Jharkhand State Electricity Regulatory Commission

Provisional

Tariff Order

on

Annual Revenue Requirement

for

FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12

and

Determination of Provisional Tariff for FY 2011-12

for

Jharkhand State Electricity Board (JSEB)

Ranchi

July 2011

TABLE OF CONTENTS

SECTION 1: INTRODUCTION **7**

JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION (JSERC) 7
JHARKHAND STATE ELECTRICITY BOARD (JSEB) 9
SCOPE OF THE PRESENT ORDER 10

SECTION 2: PROCEDURAL HISTORY **12**

BACKGROUND 12
INFORMATION GAPS IN THE PETITION 13
INVITING COMMENTS/SUGGESTIONS FROM THE PUBLIC 20
SUBMISSION OF OBJECTIONS AND CONDUCT OF PUBLIC HEARINGS 21

SECTION 3: SUMMARY OF THE ARR & TARIFF PETITION FILED BY THE PETITIONER FOR FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 AND FY 2011-12 .... **23**

SECTION 4: PUBLIC CONSULTATION PROCESS-ISSUES RAISED **27**

NON SUBMISSION OF AUDITED ACCOUNTS BY THE PETITIONER 27
NOTICE PUBLISHED IN NEWSPAPER BEING TRUNCATED 29
DISPUTED MATTER BETWEEN JSEB AND DVC 29
RECOVERIES FROM RAIDS AND DISPUTES FOR CALCULATION OF ARR 30
T&D LOSSES 30
MINIMUM GUARANTEED CONSUMPTION 32
RECOVERY OF FIXED CHARGES 33
PROVISION FOR BAD AND DOUBTFUL DEBTS 34
THERMAL GENERATION FROM PTPS 34
IMPACT OF PROPOSED TARIFF HIKE 35
GENERATION COST 36
OPERATION AND MAINTENANCE (O&M) COST 36
INTEREST AND FINANCE CHARGES 37
QUALITY OF SUPPLY 38
TARIFF DESIGN 38
REPLACEMENT OF DEFECTIVE METERS 39
DEMAND BASED TARIFF FOR DS/NDS CONSUMERS 39
REBATE ON PAYMENT OF OUTSTANDING ARREARS 40
PENALTY FOR EXCEEDING THE CONTRACT DEMAND 41
MINIMUM BILLING DEMAND 41
DELAYED PAYMENT SURCHARGE 42
STATE GOVERNMENT DUES 42
CAPITAL INVESTMENT PLAN 42
RETURN ON EQUITY 43
POWER PURCHASE 43
INCOME FROM SALE OF POWER THROUGH UI 44
TREATMENT OF REVENUE GAP 44

SECTION 5: PROVISIONAL TRUE UP: FY 2007-08, FY 2008-09 & FY 2009-10 .... **46**

ENERGY SALES 46
TRANSMISSION & DISTRIBUTION (T&D) LOSSES 47
ENERGY REQUIREMENT 49
OWN GENERATION & FUEL COST- PTPS 50
OWN GENERATION- SHPS 55
POWER PURCHASE 57
DISINCENTIVE FOR NON-ACHIEVEMENT OF T&D LOSS REDUCTION TARGETS 61
EMPLOYEE COST 62
ADMINISTRATION & GENERAL EXPENSES 65

REPAIR & MAINTENANCE (R&M) EXPENSES 69
GROSS FIXED ASSETS (GFA) 72
RETURN ON EQUITY (ROE) 73
INTEREST & FINANCING CHARGES (IFC) 75
INTEREST ON WORKING CAPITAL 77
INTEREST ON CONSUMER SECURITY DEPOSIT 80
DEPRECIATION 81
PRIOR PERIOD EXPENSES 82
INEFFICIENT COST OF PTPS 84
NON-TARIFF INCOME (NTI) 84
PROVISION FOR BAD DEBTS 87
PENALTY FOR NON-COMPLIANCE OF STANDARDS OF COMPLIANCE (SOP) 88
REVENUE FROM EXISTING TARIFF 90
SUMMARY OF THE ARR ON TRUING UP OF FY 2007-08 TO FY 2009-10 90
FUNCTIONALLY DISAGGREGATED ARR 90
CONSOLIDATED ARR 92

SECTION 6: REVISED ESTIMATES FOR FY 2010-11 95

ENERGY SALES 95
TRANSMISSION & DISTRIBUTION LOSSES (T&D LOSSES) 96
ENERGY REQUIREMENT 98
OWN GENERATION & FUEL COST- PTPS 98
OWN GENERATION- SHPS 101
POWER PURCHASE 102
DISINCENTIVE FOR NON-ACHIEVEMENT OF T&D LOSS REDUCTION TARGETS 103
EMPLOYEE COST 104
ADMINISTRATIVE & GENERAL EXPENSES 106
REPAIR & MAINTENANCE (R&M) EXPENSES 107
RETURN ON EQUITY (ROE) 111
INTEREST AND OTHER FINANCE CHARGES 112
INTEREST ON WORKING CAPITAL 113
INTEREST ON CONSUMER SECURITY DEPOSIT 116
DEPRECIATION 116
NON TARIFF INCOME (NTI) 117
PROVISION FOR BAD & DOUBTFUL DEBTS 119
REVENUE FROM EXISTING TARIFF 119
SUMMARY OF THE ARR FOR FY 2010-11 120
FUNCTIONALLY DISAGGREGATED ARR FOR FY 2010-11 120

SECTION 7: PROJECTIONS FOR FY 2011-12 123

ENERGY SALES 123
TRANSMISSION & DISTRIBUTION LOSSES (T&D LOSSES) 124
ENERGY REQUIREMENT 128
OWN GENERATION- PTPS 128
OWN GENERATION- SHPS 131
POWER PURCHASE COST 132
DISINCENTIVE FOR NON-ACHIEVEMENT OF T&D LOSS REDUCTION TARGETS 134
EMPLOYEE COST 135
ADMINISTRATIVE & GENERAL EXPENSES 136
REPAIR & MAINTENANCE (R&M) EXPENSES 137
INTEREST AND OTHER FINANCE CHARGES 142
INTEREST ON WORKING CAPITAL 143
INTEREST ON CONSUMER SECURITY DEPOSIT 146
DEPRECIATION 147
NON TARIFF INCOME (NTI) 148
PROVISION FOR BAD & DOUBTFUL DEBTS 149

REVENUE FROM EXISTING TARIFF 150
SUMMARY OF THE ARR FOR FY 2011-12 150

SECTION 8: SUMMARY OF ARR FOR FY 2007-08 TO FY 2011-12 154

SUMMARY OF THE ANNUAL REVENUE REQUIREMENT 154

SECTION 9: TREATMENT OF REVENUE GAP 155

SECTION 10: APPROVED TARIFFS FOR FY 2011-12 156

GENERATION TARIFF 156
TRANSMISSION TARIFF 156
DISTRIBUTION- WHEELING TARIFF 156
DISTRIBUTION- RETAIL SUPPLY TARIFF 157

SECTION 11: REDUCTION IN CROSS SUBSIDY 159

SECTION 12: TARIFF RELATED OTHER ISSUES 160

TARIFF PROPOSAL 160
INTRODUCTION OF NEW SLABS IN DS-I (A), (B) AND NDS-I CATEGORIES 162
CHANGES IN TARIFF SCHEDULE 162
DS CATEGORY 162
NDS CATEGORY 163
LTIS CATEGORY 163
HTS CATEGORY 165
HTSS CATEGORY 165
RTS CATEGORY 166
SS-I CATEGORY 167
REC CATEGORY 167
MISCELLANEOUS CHARGES 168
SCHEDULE OF CHARGES 168
OTHER TERMS AND CONDITIONS OF SUPPLY 168

SECTION 13: TARIFF SCHEDULE 177

DOMESTIC SERVICE (DS) 177
NON–DOMESTIC SERVICE (NDS) 179
LOW TENSION INDUSTRIAL & MEDIUM POWER SERVICE (LTIS) 180
IRRIGATION & AGRICULTURE SERVICE (IAS) 183
HIGH TENSION VOLTAGE SUPPLY SERVICE (HTS) 184
HT SPECIAL SERVICE (HTSS) 186
RAILWAY TRACTION SERVICE (RTS) 188
STREET LIGHT SERVICE (SS) 189
RURAL ELECTRIC CO-OPERATIVE (REC) 189
BULK SUPPLY TO MILITARY ENGINEERING SERVICE (MES) 190
SCHEDULE FOR MISCELLANEOUS CHARGES 191

SECTION 14: TERMS AND CONDITIONS OF SUPPLY 193

POINT OF SUPPLY 193
TARIFF FOR TEMPORARY CONNECTIONS 193
DISHONOURED CHEQUES 193
STOPPED/ DEFECTIVE METERS 193
RESALE OF ENERGY 194
RELEASE OF NEW CONNECTIONS 194
INSTALLATION OF CIRCUIT BREAKER & ELCB 194
ELECTRICITY DUTY 194
CONVERSION FACTORS 195
FUEL & POWER PURCHASE COST ADJUSTMENT (FPPCA) 195

SECTION 15: STATUS OF THE DIRECTIVES ISSUED BY THE COMMISSION IN TARIFF ORDER OF FY 2003-04 196

SECTION 16: STATUS OF THE DIRECTIVES ISSUED BY THE COMMISSION WITH TARIFF ORDER FY 2006-07 200

SECTION 17: STATUS OF THE DIRECTIVES ISSUED BY THE COMMISSION IN TARIFF ORDER OF FY 2010-11 216

SECTION 18: NEW DIRECTIVES 219

STRENGTHENING THE COMPLAINT REDRESSAL MECHANISM 219
MANPOWER PLANNING STUDY FOR PTPS PLANT 219
UPLOADING OF THE TARIFF PETITION ON THE WEBSITE 219
INTEREST ON CONSUMER SECURITY DEPOSIT 220
TARIFF FOR HTSS CONSUMERS 220
ONLINE FILING OF THE APPLICATION FOR NEW CONNECTION 220
METER READING RELATED ISSUE 220
OVERTIME EXPENSES 221
SEPARATE FILING FOR EACH FUNCTION 221
PAYMENT OF DUES TO TVNL & REVISION OF PPA 221
DATA ADEQUACY IN NEXT TARIFF PETITION AND TIMELINES 222

List of Abbreviations

Abbreviation	Description
A&G	Administrative and General
APTEL	Appellate Tribunal for Electricity
ARR	Aggregate Revenue Requirement
CoD	Date of Commissioning
CWIP	Capital Work in Progress
DPS	Delayed Payment Surcharge
DS	Domestic Service
DS HT	Domestic Service High Tension
DVC	Damodar Valley Corporation
FY	Financial Year
GFA	Gross Fixed Assets
GoI	Government of India
GoJ	Government of Jharkhand
HT	High Tension
JSERC	Jharkhand State Electricity Regulatory Commission
JSEB	Jharkhand State Electricity Board
LT	Low Tension
kV	Kilovolt
kVA	Kilovolt-ampere
kW	Kilowatt
kWh	Kilowatt-hour
MMC	Monthly Minimum Consumption
MU	Million Units
NEFT	National Electronic Fund Transfer
NTI	Non Tariff Income
O&M	Operations and Maintenance
PLF	Plant Load Factor
PLR	Prime Lending Rate
PPA	Power Purchase Agreement
PTPS	Patratu Thermal Power Station
R&M	Repair and Maintenance
RoE	Return on Equity
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SHPS	Sikidri Hydro Power Station
SLM	Straight Line Method
TOD	Time of Day

SECTION 1: INTRODUCTION

Jharkhand State Electricity Regulatory Commission (JSERC)

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 22.08.2002 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 enactment of Electricity Act, 2003, 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 Petitioners including the price at which electricity shall be procured from the generating companies or Petitioners 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 Petitioners, distribution Petitioners 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 Petitioner;

(f) adjudicate upon the disputes between the Petitioners 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 Petitioners;

(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.

Jharkhand State Electricity Board (JSEB)

1.8 Jharkhand State Electricity Board (hereinafter referred to as the 'Petitioner') was constituted on March 10, 2001 under Section 5 of the Electricity (Supply) Act, 1948 as a result of the bifurcation of the erstwhile State of Bihar. Before that, the Bihar State Electricity Board (BSEB) was the predominant entity entrusted with the task of generating, transmitting and supplying power in the State. The Petitioner has been engaged in electricity generation, transmission, distribution and related activities in the state of Jharkhand. Presently, the board if functioning as two entities, i.e. State Transmission Utility (STU) and a Petitioner.

1.9 Apart from the distribution and transmission functions, the Petitioner also owns two power plants; **Patratu Thermal Power Station (PTPS)** having a capacity of 840 MW (de-rated capacity of 770 MW) and **Sikidri Hydel Power Station (SHPS)** having a capacity of 130 MW. The unit-wise capacity and date of commissioning (CoD) of the PTPS tabulated hereunder:

Table 1: Unit-wise Capacity and CoD for PTPS

Description	Capacity/De-rated (MW)	CoD
Unit I	50/40	26.06.1966
Unit II	50/40	27.04.1967
Unit III	50/40	16.10.1968
Unit IV	50/40	31.10.1969
Unit V	100/90	31.03.1971
Unit VI	100/90	31.03.1972
Unit VII	110/105	31.08.1977
Unit VIII	110/105	16.07.1979
Unit IX	110	30.03.1984
Unit X	110	20.03.1986

1.10 The Petitioner is also engaged in construction and maintenance of its transmission and distribution system for providing services to various categories of electricity consumers within the area of its jurisdiction.

Scope of the Present Order

1.11 In compliance with the Hon'ble Appellate Tribunal for Electricity Order dated 8.05.2008 vide appeal no.129 of 2007 & IA 78 of 2009 dated 23.9.2009, the Commission had issued the previous Tariff Order of JSEB for FY 2010-11 dated April 26, 2010 covering the following:

(a) Truing up exercise for FY 2003-04 to FY 2006-07 as per the provisional accounts of the Petitioner for these years,

(b) ARR and Tariff Petitions filed by the Petitioner for approval of ARR for FY 2007-08 & 2008-09,

(c) Suo motu proceedings for FY 2009-10 & FY 2010-11, and

(d) Determination of Provisional tariff for FY 2010-11.

1.12 It is important to mention here that in the absence of audited provisional accounts for FY 2003-04 to FY 2006-07, the Commission had carried out provisional true up of JSEB for the said years.

1.13 In the ARR and Tariff Petition for FY 2011-12, the Petitioner has again requested for provisional true-up for FY 2003-04 to FY 2006-07 on the basis of latest provisional accounts. The Commission does not find any merit in carrying out the second provisional true-up in the absence of audited accounts for respective years as the provisional true-up has already been done for these years and conducting another provisional true-up, in absence of audited accounts, will serve no purpose. The Commission shall undertake final true-up for these years as and when the audited accounts are made available to the Commission.

1.14 In view of the above, the scope of this Order is restricted to:

(a) Truing up exercise for FY 2007-08, FY 2008-09 and FY 2009-10 based on provisional accounts of the respective years, ARR & Tariff Petition filed by the Petitioner and trajectory for operational parameters set by the Commission in its previous Tariff Order.

(b) Revision exercise for FY 2010-11 based on the latest data and ARR petition filed by the Petitioner.

(c) Determination of ARR and provisional tariff for FY 2011-12, based on the past trends and ARR & Tariff Petition filed by the Petitioner.

1.15 The aforementioned exercise has been done by taking into consideration:

(a) Provisions of the Electricity Act, 2003;

(b) Provisions of the National Electricity Policy;

(c) Provisions of the National Tariff Policy;

(d) Principles laid down in the 'Generation Tariff Regulations, 2004'.

(e) Principles laid down in the 'Distribution Tariff Regulations, 2004';

(f) Principles laid down in the JSERC 'Terms and Conditions for Determination of Generation Tariff Regulations, 2010' herein referred to as 'Generation Tariff Regulations, 2010'. These Regulations have been referred for tariff determination of FY 2011-12, i.e., the first year of the transition period.

(g) Principles laid down in the 'JSERC, Terms and Conditions for Determination of Transmission Tariff Regulations, 2010' herein referred to as 'Transmission Tariff Regulations, 2010'. These Regulations have been referred for tariff determination of FY 2011-12, the first year of the transition period.

(h) Principles laid down in the JSERC 'Terms and Conditions for Determination of Distribution Tariff Regulations, 2010' herein referred to as 'Distribution Tariff Regulations, 2010'. These Regulations have been referred for tariff determination of FY 2011-12, the first year of the transition period.

SECTION 2: PROCEDURAL HISTORY

Background

2.1 The Petitioner has filed ARR and Tariff Petition for determination of distribution tariff for FY 2011-12 and also for truing-up the ARR from FY 2003-04 to FY 2010-11.

2.2 As per Distribution Tariff Regulations, 2010 notified on 1st November, 2010, the Petitioner is required to submit the audited accounts of the previous years along with the Petition, which the Petitioner has failed to submit as it has only submitted the provisional accounts for the relevant years of FY 2003-04 to FY 2009-10. The Petitioner submitted that provisional accounts from FY 2003-04 to FY 2009-10 have been submitted to the office of CAG for the purpose of audit.

2.3 The Commission, before taking the final view on the issue of proceeding for true-up without the audited provisional accounts, decided to conduct a public hearing on March 12, 2011. A public notice was published on March 2, 2011 in Jharkhand edition of leading newspapers. The Public hearing was attended by 33 persons who represented various consumer groups, consumer forums, industries apart from the Petitioner -JSEB.

2.4 The Petitioner presented its case in the public hearing and requested the Commission to admit its ARR & Tariff Petition and determine the ARR & Tariff accordingly without the audited provisional accounts. Various consumer groups strongly advocated that no tariff should be given to the Petitioner without the audited accounts.

2.5 In view of the 'JSERC Generation Tariff Regulations,2010', 'JSERC Transmission Tariff Regulations, 2010' and 'JSERC Distribution Tariff Regulations,2010', the Commission felt that it is in public interest if the tariff is updated at regular intervals else it can lead to "Tariff Shock" to the consumers. Moreover, the Petitioners and generators shall be deprived of the genuine requirements of funds which will ultimately result in the sub-standard services to the consumers. However, the tariff issued in absence of audited accounts shall be on the provisional basis.

2.6 Thus the Commission, in the public interest, decided to relax the requirements of audited accounts pronounced vide Order dated March 14, 2011 and admitted the ARR and Tariff Petition filed by the Petitioner.

2.7 The above mentioned Order of the Commission was challenged by M/s Aditya Biral Chemicals (India) ltd and others before the Hon'ble Appellate Tribunal for electricity (APTEL) at New Delhi by filing appeal nos. 55 & 56 of 2011. The Hon'ble APTEL by its Order dated 11.05.2011 directed that the Proceeding before the Commission may go on but the Commission is directed not to pass the final order. In view of this, the Commission proceeded in the matter and completed all the procedural formalities including the Public hearing process.

2.8 Finally, the Hon'ble APTEL delivered its judgement on 19.07.2011 in the aforesaid appeals and rejected the appeals by the appellants and confirmed the Order dated 14.03.2011 of the Commisison.

2.9 In view of the above, the Commission proceeded and announced the Tariff for FY 2011-12 as per this Tariff Order.

2.10 The Commission also opined that the provisional true-up till FY 2006-07 based on the provisional accounts had already been done in the previous Tariff Order and revisiting the figures for the same years again based on the provisional accounts does not make any sense. Therefore, the Commission decided that the final true-up for the said years will be done only on the basis of audited accounts. The Commission shall only undertake the provisional true-up from FY 2007-08 to FY 2010-11 on the basis of provisional accounts.

Information Gaps in the Petition

2.11 In the process of scrutinizing the Tariff Petition filed by the Petitioner, the Commission observed several deficiencies in the ARR & Tariff Petition received from the Petitioner. The information gaps observed were communicated to the Petitioner through written communication vide various letters dated 21st January, 2011, 2nd April, 2011, 2nd May, 2011 and 23rd May, 2011. The Petitioner subsequently submitted its response and provided the requisite data vide letter dated 26th February, 2011, 20th April, 2011, 17th May, 2011 and 26th May, 2011.

2.12 Subsequently, further clarifications were also obtained from the Petitioner, from time to time, till the finalization of this Tariff Order. The Commission regularly interacted with the officers of the JSEB to validate the information submitted by them.

2.13 The table below summarises the discrepancies and the additional information pointed out by the Commission to the Petitioner and its respective status as submitted by the Petitioner.

Table 2: Additional information and discrepancies pointed out by the Commission and its respective status

Queries Sent	Replies by JESB
Discrepancies sent on 21 January'2011	**Reply received on 26 February'2011**
Disaggregated ARR for Generation, Transmission and Distribution function along with the basis of segregation for FY 2007-08, FY 2008-09 and FY 2009-10. Detailed working of each component also to be furnished	Submitted. The Petitioner while submitting the disaggregated figures, also stated that there were inadvertent errors in the true-up proposed in the petition and requested the Commission to submit the revised figures.

The Petitioner had not substantiated the reasons for deviation in various cost components proposed in its present petition with the values approved by the Commission in its previous Tariff Order of FY 2010-11 for FY 2007-08, FY 2008-09, FY 2009-10.	Submitted
Power purchase bills from various sources for the month of December for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11.	Submitted
For FY 2007-08, FY 2008-09 and FY 2009-10, the Petitioner had submitted the depreciation and Interest on loan as per the provisional accounts whereas the same was to be calculated on normative basis. The Petitioner was directed to submit the same separately for G, T and D function along with the calculations.	Submitted alongwith the working.
Consumer-Bills for each consumer category for the month of August for FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11.	Submitted
The details of calculation of return on equity from FY 2007-08 to FY 2011-12 to be furnished separately for each function.	Submitted
Actual category-wise sales for first ten months of FY 2010-11.	The Petitioner submitted the actual sales for first 8 months and submitted that for other two months, due to introduction of spot billing, it has not been able to generate and provide category-wise sales for the month of December and January.
Basis of projection of power purchase cost for FY 2011-12.	Submitted
In table 23 on page 30, there was a component of direct input at distribution voltage (33 kV). JSEB was asked to specify the source of the power purchase?	JSEB submitted that the power from WBSEB and long term power is being received at 33kV level.
JSEB was directed to submit the information for FY 2007-08 and FY 2008-09 also in the regulatory formats.	Submitted
JSEB was directed to submit the revenue sheets for FY 2007-08, FY 2008-09 and FY 2009-10 as per the distribution formats given along with the JSERC (Terms and Condition for determination of distribution tariff) Regulations, 2010.	Submitted
Scheme-wise Capital expenditure plan for generation, transmission and distribution function along with the amount already spent on the proposed schemes in FY 2010-11 (till December'2010) was to be submitted. The Petitioner was directed to submit the phasing of the capital expenditure, capitalisation schedule and the expected time for completion of projects.	The Petitioner submitted that scheme-wise figures have not been maintained in the past and in the prevalent situation, there is no organisational level MIS on actual capital expenditure being prepared on a month to month basis.
The Petitioner was directed to submit the details of the calculation of variable	Submitted

cost for PTPS for FY 2007-08, FY 2008-09 and FY 2009-10.	
The Petitioner was directed to submit the workings for Interest expenses proposed in its present tariff petition from FY 2007-08 to FY 2011-12.	Submitted
Details of GFA and CWIP separately for each function from FY 2007-08 to FY 2011-12.	Submitted
Details of calculation of fixed cost for Sikidri Hydel power Station for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12.	Submitted
It was noticed that the Petitioner had not filled-in some of the forms of the regulatory formats. The following forms were to be submitted by the Petitioner. Hydro Generating stations- S1,S2,S3,S6, F1,F2,F3,F5,F5A,F5B,F5C,F5D, F6,F6A, F8A,F8B,F8C, F8D, F10 to F16, F19 to F20 Thermal Generating stations- S1,S2,F2,F5A,F10,F11,F14,F15,F16, Transmission formats-S1,S2,S3,S7,F1,F1A,F2,F3,F5A, F8B,F10, F11,F12,F14,F15 (incomplete), F16, P1,P2,P3,P4,P5,P6,P7,P8,P9 Distribution formats- S2,S3,S6,F4,F4A,F4B,F4C,F4D,F6A,F15,F16A,F19,T4,P1, P1A,P2A,P2B, P2C,P2D,P2E,P3,P4	Submitted
The Petitioner was directed to submit the energy balance and distribution loss calculation for FY 2007-08, FY 2008-09 and FY 2009-10.	Submitted
The total of capital expenditure plan in Table 38 of Page 42 was mentioned as Rs 493.00 Cr and Rs 3143.14 Cr for FY 2010-11 and FY 2011-12 respectively whereas it was coming out as Rs 661.00 Cr and Rs 4146.64 Cr.	The Petitioner stated that there was an inadvertent error in the representation of the total values and submitted revised calculations
The Petitioner was directed to submit the reason for proposing less NTI in the Tariff Petition vis-à-vis as recorded in the Provisional accounts.	The Petitioner submitted that the values for all other items are same as in the provisional accounts except for D.P.S which has been proposed at 10% which is expected to be realised by JSEB.
Discrepancies sent on 2 April'2011	**Reply received on 20 April'2011**
Total expenditure in Table 55 of the Tariff Petition written as "0" for Generation, Transmission and Distribution.	The Petitioner submitted the revised tables after correcting the errors.
The Petitioner in the regulatory formats (form 7) for Thermal generating stations did not submit the fixed assets and depreciation details for FY 2007-08 and FY 2008-09.	Submitted
For FY 08, 09 and 10, the Petitioner in the additional information had disaggregated the actual depreciation in the ratio of opening GFA which does not match with the asset-wise depreciation given in the respective regulatory	The Petitioner submitted the revised asset category-wise depreciation

formats of each function. The Petitioner was directed to submit the disaggregated depreciation as per the regulations again.	after correcting the errors.
There were lot of discrepancies in the figures submitted by the Petitioner for SHPS and PTPS. The Petitioner was directed to resubmit the figures.	The Petitioner submitted the revised ARR tables for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12.
Number of employees engaged in each function- Generation-Hydel, Generation-Thermal, Transmission and distribution for FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11 certified by some senior officials.	The Petitioner submitted the aggregated no. of employees for generation and transmission function and submitted no. of employees for distribution function separately for 2007-08, FY 2008-09 and FY 2009-10. Although, for FY 2010-11, the disaggregated no. of employees for generation-thermal, generation-hydel, transmission and distribution were submitted.
Detailed calculation of inter-state and intra-state transmission losses or source from which the figures were taken was to be submitted for FY 08 to FY 11.	The Petitioner submitted that it does not have adequate metering facilities in place at all voltage levels to accurately estimate the intra-state transmission losses and has been assumed to be 5% of the total energy input at the transmission voltage. The inter-state transmission losses have been taken as per actual recorded. The details were submitted by the Petitioner.
Detailed capital expenditure plan for FY 2010-11 and FY 2011-12 and the actual expenditure already incurred in FY 2010-11 against the projected expenditure was to be submitted.	The Petitioner stated that the detail of the capital expenditure for generation, transmission and distribution for current and ensuing year has already been submitted and there is no organisation level MIS on actual capital expenditure being prepared on month to month basis.
Summary of UI payable & receivable- Quantum and cost from FY08-11 and status of payment by JSEB in respect of the same.	Submitted
Quantum and cost of power traded through exchange (purchased and sold) for FY 2008-09 and FY 2009-10.	Submitted
Discrepancies sent on 2 May'2011	**Reply received on 17 May'2011**
The number of employees for FY 2009-10 as per regulatory formats is 5499 whereas the same as per the additional information submitted on 20th April, 2011 comes to 5690. The Petitioner is required to reconcile both the figures.	Resubmitted in the regulatory formats.

There was a variation in the UI data provided by the Petitioner in the additional information submitted on 26.02.2011 and that submitted on 20.04.2011. The Petitioner was also required to explain the treatment of income earned through UI.	Clarified and submitted revised figures
The Petitioner in the additional information submitted on 26.02.2011 had not mentioned any amount against power traded through exchange. The Petitioner is required to explain the treatment of income in this regard.	Clarified
The Petitioner had not submitted component wise breakup for employee cost, R&M cost and A&G cost for hydel generation in regulatory formats. The Petitioner was required to explain the reason for non-submission.	Submitted
In distribution regulatory formats (S4), the grants towards cost of capital assets as well as revenue subsidy for FY 2010-11 and FY 2011-12 were left blank. The Petitioner was directed explain the same.	The Petitioner submitted that the grants and subsidies are not notified by the state government in advance and the resource gap funding in released for meeting the expenses which were not foreseen.
In power purchase, a discrepancy was found in number of units purchased for FY 2010-11 with the information provided by the Petitioner compared to the information available in ERPC website. The Petitioner was directed to clarify the same.	Submitted
The Commission had observed lot of variation between the information submitted on 26th Feb' 2011 and on 20th April '2011, the comparison of the same for each function was also provided. The Petitioner was directed to substantiate the reason for the same.	The Petitioner submitted that the variation was due to inadvertent errors introduced to the iterative and linked nature of excel. Hence, the Petitioner submitted the revised figures and requested the Commission to consider the same.
The Petitioner had to submit the details of employee's expenses and A&G expenses capitalised for FY 2007-08, FY 2008-09 and FY 2009-10.	The Petitioner submitted that the board does not capitalize any expenses except interest and finance charges. The reason for the same was also submitted.
Opening stock of coal as on 1st April of the respective year , closing stock at the end of the financial year and monthly details of the coal consumption for FY 2007-08, FY 2008-09 ,FY 2009-10 and FY 2010-11.	The Petitioner submitted that the same is provided in statement-9 of the Provisional accounts.
Opening stock of oil as on 1st April of the respective year, closing stock at the end of the financial year and monthly details of the oil consumption for FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11.	The Petitioner submitted that the same is provided in statement-9 of the Provisional accounts.
The Petitioner in its Tariff Petition had mentioned that CEA vide its letter dated August 20, 2009 addressed to the Principal Secretary, Energy, GoJ had proposed retirement of units 1-6 during 11th and 12th plan periods. The Petitioner was directed to submit a copy of the same.	Submitted
Break-up of legal expenses incurred for FY 2007-08, FY 2008-09, FY 2009-10. The Petitioner was supposed to provide information pertaining to the amount	Incomplete information was

spent on each case (including payment made to lawyers) and the outcome/current status of each case. The Petitioner was directed to justify the exorbitant cost incurred by it under this head.	submitted by the Petitioner.
The Petitioner in the directive section of the Tariff Petition had mentioned that it has implemented the SoP as per the regulations. The licensee was directed to reply back on the compliance of SoP and also the status of submission of the same.	Submitted
The Petitioner was required to submit Revenue sheets in a linked format for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12 at existing tariff and FY 2011-12 at projected tariff.	The Petitioner submitted that it has provided the details in the distribution format (F1) and the information has been taken from Provisional accounts.
Details of GFA, asset wise capitalisation and CWIP for FY 2010-11 and FY 2011-12.	The Petitioner stated that it has already submitted the capital expenditure for generation, transmission and distribution for current as well as ensuing year in the Tariff Petition. The Petitioner submitted the loan sanction letters of various loans availed for FY 2010-11. The Petitioner submitted the that the out of total outlay of Rs 1600 Crs proposed by GoJ for energy, Rs 1540 Cr is proposed for JSEB. The details of the same were also submitted.
Discrepancies sent on 23 May'2011	**Reply received on 26 May'2011**
There was a mismatch in the depreciation values given in the regulatory formats.	The Petitioner submitted revised figures and requested the Commission to consider the same.
The Commission observed a variation in the RoE figures submitted in the formats with the figures submitted on 26th February, 2011 for FY 2007-08, FY 2008-09 and FY 2009-10.	The Petitioner submitted the corrected and revised figures and also requested the Commission to consider the figures submitted on 26th February, 2011.
The Commission observed a variation in the interest on loan figures submitted in the formats with the figures submitted on 26th February, 2011 for FY 2007-08, FY 2008-09 and FY 2009-10.	The Petitioner submitted the corrected and revised figures and also requested the Commission to consider the figures submitted on 26th February, 2011.
The Petitioner was directed to clarify whether the electricity duty is covered in A&G expenses given in the provisional accounts of the respective year and also	

to provide the break-up of the components covered under the miscellaneous charges given under the head of A&G expenses for each year.	The Petitioner submitted that the electricity duty is not a part of schedule 10 of A&G expenses. The break-up of miscellaneous charges was submitted by the Petitioner.
The Petitioner was directed to submit the energy balance table for FY 2007-08, FY 2008-09 and FY 2009-10.	Submitted
The Commission had observed the following discrepancy in the power purchase tables submitted by Petitioner as additional information on 26.02.2010: • Power purchase cost for NHPC for FY 2009-10 was submitted as Rs 71.01 Cr whereas the same as per accounts is coming out to be Rs 62.27 Cr. • Schedule 6 of the provisional accounts for FY 2007-08, FY 2008-09 and FY 2009-10 contains power purchase source from NHPC- Kuruchi which is not mentioned in the power purchase details submitted by the Petitioner in the additional information submitted on 26th February, 2011. The Petitioner was directed to clarify the same and also specify the details of power purchase included under this head. • There was a mismatch in the SHPS generation data mentioned by the Petitioner in the power purchase table with the figures given in the regulatory formats and provisional accounts. • The aggregated power purchase quantum for Chukha, PTC-short term and PTC –Tala HEP is submitted as 638.46 which as per provisional accounts is coming out to be 639.19	The Petitioner submitted that various discrepancies in power purchase figures are because of different practices adopted by the commercial department and accounts department of JSEB. The Petitioner requested the Commission to consider the figures as per the Provisional accounts. Clarified The Petitioner requested the Commission to consider the figures as per the Provisional accounts. The Petitioner requested the Commission to consider the figures as per the Provisional accounts.
The utility was required to explain the utilisation of long-term sources, apart from GFA and CWIP during FY 2007-08 and FY 2008-09.	The Petitioner submitted that the total addition in loans cannot be the same as the sum of CWIP and GFA. The Petitioner submitted that the details of cash and bank balances and stock are provided in Schedule 26 of the Provisional accounts.

The Petitioner was directed to submit break-up of the prior period income and expenses for FY 2007-08, FY 2008-09 and FY 2009-10.	Submitted
The Petitioner was directed to submit break-up of PGCIL charges and UI-quantum and cost for FY 2007-08, FY 2008-09 and FY 2009-10.	Submitted
Schedule I- Revenue from sale of power of the provisional accounts has a component of miscellaneous charges from consumers. The details of the same were to be provided by the Petitioner.	The Petitioner submitted that the head wise break up of such expenses cannot be provided at a short notice. Therefore, it requested the Commission to consider the figures as per Provisional accounts.

Inviting Comments/Suggestions from the Public

2.14 As per the Commission's order dated March 14, 2011 passed in case no. 33 of 2010, the petitioner was directed to provide the copies of ARR & Tariff Petition to the general public and issue public notice for inviting objections/comments/suggestions on the same.

2.15 The public notice was subsequently published by the Petitioner in various newspapers, as detailed hereunder:

Table 3: List of newspapers where public notice was issued by the Petitioner

Newspaper	Date
Hindustan	19.03.2011
Hindustan Times	19.03.2011
Prabhat Khabar	19.03.2011
Dainik Jagran	22.03.2011
Telegraph	22.03.2011
Quami Tanzeem (Urdu Daily)	23.03.2011
Ranchi Express	24.03.2011

2.16 A total period of 30 days was provided to the public for submitting their objections/ comments/suggestions.

2.17 The Commission also uploaded this information on its official website www.jserc.org and published advertisements in various newspapers separately for each public hearing. The list of newspapers alongwith the dates and the place for which the notice was issued by the Commission is tabulated hereunder.

Table 4: List of newspapers where public notice was published by the Commission

Newspaper	Date	For hearing at
Aaj	12.04.2011	Hazaribagh
Hindustan	12.04.2011	Hazaribagh

Prabhat Khabar	12.04.2011	Hazaribagh
Ranchi Express	12.04.2011	Hazaribagh
Dainik Jagran	12.04.2011	Hazaribagh
Sanmarg	12.04.2011	Hazaribagh
The Hindustan Times	12.04.2011	Hazaribagh
The Pioneer	12.04.2011	Hazaribagh
Quami Tanzeem (Urdu Daily)	12.04.2011	Hazaribagh
Hindustan	21.04.2011	Dumka
Prabhat Khabar	21.04.2011	Dumka
Ranchi Express	21.04.2011	Dumka
Dainik Jagran	22.04.2011	Dumka
Sanmarg	22.04.2011	Dumka
The Hindustan Times	22.04.2011	Dumka
Hindustan	28.04.2011	Chaibasa
Prabhat Khaber	28.04.2011	Chaibasa
Ranchi Express	28.04.2011	Chaibasa
Uditvani	28.04.2011	Chaibasa
Dainik Jagran	29.04.2011	Chaibasa
Sanmarg	29.04.2011	Chaibasa
The Hindustan Times	29.04.2011	Chaibasa
Hindustan	05.05.2011	Medninagar
Prabhat Khaber	05.05.2011	Medninagar
Ranchi Express	05.05.2011	Medninagar
Dainik Jagran	06.05.2011	Medninagar
Sanmarg	06.05.2011	Medninagar
The Hindustan Times	06.05.2011	Medninagar
Aaj	12.05.2011	Ranchi
Hindustan	12.05.2011	Ranchi
Prabhat Khaber	12.05.2011	Ranchi
Ranchi Express	13.05.2011	Ranchi
Dainik Jagran	13.05.2011	Ranchi
Sanmarg	13.05.2011	Ranchi
The Hindustan Times	14.05.2011	Ranchi
The Pioneer	14.05.2011	Ranchi
Quami Tanzeem (Urdu Daily)	14.05.2011	Ranchi

Submission of objections and conduct of public hearings

2.18 The public hearings were held in all the five revenue divisional headquarters of Jharkhand from April 17, 2011 to May 15, 2011, as detailed under.

Table 5: Location and date of public hearing

Location	Date
Hazaribagh	17.04.2011
Dumka	24.04.2011
Chaibasa	01.05.2011
Medninagar	08.05.2011
Ranchi	15.05.2011

2.19 In order to ensure wide coverage and maximum response from the public, public hearings were held on Sundays. The Commission also issued public notice for public hearings in the local newspaper on the day prior to the day of public hearing and also on the date of the hearing. Apart from this, the public announcement system was also used before every hearing to maximize the attendance of the consumers. All the measures ensured that the coverage was wide and the response was also overwhelming.

2.20 Numerous objections/comments/suggestions on the ARR & Tariff Petition were received from the general public. The objections/comments/suggestion of the public, Petitioner's responses and commission view thereon is detailed in the Section 4: of this Order.

SECTION 3: SUMMARY OF THE ARR & TARIFF PETITION FILED BY THE PETITIONER FOR FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 AND FY 2011-12

3.1 In the ARR and Tariff Petition filed with the Commission, the petitioner requested for true up from FY 2003-04 onwards apart from revision in ARR for FY 2010-11 and ARR & Tariff determination for FY 2011-12. However, as mentioned earlier, the Commission has restricted the scope of this Order to the true up exercise from FY 2007-08 to FY 2009-10, revision in FY 2010-11 and ARR & Tariff determination for FY 2011-12. Accordingly, the section highlights the summary of the ARR & Tariff Petition filed by the Petitioner from FY 2007-08 onwards only.

3.2 The detailed submission made by the Petitioner in respect of its ARR for true-up of FY 2007-08 to FY 2009-10, revised ARR for FY 2010-11 and projected ARR for FY 2011-12 are discussed in the subsequent sections of this Order.

3.3 The summary of ARRs as submitted by the Petitioner from FY 2007-08 to FY 2010-11 is detailed hereunder:

Table 6: Proposed Aggregate Revenue Requirement (Rs Cr)

Parameters	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Power Purchase	1655.9	1785.6	1924.4	2351.7
Generation Cost	88.8	137.1	143.6	71.2
Repair & Maintenance	57.2	68.3	68.1	75.4
Employee Cost	168.9	189.2	207.8	371.1
Admin and general expenses	34.1	55.1	41.2	47.7
Depreciation	43.5	48.4	49.8	60.6
Provision for Bad debts	403	209.5	0	0
Interest and finance charges	455.9	449.2	451.5	236
Prior period expenses	-12.3	48	147.4	0
Interest on working capital	-1.4	0.4	14.4	22.2
Interest on consumer security deposit	7.3	7.8	8.4	11.0
Total Expenditure	**2900.9**	**2998.6**	**3056.8**	**3246.9**
Statutory return/RoE	39.6	33.5	37.7	38.3
Revenue required	**2940.3**	**3032.1**	**3094.5**	**3285.1**
Less: Misc. Receipts	52.7	45.9	61.9	92.7
Net revenue required	**2887.7**	**2986.2**	**3032.7**	**3192.5**
Revenue at current tariff	1391.2	1584.9	1634.4	1904.6
Grants-in-Aid of debt service	77.3	80	400	0.00
Revenue Gap	**1419.2**	**1321.3**	**998.3**	**1287.9**

3.4 The summary of disaggregated function-wise ARR submitted by the Petitioner for FY 2011-12 is detailed hereunder:

Table 7: Proposed function-wise Annual Revenue Requirement for FY 2011-12 (Rs Cr)

Parameters	Generation-Thermal	Transmission	Distribution	Total
Power Purchase Cost	0	0	2448.9	2448.9
Generation cost	289.4	0	0	289.4*
Repair & Maintenance	37.2	26.6	82.9	146.7
Employees cost	111.8	39.9	241.6	393.3
A&G Expenses	17.5	4.7	28.4	50.6
Depreciation	13.3	19.8	75.9	109.1
Interest and finance expenses	46.8	73.4	271.2	391.5
Interest on working capital	11.3	1.9	19.9	33.3
Interest on consumer security deposit	0	0	12.2	12.2
Statutory Return/RoE	27.1	21.2	64.0	112.3
Revenue required				**3987.4**
Less: Misc. Receipts				93.1
Net revenue required	**458.9**	**187.7**	**3245.2**	**3891.9**

* The Petitioner has erroneously submitted the Generation cost as Rs 193.9 Cr after deducting misc receipts in the Original Petition submitted in December 2010. This figure was later verified and corrected to Rs 289.4 Cr. And misc receipts were separately considered for deduction from ARR. The net ARR remained unchanged.

3.5 The Petitioner has proposed the following revenue gap from FY 2007-08 to FY 2011-12:

Table 8: Proposed Revenue Gap (Rs Cr)

Year	At existing tariff	At proposed tariff
FY 2007-08 (Provisional Accounts)	1419.2	1419.2
FY 2008-09 (Provisional Accounts)	1321.3	1321.3
FY 2009-10 (Provisional Accounts)	998.3	998.3
FY 2010-11 (Revised Estimates)	1287.9	1287.9
Cumulative gap from FY 08 to FY 11		
FY 2011-12 projected gap at existing/ proposed tariff	1752.4	704.8
Cumulative Gap from FY 08 to FY 12	**6779.1**	**5731.5**

3.6 In its Tariff Petition for FY 2011-12, the Petitioner has also submitted a proposal for tariff hike of 51% and requested the Commission to treat the balance gap as Regulatory asset. The tariff schedule as proposed in the Petition is reproduced hereunder:

Table 9: Proposed Tariff Schedule for FY 2011-12

Category	Units for Fixed Charge	Existing Fixed Charge	Proposed Fixed Charges	Existing Energy Charge (Rs/Kwh)	Proposed Energy Charges (Rs/Kwh)
Domestic					
DS-I (a), Kutir Jyoti (metered) (0-50)	Rs/ Conn/Month	0	20	1.10	1.10
DS-I (a), Kutir Jyoti (metered) (50-100)	Rs/ Conn/Month		20		2.00
DS-I (a), Kutir Jyoti (Unmetered)	Rs/ Conn/Month	30	50	0.00	0.00
DS-I (b), metered (0-200)	Rs/ Conn/Month		50		2.10

DS-I (b), metered (above 200)	Rs/ Conn/Month		50		2.90
DS-I (b), unmetered	Rs/ Conn/Month	72	200	0.00	0.00
DS-II, <= 4KW Total					
0-200	Rs/ Conn/Month	25	60	1.50	2.95
201 & above	Rs/ Conn/Month	30	70	1.90	3.95
DS-III, Above 4 KW	Rs/ Conn/Month	50	100	1.90	3.95
DS HT	Rs/Kva/Month	40	80	1.65	3.75
Non-Domestic					
NDS-I, metered (<= 2 Kw) (0-100)	Rs/ Conn/Month	0	100	1.35	2.50
NDS-I, metered (<= 2 Kw) (above 100)	Rs/ Conn/Month		100		4.00
NDS-I, unmetered (<= 2 KW)	Rs/Kw/Month	Rs 120 up to1KW And Rs 50 for every additional KW	Rs 300 up to1KW And Rs 100 for every additional KW	0.00	0.00
NDS-II	Rs/Kw/Month	Rs 110 per KW per Month or part thereof	Rs 195 per KW per Month or part thereof	3.95	5.50
Low Tension					
LTIS-I	Rs/HP/Month	75	120	3.50	4.80
Irrigation & Agricultural					
IAS-I	Rs/HP/Month	0	25	0.50	1.00
IAS-I Unmetered	Rs/HP/Month	50	100	0.00	0.00
IAS-II	Rs/HP/Month	0	100	0.75	4.00
Agriculture-IAS-II (unmetered)	Rs/HP/Month	200	500	0.00	0.00
HTS					

11 KV & 33 KV	Rs/Kva/Month	165	250	4.35	5.10
132 KV	Rs/Kva/Month	165	250	4.35	5.10
HT Special S					
11 KV	Rs/Kva/Month	330	250*	2.50	5.10*
33 KV	Rs/Kva/Month	330	250*	2.50	5.10*
132 KV	Rs/Kva/Month	330	250*	2.50	5.10*
Traction					
RTS	Rs/Kva/Month	180	300	4.50	5.25
Street Light Service					
SS-I	Rs/ Conn/Month	25	150**	3.50	6.50
SS-II	Rs/ Conn/Month	Rs 110 per 100 watt lamp. and In addition Rs 25 would be charged for each additional 50 watt	Rs 250 per 100 watt lamp. and In addition. Rs 100 would be charged for each additional 50 watt	0.00	0.00
REC		0	0	0.70	1.50
MES	Rs/Kva/Month	160	240	3.00	4.50
Note: * JSEB has proposed the HTSS category to be merged with HTS;					
**** JSEB has Proposed the fixed charge unit to be converted from Re/Connection/Month to Rs/Kw/Month**					

SECTION 4: PUBLIC CONSULTATION PROCESS-ISSUES RAISED

4.1 The Tariff Petition evoked response from several stakeholders. The public hearings were held in various locations across the State of Jharkhand to ensure the maximum public participation wherein stakeholders put forth their comments and suggestions before the Commission in the presence of the Petitioner. There were 384 members of the public who took part in the public hearing process. The list of the attendees is attached as Annexure-I to this Order.

4.2 In course of public hearings, the Commission also allowed persons/representatives of entities who had not submitted prior written representations but attended the public hearings, to express their views in person, regarding the ARR and Tariff Petition of FY 2011-12 and also about ways and means to improve the consumer services by the Petitioners.

4.3 The comments and suggestions raised by the participants along with replies given to the suggestions/comments by the Petitioner and views of the Commission thereon are discussed in the following sections.

Non submission of audited Accounts by the Petitioner

Public Comments/Suggestions

4.4 It has been objected that the Petitioner has not been able to submit its audited provisional accounts, thereby rendering the complete process of review of the Tariff Petition illegal. Hence, in absence of the audited provisional accounts, the Commission should not accept the ARR & Tariff Petition for FY 2011-12. Moreover, the truing up exercise should also not be undertaken in the absence of audited accounts.

Petitioner's response

4.5 The Commission had already sought objections and comments on the submission of the Tariff Petition by JSEB accompanied by un-audited annual account, through wide circulation in daily newspapers. Subsequently a hearing was also conducted in the conference hall of the office of the Commission on March 12, 2011 in which several consumers, groups of consumers, representatives of chambers of commerce, NGO's, etc. had participated and presented their views. Thereafter, the Board had also presented its side to the attendees and cited instances where the tariff determination exercise was carried out by other SERCs without the audited provisional accounts. After the public hearing, the Commission directed the Board to publish the ARR and Tariff Petition in popular daily newspapers and invite comments and suggestions from the members of public. Hence raising concerns with regard to this matter at this juncture is not relevant as the matter has already been debated before the Commission and an Order has also been passed.

4.6 Further, the JSEB clarified that the truing up exercise proposed by Board in its Tariff Petition is only provisional with the final truing-up proposed to be undertaken once the audited provisional accounts are finalized and received from CAG. It also cited that the similar exercise has been taken up in several states in the past on the basis of unaudited accounts only.

Views of the Commission

4.7 The Commission had sought views of the public on the issue of acceptance of ARR and Tariff Petition on the basis of un-audited provisional accounts for determination of Tariff for FY 2011-12 and thereafter conducted a public hearing on March 12, 2011 on the subject. After hearing the views of the Petitioner and members of the public, the Commission decided to relax the requirement of audited provisional accounts for determination of tariff for FY 2011-12 vide its Order in Case No. 33 of 2010 dated March 14, 2011.

4.8 The relevant extract of the said order is given below:

"The Commission appreciates the concerns of the representative of the consumers on the necessity of the submission of audited provisional accounts by the licensee-JSEB and acknowledges the importance of such accounts in determination of tariff. The Commission will continue to pursue the issue of submission of audited provisional accounts with the Petitioner-JSEB and monitor the progress quarterly. The Commission also feels that it is in public interest that the tariff is updated at regular intervals as provided in the Electricity Act, 2003 and aforesaid Distribution Tariff Regulations. If the tariff is not updated from time to time, a situation will arise when unbearable load will suddenly come on the consumers giving them a "tariff shock". On the other hand, the licensee will also be deprived of its genuine requirements of funds leading to sub-standard service which again will adversely affect the consumers.

In view of the above, the Commission feels that it is in the public interest to relax the requirement of audited provisional accounts and orders accordingly. Moreover, it will be a provisional tariff. The Commission has already done the provisional true-up upto 2006-07 in the Tariff Order for FY 2010-11. Further provisional true-up will be done from the years 2007-08 to 2010-11. When the audited provisional accounts are made available, for which the licensee-JSEB is pursuing at the highest level in the Audit Office, these will be taken into account in the final true up.

Considering the facts and circumstances mentioned hereinabove, the ARR and the petition filed by the licensee-JSEB for determination of distribution tariff for FY 2011-12 are admitted for further scrutiny."

Notice published in newspaper being truncated

Public Comments/Suggestions

4.9 The summary of ARR & Tariff Petition for FY 2011-12 published by the Petitioner in leading dailies is thoroughly truncated and not admissible for tariff determination.

Petitioner's response

4.10 The tariff regulations as well as the Electricity Act, 2003 provide that the ARR and Tariff Petition filed by the Petitioner is to be published in popular newspapers in such form as directed by the State Commission. In compliance of the same, a public notice was issued by the JSEB in accordance with the directions of the Commission and there were no objection pertaining to the public notice from the Commission. The JSEB also submitted that a copy of the complete ARR could be obtained by the interested parties from its Head Office on payment of Rs 100 or it could have been downloaded from the website of the Government of Jharkhand i.e. www.jharkhand.gov.in. Further, the ARR and Tariff Petition being a voluminous document, it is practically not possible to publish the complete document in newspapers and there is no precedence of the same as such in the entire nation.

Views of the Commission

4.11 The Commission is in agreement with the Petitioner's stand that it is not possible to publish the complete ARR and Tariff Petition in newspapers. Therefore, a summary giving details of proposed ARR and tariff proposal is required to be published in the leading daily newspapers of the State in accordance with the Tariff Regulations. The Petitioner has, accordingly, published the said notice in the leading newspapers of the state. In case, any consumer wants the complete ARR & Tariff Petition, he has the option to get it from JSEB's head office or download it from websites of Government of Jharkhand as well as of the Commission.

Disputed matter between JSEB and DVC

Public Comments/Suggestions

4.12 The Petitioner has huge pending dues pertaining to power purchase from DVC. Further the rate per unit payable to DVC for power purchased is under dispute. The objector is of the view that JSEB has claimed huge adjustments from the arrears payable by it to the DVC. However the facts and figures submitted by JSEB are questionable in absence of audited provisional accounts.

Petitioner's response

4.13 The matter in question is subjudice before the Hon'ble Supreme Court. It is extremely difficult to assess the financial impact of the same at this stage because the contested amount between JSEB and DVC is based on rates of power which are yet to be finalized. The financial impact of the disputed amount shall be taken care of by the JSEB as and when the final order against the same is passed by the Hon'ble Supreme Court.

Views of the Commission

4.14 The Commission notes that the matter is subjudice before the Hon'ble Supreme Court of India. It also views that the actual financial impact could only be assessed once the decision of Hon'ble Supreme Court of India is pronounced in the matter.

Recoveries from raids and disputes for calculation of ARR

Public Comments/Suggestions

4.15 JSEB has failed to account for the amount recovered from raids and FIRs lodged against theft cases in the ARR and Tariff Petition.

Petitioner's response

4.16 Such receipts are accounted for in its provisional accounts and reflected in the total revenues of the Board. The revenue projections for the future years included in the Tariff Petition are in line with the same.

Views of the Commission

4.17 The Commission has considered the revenue from other sources, including income from raids and disputes, while calculating the revenues and non tariff income of the Petitioner.

T&D Losses

Public Comments/Suggestions

4.18 The T&D losses in JSEB command area are very high and same has been noted by the Commission in its Previous Tariff Orders. JSEB has not been able to reduce the losses over the years and is running into losses due to their own poor performance wherein 40-50% of electricity remains unaccounted for due to poor supply system or theft of electricity. Only if the losses are reduced, then there would not be any need of tariff hike and the consumers should not be burdened due to the inefficiencies of the Petitioner.

Petitioner's response

4.19 The JSEB has been incurring huge losses primarily due to high transmission and distribution losses. In order to bring down these losses JSEB has made concerted efforts. The progressive initiatives being undertaken by the JSEB in this context are:

(a) **Capital expenditure:** JSEB is undertaking necessary capital expenditure in Generation, Transmission and Distribution infrastructure for capacity addition, augmentation and renovation related works in order to be able to cater to the growing demand for power and also improve the quality and reliability of supply at the same time reducing T&D losses of the Board.

(b) **Metering of un-metered Kutir Jyoti Connections & Replacement of defective meters:** Under the directives given by the Commission, JSEB is in the process of installing meters against all un-metered Kutir Jyoti Connections. This is expected to reduce losses and also wastage of electricity by un-metered connections.

(c) **Improving the quality of supply and service and ensuring compliance of Standards of Performance Regulations:** JSEB intends to put in place elaborate IT based systems for measuring and monitoring of compliance against the standards prescribed in the SoP Regulations.

(d) **Setting-up of Consumer Grievance Redressal Forum (CGRF):** JSEB is in the process of establishing four (4) more VUSNF, besides one already operational at Ranchi. JSEB intends to complete the process of creation of the additional four VUSNF's by July, 2011.

(e) **Bill Payment Mechanism:** In compliance to the directive given by the Commission, JSEB has initiated the process of installation of state-of-the-art ATP (Any Time Payment) machines. JSEB has already installed 6 ATPs in Ranchi at select locations. Installation of 4 ATPs in Jamshedpur is under progress. On validation of consumer response to the new ATP machines, the same would be extended throughout the State. Besides ATP, the system of collection through banks and post offices is already in place. Drop box facility has been introduced in Ranchi and is being extended to other parts of the State. JSEB in compliance to the directives given by the Commission has also extended the facility of EFT/ NEFT payment for all HT consumers. JSEB has also developed its own website with huge server capacity to facilitate online bill payments. Also, there is a provision for collection of cheque from the consumers at the spot itself in the case of spot billing.

(f) **Timely Energization of New Connections:** During three month long camps organised in September – November, 2010, new connection forms were being accepted and sanctioned then and there following due process. JSEB had in the recent past organized three months camps for "Load Disclosure Scheme", which was a multipurpose camp and consumers were allowed/ encouraged to submit applications for new connections also. These camps also contribute significantly to reduction in financial losses by way of bringing more load and consumers under the fold of JSEB thereby increasing the revenues.

(g) **Spot Billing:** JSEB has initiated the process of introduction of spot billing. With the introduction of spot billing, it is expected that the issues in the present billing system will substantially get reduced to acceptable levels. In addition to correct billing, spot billing will also facilitate reduction of the time consumed in the billing process, as the bills will be delivered to the consumes at the time of meter reading itself.

4.20 However, even after such concerted efforts, the losses of Petitioner have not come down in line with the targets given by the Commission in its previous Tariff Order. This is due to the fact that a large number of consumers (approximately 2.5 lakh) have been added in the rural areas under Kutir Jyoti connections. Further, the substantial expansion of the network in rural areas has also led to enhanced distribution losses. Although the metering of these rural consumers has been taken up in a phased manner, but the use of much more load than the prescribed load in the rural households adds substantially in T&D losses. However, the effect of these high loses has not been passed on to the consumers in any of the past Tariff Orders. The Petitioner has already been penalized by the Commission for this in the last Tariff Order.

Views of the Commission

4.21 The Commission fully agrees with the views of the consumers and feels that the Petitioner has failed to show improvement in the T&D loss reduction. In previous Tariff Order, the Commission had directed the Petitioner to prepare a detailed plan for the reduction of T&D losses including capital investment required for the same. The utility has explained the steps undertaken by it for reduction of T&D losses but has not submitted the detailed plan.

4.22 The Commission is of the view that the T&D losses submitted by the Petitioner are too high and it does not find any merit in passing on the inefficiencies of the past and present onto the consumers beyond the loss reduction levels approved by the Commission. Therefore, the Commission has also decided to continue with the trajectory specified in its previous Tariff Order and the 'JSERC Distribution Tariff Regulations, 2010'. The Commission has also continued with the process of dis-incentivizing the Petitioner for non-achievement of T&D Losses as per the set trajectory.

4.23 The Commission has again given directives to the Petitioner for submission of a detailed T&D loss reduction road map in the directives section of this Tariff Order so that the Petitioner is able to achieve the trajectory as laid down in the 'JSERC Distribution Tariff Regulations, 2010'.

Minimum Guaranteed Consumption

Public Comments/Suggestions

4.24 The objectors have objected to levying of the minimum guaranteed consumption norms and have stated that the same is in violation of the Electricity Act, 2003.

Petitioner's response

4.25 The objective of minimum guaranteed consumption norms is to ensure efficient network utilization. Considering that the Petitioner installs large network infrastructure for distribution of energy, and also incurs various other costs (like depreciation, interest etc.) for the upkeep of the network, it is important that consumers also utilize the network to an optimal level failing which the Board shall not be able to recover the returns on its investment. Hence, in order to ensure recovery of returns on investments made by the Petitioner, minimum guarantee charges are proposed to be levied.

Views of the Commission

4.26 In the Previous Tariff Order for FY 2010-11, the Commission had directed the Petitioner to justify the increase in miscellaneous charges or recovery through Minimum Guaranteed charges and to also quantify its effect on the non-tariff income (NTI) with a separate petition or along with subsequent ARR. The Petitioner has not complied with the directive. The Commission again directs the Petitioner to submit the details as directed in a separate petition or next ARR Petition for FY 2012-13. The Commission shall review and decide accordingly.

Recovery of Fixed charges

Public Comments/Suggestions

4.27 JSEB to provide rationale for proposing fixed charges even though demand is not fully met. Further the hike proposed in fixed charges is very high and abnormal.

Petitioner's response

4.28 JSEB makes heavy investments in terms of infrastructure and network. This investment is expected to fetch a minimum return. However, in a power deficit scenario, if the consumption recorded by the consumer is less than the minimum return on investment, JSEB would be left with huge losses. Hence, the Commission has provided for fixed charges so that JSEB is at least able to recover its fixed expenses it incurs on its network infrastructure.

Views of the Commission

4.29 The Commission views that fixed charges are necessary to recover the fixed cost component of the cost incurred in setting up the infrastructure. The National Tariff Policy notified by Government of India also advocates the introduction of two-part tariff featuring separate fixed and variable charges. The Central Electricity Regulatory Commission and other State Electricity Regulatory Commission's also follow the approach of two part tariff.

4.30 Meanwhile, the Commission has dealt with the issue of tariff proposal and other issues in the Section 12: and Section 13: of this Order.

Provision for Bad and Doubtful Debts

Public Comments/Suggestions

4.31 The objector submitted that writing off of bad and doubtful debts by JSEB gives a misleading picture of the assets of JSEB to its consumers.

Petitioner's response

4.32 The business of power distribution for a utility with universal supply obligation (USO) is prone to T&D losses and collection inefficiencies. Several SERCs have taken cognizance of the ground realities and allowed a provision for bad and doubtful debt in their Regulations. The case of JSEB is no different. It is a reality that the likelihood of collecting dues which have been lying unrecovered for several years is very low. Hence writing off bad debts improves the balance sheet of the JSEB and provides a clear picture of the assets of the Board and does not mislead the consumers.

Views of the Commission

4.33 The Commission views that it is the obligation of the Petitioner to supply power to every consumer as per the requirement of the consumer. Similarly, it is also the responsibility of the Petitioner to ensure that it collects the amount for energy billed and supplied to the consumers. In case the consumers do not pay, the Petitioner has full right to disconnect the supply by following requisite disconnection procedures. However, if the Petitioner is not able to collect the amount billed from any consumer, it has no right to pass on its inefficiency to the paying consumers.

4.34 The collection efficiency of 100% was fixed in the 'JSERC Distribution Tariff Regulations, 2010' in consideration of the above mentioned philosophy of the Commission.

Thermal Generation from PTPS

Public Comments/Suggestions

4.35 There is a continuous lack of any improvement in any of the performance parameters of PTPS. It is suggested that the Commission shall consider the appropriate performance standards as per norms being laid by it or plan for its complete shutdown. The poor performance of PTPS should not be passed on to the consumers.

Petitioner's response

4.36 PTPS, being a very old thermal power plant, is running on a very low PLF. The efficiency parameters such as the Station Heat Rate, Auxiliary Consumption, Specific Coal Consumption and Specific Oil Consumption are also higher than the normative levels as defined by the Tariff Regulation of the Commission. JSEB submits that the Commission may fix a relaxed norm in view of the vintage and past performance of the plant. The National Tariff Policy also accepts the vintage of plants and past performance of power plants as base to set norms.

4.37 JSEB also submits that the overhauling and restoration work of the units of the Plant had remained affected due to non-availability of sufficient funds with JSEB. With continuous effort, JSEB has been able to bring improvement in the performance parameters of the Plant. Though, it is agreed that the same is not comparable with the generally acceptable performance norms, JSEB is constrained to continue operating PTPS at an inefficient scale of operations till alternate sources of power are made available to the State already reeling under severe energy shortfall.

Views of the Commission

4.38 The Commission had directed the utility through its previous Tariff Order to take up steps in order to achieve performance norms. The Petitioner submitted its Renovation & Modernisation (R&M) plan for PTPS to achieve the desired performance norms. The Commission expects that after completion of R&M works, plant shall operate at efficient scale at par with other similarly placed generating plants.

Impact of Proposed Tariff Hike

Public Comments/Suggestions

4.39 The objector submitted that the proposed tariff hike is very steep and would burden the consumers.

Petitioner's response

4.40 The Petitioner has prepared its ARR and tariff petition for the year 2011-12 in accordance with the Terms and Condition of determination of tariff Regulations, 2010 for generation, transmission and distribution as have been notified by the Commission. The gap in the revenues at current tariff rates and the estimated expenditure has been accordingly arrived at. As per the process of tariff determination, this gap is to be met either through a tariff hike or through other means as deemed fit by the Commission. Hence the hikes in demand as well as energy charges for consumer categories have been rationally proposed for partially bridging this gap. It is further stated that the proposed hikes have been determined after detailed deliberations by the officials of JSEB and due care has been taken that any particular category of consumers is not burdened by disproportionate tariff hike.

Views of the Commission

4.41 The Commission has dealt with this issue and other issues related to tariff proposal in the 0 and Section 9: of this Order.

Generation cost

Public Comments/Suggestions

4.42 The objector submitted that the generation cost for past years is very high and in absence of audited provisional accounts cannot be relied upon.

Petitioner's response

4.43 The generation cost for FY 2003-04 to FY 2009-10 has already been analyzed and approved by the Commission in the Tariff Order for FY 2010-11. In the current petition JSEB has filed for truing up of the same. Further, generation cost is largely dependent on fuel cost and fuel consumption, and varies significantly with the fluctuations in fuel costs.

Views of the Commission

4.44 The generation tariff of the Petitioner has been determined by the Commission in accordance with the Generation Tariff Regulations, 2004. These Regulations allow the recovery of fixed costs on the basis of the availability of the generating station. During previous years, the Commission has dis-incentivised the Petitioner by disallowing a part of its fixed cost in proportion to the poor generation.

Operation and maintenance (O&M) cost

Public Comments/Suggestions

4.45 The Operation and Maintenance costs including employee cost, repair and maintenance and administration & general expenses for past years are very high and in absence of audited provisional accounts cannot be relied upon.

Petitioner's response

4.46 The A&G and R&M cost for the years from 2003-04 to 2009-10 has already been analyzed by the Commission in the Tariff Order for FY 2010-11. In the current petition the JSEB is filing for truing up of the same. However, the increase in employee cost is due to the implementation of 6th Pay Commission.

Views of the Commission

4.47 The Commission takes note of the concerns of the objectors. The Commission is of the view that the justifiable and legitimate cost should only be allowed to the Petitioner for its smooth and efficient functioning. However, the Commission feels that the PTPS plant is having a higher employee number than required resulting in high employee cost. The Commission has also given directives to the Petitioner on this issue in the directives section of this Order.

Interest and finance charges

Public Comments/Suggestions

4.48 It has been argued that since JSEB has failed to provide its audited provisional accounts for recent years, determination of its sources of funds cannot be correctly made. In the absence of proper details of loans, such a high interest cost shall not be allowed.

Petitioner's response

4.49 Interest and finance charges mainly include the interest liability of the Board against the loans that it borrows for capital works. In the past years JSEB has added significantly to its network by expanding in rural areas with the help of borrowings from financial institutions. In FY 2010-11 and FY 2011-12, JSEB plans to spend roughly Rs 800 Crores in capital works. Accordingly the interest and finance charges have been increasing steadily owing to the increasing capital investment made by JSEB. For FY 2011-12, the interest and finance charges have been worked out on the basis of 'Terms and Conditions of Determination of Tariff Regulation, 2010'.

4.50 The interest on working capital and Interest on security deposit have also been estimated in lines with the Tariff Regulations, 2010.

Views of the Commission

4.51 The Commission has highlighted in various section of the Tariff Order that it has observed anomalies in the loans and other balance sheet items. However, as per its Order dated 14/03/2011 in Case No. 33 of 2010, the Commission has accepted the ARR & Tariff Petition for FY 2011-12 on the basis of un-audited Accounts. The ARR will be trued up once the audited data is available.

4.52 As per the Regulations, the interest and other finance costs are allowed only on the loan funds deployed in usable fixed assets, after netting off the consumer contribution, grants & subsidies and equity portion. The Commission has dealt with this issue in detail in the relevant sections of this Tariff Order.

Quality of supply

Public Comments/Suggestions

4.53 JSEB should specify the regulatory safeguards available to the consumer against prolonged supply of power at a lower voltage than what is contracted for and is required to maintain minimum quality of supply. Further voltage variation experienced by the consumers' ranges in between +10% to -20% which impacts the consumption adversely.

Petitioner's response

4.54 JSEB submits that the power supply to the consumers outside the command area of DVC is given by 18 grid substations located at different places in the State. Almost all grids are connected with state load dispatch centre (SLDC) at Ranchi through which the voltage variation between +6% and -9% is maintained. There are protective systems to take care of voltage abnormalities if at all they are recorded. There may be occasions when the recorded voltage levels are very low but these can in no way be said to be frequent phenomenon. JSEB admits that in case of certain consumers, where the supply is given through DVC system, it has been observed that the voltage level is low as compared to voltage in JSEB system. The matter has been repeatedly taken up with DVC and JSEB is making every effort to rectify the same. Further JSEB has complaint centres in the field offices where any such faults/abnormalities are recorded and attended to.

Views of the Commission

4.55 The Commission notes the concern raised by the consumers and the reply submitted by the Petitioner and has also imposed penalty on the Petitioner from FY 2007-08 onwards. Meanwhile, Petitioner has complied with the directives of the Commission and submitted information regarding the implementation of Standards of performance (SoP). Accordingly the Commission has given relaxation to the Petitioner from FY 2010-11. However, the Commission has given additional directives to the Petitioner on this issue in the Section 16: of this Order. The failure to do comply would lead to reinstating the penalties on non-compliance of SoP.

Tariff Design

Public Comments/Suggestions

4.56 There is no justification behind merging of HTSS consumer category with the HTS category as the industries under the categories have different load factors and power factors and, therefore, the proposal of JSEB should not be accepted.

Petitioner's response

4.57 The reasons for merging the HTSS and HTS categories have been dealt with in detail in the Tariff Petition filed by JSEB and it is requested that the objector refer to the same for details. As has already been explained in detail in the Tariff Petition of JSEB, although the average tariff of the HT category consumers has recorded a consistent increase with every tariff revision, the average per unit tariff of the HTSS category has recorded a steady decline over the years. Hence reduction in the average tariff of a subsidizing category at the cost of subsidized categories cannot be justified.

Views of the Commission

4.58 The Commission has agrees with the views of the objectors and has not allowed the merger. This issue has been dealt in detail Section 12: of this Order.

Replacement of defective meters

Public Comments/Suggestions

4.59 The replacement of defective meters is the duty of JSEB and hence should be carried out by it in a timely manner. Further JSEB should clearly specify the methodology adopted for estimating the consumption during the interim period when the meter is defective and not replaced. This would ensure transparency in the system.

Petitioner's response

4.60 The load factors proposed for calculation of electricity bill in the interim period when the meter of the consumer has been reported dead or defective and ordered for replacement have been arrived at based on the actual load factor observed in the system in the various consumer categories. JSEB further agrees with the objectors that the replacement of defective meters is the duty of the JSEB and it makes every effort to replace defective meters at the earliest subject to the availability.

Views of the Commission

4.61 The Commission agrees with the objector that replacement of defective meters is the responsibility of JSEB. In its Previous Orders, the Commission had directed the utility to submit a metering plan along a report on defective meters and action plan to replace all the defective meters within a period of 3 months. However, the Petitioner has not complied with the directive of the Commission and has not submitted the metering plan. The Commission once again directs the utility to submit a metering plan along with report on replacement of defective meters, as also mentioned in the directives section of this Order.

Demand based Tariff for DS/NDS Consumers

Public Comments/Suggestions

4.62 JSEB should implement demand based tariff for DS/NDS consumer categories also.

Petitioner's response

4.63 JSEB would like to apprise the objector that implementation of demand based tariff requires installation of special meters that are able to record the demand on a 15 minute interval. However these meters are relatively costly. This would not only require substantial capital investment in terms of purchasing new meters and then replacing the same, but would also cause a huge loss to JSEB in terms of the residual value of the meters currently in use. Hence immediate implementation of the proposal would be a financial disaster. However, in future the JSEB has plans to take this up in a phased manner. It is also pertinent to mention that the JSEB has implemented demand based tariff for several categories like HTS, HTSS and RTS etc.

Views of the Commission

4.64 The Commission has dealt with issues related to tariff revision and other tariff related issue in the Section 10: to Section 14: of this Order

Rebate on payment of outstanding arrears

Public Comments/Suggestions

4.65 JSEB's proposal of not offering rebates to consumers for clearing of outstanding arrears should not be allowed by the Commission.

Petitioner's response

4.66 The decision of not offering rebates to consumers with outstanding arrears was reached after detailed deliberations by the officials the Board. The Board submitted that if a case is pending in the court of law, and afterwards the same is decided in favour of the consumer, he is not required to pay any delayed payment surcharge (DPS). DPS becomes payable only if the case is decided in favour of the Board in which case recovery of DPS by the Board is legitimate and logical considering that the Board had to bear interest charges on amount that was under dispute which otherwise would have been recovered and have added to the cash flow of JSEB.

4.67 Moreover, a consumer with outstanding arrears is already causing losses to the Board. Hence, there is no reason that such losses should further be increased by means of offering rebates in favour of such a consumer.

Views of the Commission

4.68 The Commission concurs with the view of the Petitioner that no rebate for clearing outstanding arrears should be allowed to the defaulting consumers as it sets the wrong precedence and unduly burdens the honest consumers of the State. However, the Commission has decided that the outstanding dues which are stayed by the appropriate authority/Courts will not be treated as arrears. The same has been updated in the Tariff Schedule attached to this Order.

Penalty for exceeding the contract demand

Public Comments/Suggestions

4.69 The proposal of JSEB for penalising the HT consumers on exceeding their load is unreasonable and should not be allowed.

Petitioner's response

4.70 Industrial consumers form a major chunk of the load connected to the network. Also the network infrastructure is designed to cater to a particular load only with a small margin maintained for load fluctuations. Hence, if the HT consumers exceed demand significantly, it puts enormous pressure on the network during peak loading hours. Such increased demand may even lead to system collapse in extreme conditions causing severe damage to the network and the consumers alike. Therefore, it is imperative that HT consumers regulate their load optimally. The penalty for exceeding the contract demand has been proposed keeping this in mind. This would not only ensure grid discipline but would also lead to optimal utilization of the network.

Views of the Commission

4.71 The Commission has dealt with issues related to tariff revision and other tariff related issue in the Section 10: to Section 14: of this Order.

Minimum Billing Demand

Public Comments/Suggestions

4.72 The proposal of JSEB for increasing the billing demand from 75% to 85% is unjustified and should not be allowed.

Petitioner's response

4.73 The increase in the fixed charges from the current '75% of the declared demand or the actual recorded demand, whichever is higher' to '85% of the declared demand or the actual recorded demand, whichever is higher' is in order to ensure accurate declaration of the load/contract demand by the consumers thereby leading to better network management.

Views of the Commission

4.74 The Commission has dealt with issues related to tariff revision and other tariff related issue in the Section 10: to Section 14: of this Order.

Delayed Payment Surcharge

Public Comments/Suggestions

4.75 JSEB's proposal for monthly compounded delayed payment surcharge should not be accepted. Instead there should be a provision of levying one-time surcharge only.

Petitioner's response

4.76 JSEB has considered DPS in accordance with the principle adopted by the Commission in the previous Tariff Orders.

Views of the Commission

4.77 The Commission has dealt with issues related to tariff revision and other tariff related issue in the Section 10: to Section 14: of this Order.

State Government Dues

Public Comments/Suggestions

4.78 JSEB has huge outstanding dues from State government and other industries which affect its financial viability. The Board should make efforts to collect the outstanding dues instead of increasing the tariff.

Petitioner's response

4.79 JSEB submits that its officials have been trying their best for the recovery of outstanding dues. Most of the cases are subjudice before the court of law. As and when these recoveries will happen, it will be duly accounted for in the provisional accounts of JSEB under the head "Prior Period Income".

Views of the Commission

4.80 The Commission agrees with the consumers that the Petitioner should make all out efforts to collect the outstanding dues from its consumers, as outstanding dues adversely affect the financial position of the enterprise.

Capital Investment Plan

Public Comments/Suggestions

4.81 JSEB has not taken approval of the Commission for its capital investment plan for FY 2011-12.

Petitioner's response

4.82 In every ARR and Tariff Petition, there is a separate section under which the Board provides its capital investment plan to the Commission for approval. The interest liability of the Board is determined by the Commission according to the approved investment plan.

Views of the Commission

4.83 The Commission has received the capital investment plan from the Petitioner and has dealt with it the relevant sections of this Order.

Return on Equity

Public Comments/Suggestions

4.84 JSEB being a government entity and not having any equity of its own should not be allowed any return on equity.

Petitioner's response

4.85 The Board being an extended arm of the Government, there is no equity of the Board. However, the Board has proposed normative return on equity as is allowed in several states across the country.

Views of the Commission

4.86 As per the Commission's Tariff Regulations, 2010, the amount invested in usable fixed assets is assumed to be in the normative ratio of 70:30 and allows return on normative equity. The Commission has carried out the tariff determination exercise in accordance with the said Regulations.

Power Purchase

Public Comments/Suggestions

4.87 The power purchase projected by JSEB for FY 2011-12 is very high which is not justified.

Petitioner's response

4.88 The per unit power purchase cost for all the stations has been arrived at based on the actual cost reflecting in the power purchase bills in the first ten months of FY 2010-11. Hence, the cost is reflective of what is actually incurred by the JSEB. The projections for fuels consumption, station heat rate, auxiliary consumption etc. have been made on the actual parameters recorded in PTPS over the years.

Views of the Commission

4.89 The Commission is concerned with the high rate of power purchased by the Petitioner. Most of the power purchased by Petitioners is governed by terms and conditions of PPAs. Balance power requirement is met through expensive bilateral, short-term purchase which may not required had the own power plant of the utility are running at the optimal capacity.

Income from Sale of Power through UI

Public Comments/Suggestions

4.90 JSEB has not taken into account income from sale of power through UI while the power purchased through UI has been considered. This has considerably hiked the power purchase cost.

Petitioner's response

4.91 The income from UI has been taken into consideration while determining the gap for ARR. The same has been detailed out in section 'A4: Power purchase and fuel cost' of the petition. The net revenue from sale of power in UI has been deducted from the total power purchase cost.

Views of the Commission

4.92 The Commission has considered both UI payable and UI receivable while determining the ARR and Tariff Order for the years under consideration.

Treatment of Revenue Gap

Public Comments/Suggestions

4.93 JSEB should not pass on the entire revenue gap as this would lead to tariff shock and might consider creation of Regulatory asset.

Petitioner's response

4.94 JSEB has prepared its ARR and Tariff Petition for the year 2011-12 in accordance with the Terms and Conditions for determination of Tariff Regulations, 2010 for generation, transmission and distribution as have been issued by the Commission. The gap in the revenues at current tariff rates and the estimated expenditure has been accordingly arrived at. As per the process of tariff determination, this gap is to be met through a tariff hike or through other means as deemed fit by the Commission. Hence the hikes in demand as well as energy charges for consumer categories have been rationally proposed for partially bridging this gap. It is further stated that the proposed hikes have been determined after detailed deliberations by the officials of JSEB and due care has been taken that any particular category of consumers is not burdened by disproportionate tariff hike.

4.95 It is the prerogative of the Commission to decide how the revenue gap is to be met. So the petition only provides the proposals made by the JSEB for bridging the gap. The decision regarding creation of regulatory asset is solely in the hands of the Commission.

Views of the Commission

4.96 The Commission understands the concerns of the consumers. However, it has to balance the interest of the consumers as well as the Petitioner. Therefore, the Commission while pronouncing this Tariff Order has tried to ensure that on the one hand it does not entail tariff shock to consumers and on the other it addresses the genuine and legitimate requirements of the Petitioner.

SECTION 5: PROVISIONAL TRUE UP: FY 2007-08, FY 2008-09 & FY 2009-10

5.1 The year-wise provisional truing up exercise for various years has been carried out in view of the provisional accounts for the respective years and also in view of :

(i) Generation Tariff Regulations, 2004;

(ii) Distribution Tariff Regulations, 2004.'

(iii) Methodology adopted by the Commission in previous Tariff Order

5.2 Since the Petitioner submitted the disaggregated function-wise information for FY08 to FY10 as additional information, the Commission decided to approve the functionally disaggregated ARR for the respective years.

5.3 The component-wise description of Petitioner's submission and Commission's analysis is given hereunder.

Energy Sales

Petitioner's submission

5.4 The Petitioner submitted the energy sales figures of 4375 MU, 5009 MU and 5789 MU during FY08, FY 09 and FY 10 respectively on the basis of provisional accounts of the respective years.

Commission's analysis

5.5 The Commission has scrutinized the commercial information with regard to the category-wise number of consumers and category-wise sales submitted by the Petitioner from FY 2007-08 to FY 2009-10.

5.6 The Commission enquired about the nature of inter-sate sales, on which the Petitioner submitted that the inter-state sales includes the power sold through unscheduled interchange (UI) and through power exchange. The Petitioner also submitted that it has not purchased any power from the exchange during FY 2008-09 & FY 2009-10 and further submitted that the power trading through power exchange has been discontinued w.e.f. from August'2009 to ensure compliance of the directives of the Commission.

5.7 The Commission, after verifying the date for energy sold to consumers and inter-state sale of power during FY 2007-08, FY 2008-09 and FY 2009-10, provisionally approves the category-wise sales figures mentioned in the provisional accounts. The consumer category-wise sales approved by the Commission is tabulated hereunder:

Table 10 : Approved Energy Sales (in MUs)

Categories	FY 2007-08	FY 2008-09	FY 2009-10
Domestic	1,370.3	1,615.2	2,256.0
Commercial	214.4	239.4	265.7
Public Lighting	71.6	76.7	120.7
Irrigation	72.4	68.8	65.7
Public water works	70.2	63.8	72.2
Industrial LT	123.6	137.6	145.8
Industrial HT	1,791.4	1,851.7	1,962.9
Railway	531.5	616.6	603.2
Interstate sale	129.4	339.2	296.3
Total	**4,374.7**	**5,009.0**	**5,788.7**

Transmission & Distribution (T&D) losses

Petitioner's submission

5.8 The Table below summarises the overall T&D loss levels including external losses beyond state boundary as submitted by the Petitioner:

Table 11 : Proposed T&D losses

Year	T&D losses (%)
FY 2007-08	42.73%
FY 2008-09	42.79%
FY 2009-10	36.51%

5.9 The Petitioner has stated that there has been a reduction of 13.51% in the T&D losses since FY 2005-06 due to the various initiatives taken by the Board.

5.10 The various steps initiated by the Petitioner are as follows:

(a) **Anti Power Theft Cell**: The Petitioner submitted that a team has been created at the headquarters as well as at the field level to make surprise raids at consumer premises on a routine basis. Also, from July'10 onwards, half day every month have been declared as anti power theft day and raids are being conducted on those days through-out the State.

(b) **Remote metering Cell**: All the HT consumers have been provided with tri-vector meters with modems and SIM cards for remote reading capability. The cell takes reading on the regular basis for study of load/consumption pattern and tamper reports etc. The Petitioner submitted that in the second phase, it is planning to extend the reading facility to all the consumers under LTIS category of which 2000 meters have already been installed and the process of installation of such meters for rest of the consumer under LTIS consumers is underway.

(c) **R-APDRP**: The tenders have already been floated for several items under Part-A of R-APDRP scheme which includes installation of boundary meters, feeder meters, DTR meters and also consumer indexing.

Commission's analysis

5.11 The Commission appreciates the steps taken by the Petitioner to reduce the T&D losses in its area of operation; however, the same is not reflected in the T&D loss figures submitted by it in its ARR & Tariff Petition. As is evident from the actual T&D losses submitted by the Petitioner, the T&D losses are much more than the allowed targets as per the norms set by the Commission. The Commission is of the view that such a high T&D loss level due to Petitioner's inefficiency should not be passed on to the consumers.

5.12 As mentioned in the previous Tariff Order, the Hon'ble APTEL in its direction no. 10 of appeal no. 129/2007 had expressed concern on the excessive Transmission and Distribution (T&D) losses of the Petitioner and had directed the Commission to lay down time bound targets for reduction of T&D losses and norms for improvement of the power generating stations as well as increasing the overall efficiency of the Board.

5.13 In compliance to the APTEL's direction, the Commission had laid down a time bound reduction target for T&D losses so that the Petitioner achieves the benchmark T&D loss level of 15% by the end of FY 2016-17. The Commission had approved the T&D losses based on the loss trajectory set by the Commission in its previous Tariff Order of FY 2010-11.

5.14 The table below summarises the T&D loss levels approved by the Commission in the previous Tariff Order of FY 2010-11, as proposed by the Petitioner in the Tariff Petition of FY 2011-12 and approved by the Commission:

Table 12 : Approved T&D Losses

Years	As approved by the Commission in the Tariff Order of FY 11	As proposed by Petitioner in Tariff Petition	Now approved by the Commission
FY 2007-08	32.66%	42.73%	32.66%
FY 2008-09	28.66%	42.79%	28.66%
FY 2009-10	24.66%	36.51%	24.66%

Energy Requirement

Petitioner's submission

5.15 The energy requirement from FY 2007-08 to FY 2009-10 submitted by the Petitioner based on the proposed sales and T&D losses is tabulated hereunder:

Table 13 : Proposed Energy Requirement (MUs)

Description	FY 2007-08	FY 2008-09	FY 2009-10
Power Purchase from Outside JSEB Boundary	3016	3270	3959
Loss in external systems (%)	5.80%	2.99%	3.84%
MU's lost in external system	175	98	152
Net Outside State Power Purchase	2841	3173	3807
Energy Input Directly to State Transmission System	550	1039	475
Own Generation	804	1096	1084
UI Payable	157	7	237
UI Sale/ Receivable	129	339	308
Energy available for onward transmission	4221	4975	5295
Transmission loss (%)	**5%**	**5%**	**5%**
Transmission loss (MUs)	211	249	265
Net Energy Sent to Distribution (MUs)	4010	4726	5030
Direct input at distribution voltage (33 kV)	3016	3090	3204
Total Energy Available for Distribution	**7026**	**7816**	**8235**
Sales (MUs)	4245	4670	5492
Distribution loss (MUs)	2781	3147	2742
Distribution loss (%)	40%	40%	33.3%
Overall T&D loss	**42.73%**	**42.79%**	**36.51%**

Commission's analysis

5.16 The energy requirement of the Petitioner is approved based on sales and T&D losses as approved by the Commission. The T&D losses have not been considered on inter-state sale of power.

Table 14 : Approved Energy Requirement (MUs)

Description	FY 2007-08	FY 2008-09	FY 2009-10
Total Energy Sales to Intra-state consumers	4,245.3	4,669.9	5,492.4
Overall T&D loss (%) for intra-state consumers	32.66%	28.66%	24.66%
Overall T&D loss for intra-state consumers	2059.0	1876.1	1797.7
Total Energy requirement for intra-state consumers	**6,304.3**	**6,545.9**	**7,290.1**
Energy requirement for inter-state sale	129.4	339.2	296.3
Total Energy requirement	**6,433.7**	**6,885.1**	**7,586.4**

Own Generation & Fuel cost- PTPS

Petitioner's submission

5.17 The Petitioner submitted the generation costs of Rs 88.8 Cr, Rs 137.1 Cr and Rs 143.6 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively.

5.18 On being directed by the Commission to submit the detailed calculation of generation cost of PTPS, the Petitioner submitted the following information:

Table 15: Proposed Plant parameters & Fuel cost determinants for PTPS

Particulars	Units	FY 2007-08	FY 2008-09	FY 2009-10
Installed Capacity	MW	840	840	840
De-rated Capacity (Usable)	MW	640	640	640
Proposed for consideration for PLF calculation	MW	-	-	-
Plant Load Factor	%	9.47%	13.77%	15.37%
Auxiliary Consumption	%	14.45%	13.59%	14.13%
Station Heat Rate	kCal/kWh	4471.15	4515.69	4310.19
Calorific Value of Coal	kCal/kg	4540.10	4540.10	4540.10
Calorific Value of FO/LDO	kCal/L	10500	10500	10500
Coal Transit Loss	%	2.13%	2.55%	3.06%
Price of Coal - Landed Cost (Incl Transit Loss)	Rs/Tonne	915.00	990.00	1025.00
Price of Oil (FO)	Rs/kL	23508	28332	26898
Price of Oil (LDO)	Rs/kL	29433	38149	39415
Specific Coal Consumption	kg/kWh	0.95	0.97	0.93
Sp. Oil Consumption (FO)	ml/kWh	9.20	7.49	6.14
Sp. Oil Consumption (LDO)	ml/kWh	5.10	3.86	2.91
Workings				
Gross units generated	MU	696.72	1013.44	1131.15
Net units generated	MU	596.04	875.72	971.31
Fuel Cost				
Station Heat Rate	kCal/ kWh	4471.15	4515.69	4310.19

Gross Units Generated	MU	696.72	1013.44	1131.15
Total Heat Required	Million kCal	3115142	4576382	4875468
Calorific Value of Sec Fuel	kCal/ Litre	10500	10500	10500
Specific Oil Consumption (FO)	ml/kWh	9.20	7.49	6.14
Secondary Oil Consumption(FO)	kL	6411.80	7594.58	6949.13
Specific Oil Consumption (LDO)	mL/kWh	5.10	3.86	2.91
Secondary Oil Consumption (LDO)	kL	3551.22	3911.24	3288.56
Heat Generated by Secondary fuel	Million kCal	104612	120811	107496
Heat Required from Coal	Million kCal	3010530	4455571	4767972
Calorific Value of Coal	kCal/ kg	4540.10	4540.10	4540.10
Coal Consumption	Million Tons	0.66	0.98	1.05
Secondary Oil (FO) Cost per Klitres	Rs/ klitres	23508.00	28332.00	26898.00
Secondary Oil (LDO) Cost per Klitres	Rs/ klitres	29433.00	38149.00	39415.00
Secondary Oil Cost (FO + LDO)	Rs Million	255.25	364.38	316.54
Coal Cost per Ton	Rs/ Ton	915.00	990.00	1025.00
Coal Cost	Rs Million	606.73	971.57	1076.45
Fuel Cost/Unit	**Rs/kWh**	**1.24**	**1.32**	**1.23**

Commission's analysis

5.19 The Commission enquired about the variation in the generation cost submitted in the Tariff Petition of FY 2011-12 and calculation submitted in the additional information. The Petitioner submitted that the generation cost in the Tariff Petition was as per accounts which was inclusive of operating expenses like water charges, lubricants charges, other fuel related expenses and cost of consumables and stores whereas the calculation submitted as additional information only includes the cost of coal and oil which is related to Patratu Thermal power station.

5.20 The Commission in its previous Tariff Order of FY 2010-11 had specified a trajectory of operational parameters of PTPS. The table below summarises the trajectory set by the Commission for FY 2007-08, FY 2008-09 and FY 2009-10:

Table 16: Operational Parameters set by the Commission in the previous Tariff Order for PTPS

Years	PLF	Auxiliary Consumption	Transit loss of coal	Specific Oil Consumption	SHR
FY 2007-08	32%	10.50%	1.25%	15.95	3550
FY 2008-09	34%	10.50%	0.75%	10.77	3450
FY 2009-10	36%	10.50%	0.30%	5.59	3350
FY 2010-11	38%	10.50%	0.30%	2.00	3250

5.21 The variable cost of PTPS has been approved based on the trajectory set by the Commission as mentioned above.

5.22 Meanwhile, the Commission while scrutinizing the data submitted by the Petitioner observed that the actual net generation submitted by the Petitioner of 596.0 MU for FY 2007-08 is not in line with figures of 587.4 MU available in the provisional accounts. Therefore, the Commission has decided to consider the actual net generation as per provisional accounts for the respective years.

5.23 The Commission has approved the fuel cost of Rs 68.6 Cr for FY 2007-08 based on the per unit fuel cost determined by the Commission and the actual generation mentioned in the provisional accounts.

5.24 The summary of the operational parameters and the corresponding generation cost for PTPS as approved by the Commission in the previous Tariff Order of FY 2010-11, submitted by the Petitioner in the Tariff Petition of FY 2011-12 and now approved by the Commission for FY 2007-08 is detailed in the table given below:

Table 17: Plant parameters & Fuel cost determinants and Approved Generation from PTPS for FY 2007-08

Particulars	Units	FY 2007-08		
		Approved in TO of FY 11	Proposed by JSEB	True-up by JSERC
Installed capacity	MW	840	840	**840**
De-rated Capacity (Usable)	MW	770	640	**770**
Proposed for consideration for PLF calculation	MW		-	**-**
PLF	%	32.00%	9.47%	**32.00%**
Auxiliary Consumption	%	10.50%	14.45%	**10.50%**
Station Heat Rate	kcal/KWh	3550	4471.15	**3550**
Calorific value of coal	kcal/kg	4400	4540.1	**4540.1**
Calorific value of FO/LDO	kcal/l	10500	10500	**10500**
Coal Transit Loss	%	1.25%	2.13%	**1.25%**
Price of Coal	Rs/tonne	910	915	**895.5**
Price of Oil (FO)	Rs/kL	28812	23508	**23508**
Price of Oil (LDO)	Rs/kL		29433	**29433**
Specific Coal Consumption	kg/kWh	1	0.95	**0.78**
Sp. Oil consumption (FO)	ml/kWh	16	9.2	**9.2**
Sp. Oil consumption (LDO)	ml/kWh		5.1	**5**
Gross units generated	MU	2158	696.72	**2158.5**
Net Units generated	MU	1932	596.04	**1931.8**
Fuel cost				
Total heat required	Mkcal	7662547	3115142	**7662547.2**
Secondary Oil consumption (FO)	Kl	34428	6411.8	**19857.9**
Secondary Oil consumption (LDO)	Kl		3551.22	**11008.2**
Heat generated by secondary oil	MKcal	361489	104612	**324093**
Heat required from coal	MKcal	7301058	3010530	**7338454**

Coal Consumption	MT	1.68	0.66	**1.64**
Secondary Oil Cost (FO+LDO) per kL	Rs Million	992	255.25	**790.82**
Coal Cost	Rs million	1529	606.73	**1465.8**
Fuel Cost/Unit (on Gross Generation)	Rs/kWh	1.18	1.24	**1.05**
Fuel Cost/Unit (on Net generation)	Rs/kWh	1.32	1.45	**1.17**
Coal Cost (on net gen)	Rs/Kwh		1.03	**0.76**
Coal Cost (on net gen)	Rs Cr		60.67	**44.57**
Oil Cost (on net gen)	Rs/Kwh		0.43	**0.41**
Oil Cost (on net gen)	Rs Cr		25.53	**24.05**
Approved fuel cost (on the basis of Net generation)	**Rs Cr**		**86.20**	**68.61**

5.25 The Commission has computed the variable cost of PTPS based on the trajectory set by the Commission in the previous Tariff Order of FY 2010-11.

5.26 For FY 2008-09, fuel cost of Rs 103.28 Cr has been approved based on the per unit fuel cost determined by the Commission and actual generation as per the provisional accounts for the said year.

5.27 The summary of the operational parameters and the corresponding generation cost for PTPS as approved by the Commission in the previous Tariff Order of FY 2010-11, submitted by the Petitioner in the Tariff Petition of FY 2011-12 and now approved by the Commission for FY 2008-09 is detailed in the table given below:

Table 18: Plant parameters & Fuel cost determinants and Approved Generation from PTPS for FY 2008-09

Particulars	Units	FY 2008-09		
		Approved in TO of FY 11	Proposed by JSEB	True-up by JSERC
Installed capacity	MW	840	840	**840**
Derated Capacity (Usable)	MW	770	640	**770**
Proposed for consideration for PLF calculation	MW		-	
PLF	%	34.00%	13.77%	**34.00%**
Auxiliary Consumption	%	10.50%	13.59%	**10.50%**
Station Heat Rate	kcal/KWh	3450	4515.69	**3450**
Calorific value of coal	kcal/kg	4350	4540.1	**4540.1**
Calorific value of FO/LDO	kcal/l	10500	10500	**10500**
Coal Transit Loss	%	0.75%	2.55%	**0.75%**
Price of Coal	Rs/tonne	1000	990	**964.76**
Price of Oil (FO)	Rs/kL	30000	28332	**28332**
Price of Oil (LDO)	Rs/kL		38149	**38149**
Specific Coal Consumption	kg/kWh	1	0.97	**0.76**
Sp. Oil consumption (FO)	ml/kWh	11	7.49	**7.11**
Sp. Oil consumption (LDO)	ml/kWh		3.86	**3.66**
Workings				
Gross units generated	MU	2293	1013.44	**2293.4**

Net Units generated	MU	2052.56	875.72	**2052.6**
Fuel cost				
Total heat required	Mkcal	7912120	4576382	**7912119.6**
Secondary Oil consumption (FO)	Kl	24700	7594.58	**16299.54**
Secondary Oil consumption (LDO)	Kl		3911.24	**8400.03**
Heat generated by secondary oil	MKcal	259354	120811	**259346**
Heat required from coal	MKcal	7652766	4455571	**7652774**
Coal Consumption	MT	1.77	0.98	**1.70**
Secondary Oil Cost (FO+LDO) per kL	Rs Million	741.01	364.38	**782.25**
Coal Cost	Rs million	1772.550	971.57	**1638.48**
Fuel Cost/Unit (on Gross Generation)	Rs/kWh	1.11	1.32	**1.06**
Fuel Cost/Unit (on Net generation)	Rs/kWh	1.24	1.53	**1.18**
Coal Cost (on net gen)	Rs/Kwh		1.11	**0.80**
Coal Cost (on net gen)	Rs Crores		97.16	**69.91**
Oil Cost (on net gen)	Rs/Kwh		0.42	**0.38**
Oil Cost (on net gen)	Rs Crores		36.44	**33.37**
Approved fuel cost (on the basis of Net generation)	**Rs Crores**		**133.60**	**103.28**

5.28 The Commission has approved the variable cost of PTPS based on the trajectory set by the Commission in the Previous Tariff Order of FY 2010-11.

5.29 For FY 2009-10, fuel cost of Rs 97.17 Cr has been approved based on the per unit fuel cost determined by the Commission and actual generation mentioned in the provisional accounts.

5.30 The summary of the operational parameters and the corresponding generation cost for PTPS as approved by the Commission in the previous Tariff Order of FY 2010-11, submitted by the Petitioner and now approved by the Commission for FY 2009-10 is detailed in the table given below:

Table 19: Plant parameters & Fuel cost determinants and Approved Generation from PTPS for FY 2009-10

Particulars	**Units**	**FY 2009-10**		
		Approved in TO of FY 11	**Proposed by JSEB**	**True-up by JSERC**
Installed capacity	MW	840	840	**840**
Derated Capacity (Usable)	MW	770	640	**770**
Proposed for consideration for PLF calculation	MW		-	
PLF	%	36.00%	15.37%	**36.00%**
Auxiliary Consumption	%	10.50%	14.13%	**10.50%**
Station Heat Rate	kcal/KWh	3350	4310.19	**3350**
Calorific value of coal	kcal/kg	4350	4540.1	**4540.1**
Calorific value of FO/LDO	kcal/l	10500	10500	**10500**
Coal Transit Loss	%	0.30%	3.06%	**0.30%**

Price of Coal- Landed cost	Rs/tonne	1000	1025	**993.6**
Price of Oil (FO)	Rs/kL	30000	26898	**26898**
Price of Oil (LDO)	Rs/kL		39415	**39415**
Specific Coal Consumption	kg/kWh	1	0.93	**0.74**
Sp. Oil consumption (FO)	ml/kWh	6	6.14	**3.79**
Sp. Oil consumption (LDO)	ml/kWh		2.91	**1.80**
Workings				
Gross units generated	MU	2428	1131.15	**2428.3**
Net Units generated	MU	2173	971.31	**2173.3**
Fuel cost				
Total heat required	Mkcal	8134711	4875468	**8134711.2**
Secondary Oil consumption (FO)	Kl	13576	6949.13	**9209.4**
Secondary Oil consumption (LDO)	Kl		3288.56	**4364.7**
Heat generated by secondary oil	MKcal	142545	107496	**142527**
Heat required from coal	MKcal	7992166	4767972	**7992184**
Coal Consumption	MT	1.84	1.05	**1.77**
Secondary Oil Cost (FO+LDO) per kL	Rs Million	407	316.54	**419.75**
Coal Cost	Rs million	1843	1076.45	**1754.41**
Fuel Cost/Unit (on Gross Generation)	Rs/kWh	0.94	1.23	**0.90**
Fuel Cost/Unit (on Net generation)	Rs/kWh	1.05	1.43	**1.00**
Approved Fuel Cost				
Coal Cost (on net gen)	Rs/Kwh		1.11	**0.81**
Coal Cost (on net gen)	Rs Crores		107.65	**78.41**
Oil Cost (on net gen)	Rs/Kwh		0.33	**0.19**
Oil Cost (on net gen)	Rs Crores		31.65	**18.76**
Approved fuel cost (on the basis of Net generation)	**Rs Cr**		**139.30**	**97.17**

Own Generation- SHPS

Petitioner's submission

5.31 The Petitioner in the regulatory formats submitted along with the Tariff Petition of FY 2011-12, submitted the following generation details for SHPS;

Table 20 : Generation details for SHPS submitted by the Petitioner

Particulars	Units	FY 2007-08	FY 2008-09	FY 2009-10
Capacity	MW	130.0	130.0	130.0
Gross Generation	MU	216.5	223.3	115.7
Aux. Consumption	%	0.11%	1.29%	2.49%
Aux. Consumption	MU	0.2	2.9	2.9
Net Generation	MU	216.2	220.4	112.8

Commission's analysis

5.32 The Commission has analysed the data submitted by the Petitioner pertaining to generation for SHPS for FY 2007-08, FY 2008-09 and FY 2009-10 and it is of the view that the auxiliary consumption submitted by the Petitioner is very high. Moreover, the information submitted by the Petitioner was not in line with the provisional accounts. The same was communicated to the Petitioner, to which, the Petitioner submitted that the inadvertent error might be condoned and requested the Commission to consider the figures as per provisional accounts for each year.

5.33 Since, the tariff determination regulations for hydro generating stations of JSERC were not in place in FY 2007-08, FY 2008-09 and FY 2009-10, the Commission has decided to approve the auxiliary consumption based on the norm of 0.2% specified in the CERC regulations.

5.34 The 'CERC, (Terms and conditions of Tariff), Regulations, 2004' specify an auxiliary consumption of 0.2% for the surface hydro electric power generating stations with rotating exciters mounted on the generator shaft which is applicable for the type of hydro generating station that the Petitioner owns.

5.35 In FY 2007-08, the Commission has observed that the Petitioner has performed better than the norms. The actual auxiliary consumption for FY 2007-08 comes to 0.11% as against 0.2% specified in the said regulations. Therefore, the Commission approves the actual auxiliary consumption of 0.11% for FY 2007-08 as it is better than the norms specified by the Commission.

5.36 It is clarified that the norms of operation specified under the Regulations are the threshold norms and this does not preclude the generating company and the beneficiaries from agreeing to improved norms of operation and in such case improved norms will be applicable for the determination of tariff. Therefore, the Commission encourages the Petitioner to take necessary action to achieve the auxiliary consumption of a lesser value than the applicable norms. In view of the above, for FY 2007-08, the Commission approves the auxiliary consumption submitted by the Petitioner and for FY 2008-09 and FY 2009-10, the Commission has approved the auxiliary consumption as per the 'CERC, (Terms and conditions of Tariff), Regulations, 2004.

5.37 The Commission has approved the net generation of SHPS based on the actual gross generation mentioned in the provisional accounts of the respective years and the normative auxiliary consumption as per CERC 'Terms and Conditions of tariff Regulations, 2004. The summary of the operational parameters for SHPS as approved by the Commission in the previous Tariff Order of FY 2010-11, as per the provisional accounts and now approved by the Commission in the Tariff Order for FY 2011-12 is tabulated hereunder:

Table 21: Approved generation from SHPS

Particulars	Units	FY 2007-08			FY 2008-09			FY 2009-10		
		Approved in TO of FY 2010-11	Actual as per accounts	True-up	Approved in TO of FY 2010-11	Actual as per accounts	True-up	Approved in TO of FY 2010-11	Actual as per accounts	True-up
Capacity	MW	130	130	130	130	130	130	130	130	130
Gross Generation	MU	214	216.5	216.5		223.3	223.3		115.7	115.7
Aux. Consumption	%		0.11%	0.11%		1.29%	0.2%		2.49%	0.2%
Aux. Consumption	MU	0.24	0.24	0.24		2.9	0.45		2.88	0.23
Net Generation	MU	214	216.2	216.2	236.8	220.4	222.9	236.8	112.8	115.4

Power Purchase

Petitioner's submission

5.38 The Petitioner submitted the power purchase cost of Rs 1655.9 Cr, Rs 1785.6 Cr and Rs 1924.4 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively based on the provisional accounts of the respective years.

5.39 On being directed by the Commission to submit the source-wise power purchase details for each year, the Petitioner submitted the year-wise power purchase- quantum and cost in the form of additional information, as tabulated hereunder:

Table 22: Proposed source-wise Power Purchase quantum, rate and cost

Source	FY 2007-08			FY 2008-09			FY 2009-10		
	Unit Rate (Rs/kWh)	MUs	Amt. (Rs Cr)	Unit Rate (Rs/kWh)	MUs	Amt. (Rs Cr)	Unit Rate (Rs/kWh)	MUs	Amt (Rs Cr)
Farakka	1.78	549.7	98.1	2.35	576.3	135.2	2.61	695.0	181.1
Kahalgaon	1.84	78.6	14.5	2.34	92.8	21.7	1.62	122.8	19.9
Kahalgaon II				2.39	40.5	9.7	2.59	90.0	23.3
Talcher	1.28	438.1	55.9	1.51	491.9	74.2	1.67	503.9	84.2
WBSEB	4.39	46.2	20.3	4.35	49.5	21.5	4.86	55.9	27.1
DVC	2.80	2969	832.9	2.88	3040.4	875.9	2.74	31484	863.9
Rangit (NHPC)	1.73	43.3	7.5	1.79	43.8	7.8	1.84	42.8	7.9
Teesta (NHPC)	1.62	4.4	0.7	1.70	229.9	39.0	1.99	317.6	63.1

Chukha	1.57	196.1	30.7	1.60	200.8	32.1	1.46	213.1	31.1
PTC (ST)	7.84	26.9	21.1	0.00	0.0				
TVNL	1.93	1599.8	308.9	2.05	2027.1	415.6	2.05	18448	378.2
UI Payable	5.68	156.8	89.0	4.05	6.9	2.8	2.94	237.1	69.7
UI Receivable		129.4			339.2			296.3	
Power traded through IEX		0.0			8.6			12.1	
PTC (Tala HEP)	1.84	366.9	67.5	1.84	437.6	80.5	1.84	381.5	70.2
DVC (ST)	2.78	261.4	72.8	2.78	126.9	35.3	2.77	222.6	61.7
Own Generation (Thermal)	-	587.4	-	-	873.1	-	-	968.7	-
Own Generation (Hydel)	-	216.2	-	-	223.1	-	-	115.4	-
Solar	-	-	-	-	-	-	-	-	-
Other renewable	-	-	-	-	-	-	-	-	-
PGCIL	-	-	34.6	-	-	36.5	-	-	43.6
ERLDC	-	-	1.3	-	-	0.5	-	-	1.9
Payable		6738	1655.9		7364.7	1788.4	2.45	78751	1926.9
Receivable		129.4	0.0	0.00	347.8	0.0	0.00	308.4	0.0
Net Purchase/ Cost	**2.51**	**6608**	**1655.9**	**2.55**	**7016.9**	**1788.4**	**2.55**	**75672**	**1926.9**

5.40 The Petitioner submitted that there is an increase in the power purchase cost from various sources. For NTPC plants alone, the actual cost of power purchase is Rs 168.4 Cr as against the approved power purchase cost of Rs 165.7 Cr during FY 2007-08; Rs 240.8 Cr as against the approved power purchase cost of Rs 234.3 Cr. for FY 2008-09 and Rs 308.5 Cr as against the approved power purchase cost of Rs 262.2 Cr for FY 2009-10.

Commission's analysis

5.41 The Commission analysed the original ARR as well as the additional information submitted by the Petitioner pertaining to power purchase cost and quantum for FY 2007-08 to FY 2009-10 and observed a lot of discrepancies which were communicated to the Petitioner.

5.42 The Petitioner submitted that the discrepancies were primarily because of different practices adopted by the commercial department and accounts department of JSEB. It has stated that the commercial department maintains its power purchase account based on the total bills received in a particular financial year (inclusive of bills for power purchased in the previous financial year) whereas the accounts department maintains its power purchase account for bills limited only to a particular financial year due to which there are some variations in both the figures. The Petitioner has requested to condone these variations and accept the figures from provisional accounts.

5.43 The Commission while validating the power purchase figures submitted by the Petitioner also noticed that the Schedule 6 of the provisional accounts contains a power purchase source – NHPC- Kuruchi which the Petitioner has not included in the power purchase details submitted by it. The same was communicated to the Petitioner, to which it replied that they are not sourcing any power from NHPC-Kuruchi and that has been inadvertently mentioned in Schedule-6. The Petitioner clarified that this head comprises of aggregate power sourced from Chukha, PTC short term power and PTC-Tala HEP. The Commission after further verification accepted the point put forth by the Petitioner.

5.44 The Commission enquired about the UI payable charges claimed by the Petitioner in each year, to which Petitioner submitted that the UI payable charges are included in the PGCIL charges submitted by it. The Commission asked the Petitioner to provide the break-up of PGCIL charges and UI payable charges separately. Subsequently, the Petitioner submitted the following information as additional information:

Table 23 : Summary of PGCIL and UI payable charges

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
PGCIL Charges	37.7	29.2	52.0
UI charges	86.3	7.3	67.5
Total	123.6	36.5	119.5

5.45 The Commission found the details furnished to be in line with the accounts of the respective years and hence approved the same.

5.46 The source-wise power purchased approved by the Commission is tabulated hereunder:

Table 24: Approved Source-wise Power Purchase Quantum and Cost (MU)

Sources	FY 2007-08			FY 2008-09			FY 2009-10		
	MUs	Unit Rate(Rs/ kWh)	Amount (Rs Cr)	MUs	Unit Rate(Rs /kWh)	Amount (Rs Cr)	MUs	Unit Rate(Rs /kWh)	Amount (Rs Cr)
Farakka	549.7	1.78	98.1	576.3	2.35	135.2	695.0	2.61	181.1
Kahalgaon	78.6	1.84	14.5	92.8	2.34	21.7	122.8	1.62	19.9
Kahalgaon II	0	0.00	0.0	40.5	2.39	9.7	90.1	2.59	23.3

Talcher	438.1	1.28	55.9	491.9	1.51	74.2	504.0	1.67	84.2
NTPC- Sub Total	**1066.4**	**1.58**	**168.5**	**1201.5**	**2.00**	**240.8**	**1411.9**	**2.19**	**308.5**
WBSEB	46.2	4.39	20.3	49.5	4.35	21.5	55.9	4.86	27.1
DVC	2969.8	2.80	832.9	3040.4	2.88	875.9	3148.5	2.74	863.9
DVC short term power	261.4	2.78	72.8	127.0	2.78	35.3	222.6	2.77	61.7
DVC-Sub Total	3231.2	2.80	905.7	3167.4	2.88	911.2	3371.1	2.75	925.6
NHPC-Rangit	43.3	1.73	7.5	43.8	1.79	7.9	42.8		
NHPC-Teesta	4.4	1.62	0.7	230.0	1.70	39.0	317.6		
NHPC- Sub Total	47.7	1.72	8.2	273.8	1.71	46.9	360.4	1.73	62.3
Chukha	196.1	1.57	30.7	200.8	1.60	32.1	213.1	1.46	31.1
PTC-ST	27.0	7.84	21.2	0		0	0		0
PTC-tala HEP	366.9	1.84	67.5	437	1.84	80.5	381.5	1.84	70.2
PTC- Sub Total	590	2.02	119.4	639.2	1.76	112.7	594.5	1.70	101.3
TVNL	1599.8	1.93	308.9	2027.2	2.05	415.6	1844.9	2.05	378.2
UI payable	156.8	0		6.9	0.00	0.0	237.1		0
PGCIL			123.7			36.5			119.5
ERLDC			1.3			0.5			1.9
Power Purchase/Cost from outside sources	6738.1	2.46	1,655.9	7365.41	2.42	1,785.6	7875.7	2.44	1,924.4
Own generation-Thermal	587.4	-	-	875.7	-	-	971.3	-	-
Own generation-Hydel	216.2	-	-	220.5	-	-	112.8	-	-
Power purchase cost incl. Own generation	7541.7	2.20	1655.9	8461.6	2.11	1,785.6	8959.8	2.15	1,924.4
Disincentive for non-achievement of T&D losses	-1108.0	2.46	-272.3	-1,576.5	2.42	-382.2	-1,373.4	2.44	-335.6
Power Purchase allowed	**6,4337**	**2.15**	**1,383.6**	**6,885.1**	**2.04**	**1,403.4**	**7,586.41**	**2.09**	**1,588.8**

Disincentive for non-achievement of T&D loss reduction targets

5.47 The difference in the actual power purchase and the power purchase requirement approved by the Commission is disallowed at the average power purchase rate and is treated as 'Disincentive for non-achievement of T&D loss targets'.

5.48 The Commission had computed the disincentive for non-achievement of T&D loss reduction targets as Rs 275.4 Cr, Rs 131.7 Cr and Rs 117.8 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively in the Tariff Order for FY 2010-11. However, in view of the provisional accounts submitted by the Petitioner for FY 2007-08, FY 2008-09 and FY 2009-10, the disincentive for non-achievement of T&D loss reduction targets works out to Rs 272.3 Cr, Rs 382.2 Cr and Rs 335.6 Cr respectively for FY 2007-08, FY 2008-09 and FY 2009-10.

5.49 The table below summarises the computation of non-achievement of T&D loss reduction targets computed by the Commission for FY 2007-08, FY 2008-09 and FY 2009-10.

Table 25: Disincentive for non-achievement of T&D loss reduction targets

Description	Unit (MU)	Per Unit (Rs/kWh)	Cost (Rs Cr)
FY 2007-08			
Power purchased from outside sources	6738.1	2.46	1,655.9
Own Generation	803.6		
Power purchase including own generation	7541.7		1,655.9
Disincentive for non-achievement of T&D loss reduction targets	1,107.95	2.46	272.3
FY 2008-09			
Power purchased from outside sources	7365.4	2.42	1,785.6
Own Generation	1096.2		
Power purchase including own generation	8461.6		1,785.6
Disincentive for non-achievement of T&D loss reduction targets	1,576.5	2.42	382.2
FY 2009-10			
Power purchased from outside sources	7875.7	2.44	1,924.4
Own Generation	1084.1		
Power purchase including own generation	8959.8		1,924.4
Disincentive for non-achievement of T&D loss reduction targets	1,373.4	2.44	335.6

Employee Cost

Petitioner's submission

5.50 The Petitioner in the ARR & Tariff Petition had submitted the employee cost of Rs 168.9 Cr, Rs 189.2 Cr and Rs 207.8 Cr based on the provisional accounts for FY 2007-08, FY 2008-09 and FY 2009-10 respectively.

5.51 The Petitioner submitted the employee cost as additional information disaggregated function-wise and stated the basis of segregation is as per the number of employees engaged in each function. The table below summarises the disaggregated employee cost and number of employees engaged in each function submitted by the Petitioner for FY 2007-08, FY 2008-09 and FY 2009-10.

Table 26 : Summary of proposed employee cost (Rs Cr)

Particulars	Generation- Hydel	Generation- Thermal	Transmission	Distribution	Total
FY 2007-08					
No. of Employees		**2584**		**3700**	**6284**
Employee cost	5.9	39.9	17.5	105.7	
FY 2008-09					
No. of Employees		**2422**		**3663**	**6085**
Employee cost	6.6	44.7	19.6	118.4	
FY 2009-10					
No. of Employees	**209**	**1409**	**576**	**3496**	**5690**
Employee cost	7.6	49.1	21.5	129.9	

5.52 The Petitioner, in the additional information has also submitted that due to overall financial position of the organisation, the JSEB has not been able to set aside Rs 100 Cr approved by the Commission in the pension corpus and GPF Trust and has requested the Commission to approve the same along with appropriate tariff increase for enabling JSEB to set aside the amount for this purpose.

Commission's analysis

5.53 The Commission had asked the Petitioner to submit disaggregated employee cost along with the basis of segregation for FY 2007-08, FY 2008-09 and FY 2009-10 but the Petitioner was only able to submit the function-wise disaggregated number of employees for FY 2009-10.

5.54 The Commission is displeased with the Petitioner for non-submission of the requisite information for FY 2007-08 and FY 2008-09 and directs the Petitioner to take adequate steps to maintain proper database for regulatory and other functional information.

5.55 Meanwhile, for the purpose of disaggregating the employee cost in each function, the Commission has split the number of aggregated employees for generation and transmission function of FY 2007-08 and FY 2008-09 in the ratio of function-wise actual number of employee of FY 2009-10.

5.56 In accordance with the principles adopted by the Commission in the Tariff Order of FY 2010-11 for provisional truing up, the Commission has approved the employee cost for FY 2007-08, FY 2008-09 and FY 2009-10 on the basis of provisional accounts submitted by the Petitioner.

5.57 The Commission has noticed that the Petitioner has requested to allow Rs 100 Cr on account of pension corpus and GPF Trust. In the Tariff Order of FY 2006-07, the Petitioner was given directives to provide details of actuarial studies being undertaken by it with the next Tariff Petition, as the revision would be considered based on the same. In compliance to the directive, the Petitioner submitted that it had earlier appointed an independent actuary for conducting the studies but the same had not resulted in any outcome and the Petitioner intends to terminate the existing contract and award a fresh contract to a new agency. The Petitioner submitted the progress on the same shall be reported to the Commission by the end of March'2012.

5.58 The Commission is again directing the Petitioner to get the actuarial studies conducted and submit the results thereof for consideration of the Commission to allow the required amount for contribution towards Pension corpus and GPF Trust.

5.59 The Commission also asked the Petitioner to submit the details of the expenses capitalised during each year, to which, the Petitioner has stated that the CAG has not accepted the approach of capitalizing the employee cost in the provisional accounts of FY 2004-05 and has suggested that as per ESSAR 1985 no part of this cost of permanent employees who work on both capital and O&M jobs shall be capitalised. Therefore, the Petitioner submitted that they are not capitalizing any expenses except interest and finance charges.

5.60 In view of the directive given by CAG, the Commission accepts the submission made by the Petitioner and has thus not considered any capitalization on account of the employee cost for the said years.

5.61 The summary of the function-wise employee cost provisionally approved by the Commission for FY 2007-08 is detailed in the table given below:

Table 27 : Approved employee cost for FY 2007-08 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
Approved no. of employees	246	1659	678	3700	6284
Salaries	3.51	23.65	9.67	52.72	89.55
Overtime	0.15	1.04	0.42	2.32	3.93

Dearness Allowance	1.47	9.88	4.04	22.03	37.42
Other Allowance	0.24	1.64	0.67	3.66	6.21
Bonus	0.00	0.00	0.00	0.00	0.00
Medical Expenditure (reimbursement)	0.05	0.31	0.13	0.70	1.19
Leave travel assistance	0.00	0.00	0.00	0.01	0.01
Earned leave encashment	0.17	1.17	0.48	2.60	4.42
Payment under workmen compensation act	0.01	0.09	0.04	0.21	0.35
Staff welfare expenses	0.04	0.26	0.11	0.58	0.98
Terminal benefits	0.97	6.55	2.68	14.60	24.80
Total	6.6	44.6	18.2	99.4	168.9

5.62 The summary of the function-wise employee cost provisionally approved by the Commission for FY 2008-09 is detailed in the table given below:

Table 28 : Approved employee cost for FY 2008-09 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
No. of employees	231	1555	636	3663	6085
Salaries	3.32	22.39	9.15	52.72	87.58
Overtime	0.15	1.04	0.42	2.44	4.06
Dearness Allowance	1.87	12.60	5.15	29.67	49.28
Other Allowance	0.22	1.49	0.61	3.50	5.82
Bonus	0.00	0.00	0.00	0.00	0.00
Medical Expenditure (reimbursement)	0.04	0.29	0.12	0.68	1.13
Leave travel assistance	0.00	0.00	0.00	0.00	0.00
Earned leave encashment	0.24	1.65	0.68	3.89	6.46
Payment under workmen compensation act	0.00	0.03	0.01	0.07	0.11
Staff welfare expenses	0.1	0.40	0.16	0.93	1.5
Terminal benefits	1.3	8.50	3.47	20.01	33.2
Total	7.2	48.4	19.8	113.9	189.2

5.63 The summary of the function-wise employee cost provisionally approved by the Commission for FY 2009-10 is detailed in the table given below:

Table 29 : Approved employee cost for FY 2009-10 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
No. of employees	209	1409	576	3496	5690
Salaries	4.43	29.87	12.21	74.11	120.62
Overtime	0.09	0.60	0.24	1.48	2.41
Dearness Allowance	1.22	8.20	3.35	20.34	33.10
Other Allowance	0.36	2.40	0.98	5.95	9.69
Bonus	0.00	0.00	0.00	0.00	0.00
Medical Expenditure (reimbursement)	0.03	0.19	0.08	0.47	0.77
Leave travel assistance	0.00	0.01	0.01	0.03	0.05
Earned leave encashment	0.21	1.41	0.58	3.49	5.68
Payment under workmen compensation act	0.00	0.02	0.01	0.06	0.10
Staff welfare expenses	0.04	0.27	0.11	0.68	1.10
Terminal benefits	1.26	8.50	3.47	21.08	34.31
Total	7.6	51.5	21.0	127.7	207.8

Administration & General Expenses

Petitioner's submission

5.64 The Petitioner, in the Tariff Petition had submitted the A&G expenses of Rs 34.1 Cr, Rs 55.1 Cr and Rs 41.2 Cr based on the provisional accounts for FY 2007-08, FY 2008-09 and FY 2009-10 respectively.

5.65 The Commission had asked the Petitioner to submit disaggregated A&G expenses along with the basis of segregation for FY 2007-08, FY 2008-09 and FY 2009-10.

5.66 The Petitioner submitted the A&G expenses as additional information disaggregated function-wise and stated that the basis of segregation is the employees engaged in each function. The table below summarises the disaggregated A&G expenses and number of employees engaged in each function submitted by the Petitioner for FY 2007-08, FY 2008-09 and FY 2009-10.

Table 30 : Summary of proposed A&G cost (Rs Cr)

Particulars	Generation-Hydel	Generation - Thermal	Transmission	Distribution	Total
FY 2007-08					
No. of Employees	2584			3700	6284
A&G expenses	0.8	12.9	4.7	15.7	34.1
FY 2008-09					
No. of Employees	2422			3663	6085
A&G expenses	1.2	20.2	7.3	26.3	55.1
FY 2009-10					
No. of Employees	209	1409	576	3496	5690
A&G expenses	0.9	14.8	5.2	20.2	41.2

Commission's analysis

5.67 The Commission has approved the A&G expenses for FY 2007-08, FY 2008-09 and FY 2009-10 on the basis of provisional accounts submitted by the Petitioner after verifying the increase as per the details submitted and the historical trend of each expense component under the A&G expenses.

5.68 The Commission for the purpose of disaggregating the A&G expenses in each function has split the number of aggregated employees for generation and transmission function of FY 2007-08 and FY 2008-09 in the ratio of function-wise actual number of employee of FY 2009-10.

5.69 The actual aggregated A&G expenses have been disaggregated based on the number of employees engaged in each type of function- Generation-Hydel, Generation-thermal, Transmission and Distribution.

5.70 The Commission observed that the legal expenses of the Petitioner were on a higher side. In FY 2009-10, there is a sudden increase of more than 100% over the previous year. The Commission asked the Petitioner to submit the break-up of legal expenses. In reply to the same, the Petitioner provided the break-up of the legal expenses area-wise and the same was found to be in line with the accounts.

5.71 The Commission has taken a serious note on such high expenditure incurred by the Petitioner and directs the Petitioner to control unnecessary legal expenses in the future. The Commission also directs the Petitioner to provide case-wise details, such as the details of the case, the amount paid to the legal team and the outcome of the case with the next Tariff Petition.

5.72 The summary of the function-wise A&G cost provisionally approved by the Commission for FY 2007-08 is detailed in the tables given below:

Table 31 : Approved A&G expenses for FY 2007-08 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
Rent Rates & Taxes	0.03	0.22	0.09	0.48	0.82
Insurance	0.01	0.04	0.02	0.09	0.15
Telephone charges, Postage telegram and telex Charges	0.04	0.30	0.12	0.67	1.14
Legal Charges	0.03	0.19	0.08	0.43	0.73
Audit Fee	0.04	0.28	0.11	0.62	1.05
Consultancy charges	0.03	0.21	0.09	0.47	0.80
Technical fees	0.00	0.01	0.00	0.02	0.03
Other professional Charges	0.00	0.00	0.00	0.00	0.00
Conveyance & Travel	0.21	1.40	0.57	3.12	5.29
Fees & subscription	0.02	0.14	0.06	0.32	0.54
Books & Periodicals	0.00	0.03	0.01	0.06	0.10
Printing & Stationery	0.05	0.32	0.13	0.70	1.20
Advertisements	0.08	0.56	0.23	1.25	2.12
Water Charges	0.01	0.04	0.02	0.09	0.16
Electric Charges	0.12	0.78	0.32	1.74	2.96
Entertainment Charges	0.00	0.03	0.01	0.07	0.12
Misc. Expenses	0.60	4.06	1.66	9.06	15.38
Freight	0.02	0.13	0.05	0.29	0.49
Other purchase related expenses	0.04	0.27	0.11	0.59	1.01
Total	**1.3**	**9.0**	**3.7**	**20.0**	**34.1**

5.73 The summary of the function-wise A&G cost provisionally approved by the Commission for FY 2008-09 is detailed in the tables given below:

Table 32 : Approved A&G expenses for FY 2008-09 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
Rent Rates & Taxes	0.05	0.31	0.13	0.73	1.21
Insurance	0.01	0.05	0.02	0.11	0.19
Telephone charges, Postage telegram and telex Charges	0.06	0.42	0.17	0.99	1.65
Legal Charges	0.06	0.39	0.16	0.93	1.54

Audit Fee	0.04	0.26	0.11	0.61	1.01
Consultancy charges	0.10	0.64	0.26	1.52	2.52
Technical fees	0.00	0.00	0.00	0.00	0.01
Other professional Charges	0.28	1.92	0.78	4.51	7.50
Conveyance & Travel	0.22	1.46	0.60	3.44	5.72
Fees & subscription	0.00	0.01	0.00	0.03	0.04
Books & Periodicals	0.01	0.05	0.02	0.13	0.21
Printing & Stationery	0.18	1.19	0.49	2.80	4.65
Advertisements	0.05	0.32	0.13	0.75	1.25
Water Charges	0.00	0.02	0.01	0.05	0.08
Electric Charges	0.14	0.97	0.40	2.29	3.81
Entertainment Charges	0.01	0.05	0.02	0.11	0.19
Misc. Expenses	0.84	5.68	2.32	13.38	22.22
Freight	0.02	0.14	0.06	0.34	0.56
Other purchase related expenses	0.03	0.18	0.07	0.43	0.71
Total	**2.1**	**14.1**	**5.8**	**33.1**	**55.1**

5.74 The summary of the function-wise A&G cost provisionally approved by the Commission for FY 2009-10 is detailed in the tables given below:

Table 33 : Approved A&G expenses for FY 2009-10 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
Rent Rates & Taxes	0.04	0.27	0.11	0.67	1.10
Insurance	0.03	0.18	0.07	0.44	0.71
Telephone charges, Postage telegram and telex Charges	0.06	0.39	0.16	0.96	1.57
Legal Charges	0.04	0.25	0.10	0.63	1.02
Audit Fee	0.04	0.25	0.10	0.61	1.00
Consultancy charges	0.02	0.15	0.06	0.36	0.59
Technical fees	0.00	0.00	0.00	0.00	0.00
Other professional Charges	0.02	0.14	0.06	0.34	0.55
Conveyance & Travel	0.18	1.23	0.50	3.05	4.97
Fees & subscription	0.01	0.04	0.02	0.11	0.17
Books & Periodicals	0.00	0.03	0.01	0.07	0.12
Printing & Stationery	0.06	0.39	0.16	0.96	1.56
Advertisements	0.04	0.27	0.11	0.67	1.09
Water Charges	0.00	0.00	0.00	0.01	0.02

Electric Charges	0.09	0.61	0.25	1.51	2.45
Entertainment Charges	0.00	0.02	0.01	0.05	0.09
Misc. Expenses	0.86	5.81	2.38	14.42	23.48
Freight	0.02	0.12	0.05	0.30	0.49
Other purchase related expenses	0.01	0.06	0.02	0.14	0.23
Total	1.5	10.2	4.2	25.3	41.2

Repair & Maintenance (R&M) Expenses

Petitioner's submission

5.75 The Petitioner in the Tariff Petition of FY 2011-12 submitted the repair and maintenance expenses of Rs 57.2 Cr, Rs 68.3 Cr and Rs 68.1 Cr for FY 2007-08, FY 2008-09, FY 2009-10 respectively based on the provisional accounts.

5.76 As per the Commission's directive of submission of the disaggregated R&M expenses , the Petitioner in the additional information submitted the details mentioned in the table below:

Table 34 : Summary of proposed R&M expenses (Rs Cr)

Years	Generation-Hydel	Generation - Thermal	Transmission	Distribution	Total
FY 2007-08	1.4	21.6	7.8	26.3	57.2
FY 2008-09	1.5	25.0	9.1	32.6	68.3
FY 2009-10	1.5	24.5	8.6	33.4	68.1

Commission's analysis

5.77 The Commission has noticed that the Petitioner submitted a very high expenditure under R&M expenses in each year without any logical explanation and as such the Commission does not find merit in passing on the entire cost to the consumers.

5.78 The Commission in the previous Tariff Order of FY 2010-11 had approved the R&M expenses based on the opening GFA of FY 2004-05 and the actual R&M expenses incurred by the Petitioner in that year. The R&M expenses as a % of opening GFA was worked out as 1.83%. Therefore, the Commission has applied the same methodology to approve the R&M expenses for FY 2007-08, FY 2008-09 and FY 2009-10.

Table 35 : Summary of approved R&M expenses (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Opening GFA	1694	1828	1938
Approved R&M expenses as % of GFA	1.83%	1.83%	1.83%
Approved R&M expenses	**31.0**	**33.4**	**35.5**

5.79 The disaggregation of R&M expenses into each function has been done on the basis of opening GFA of the respective function.

5.80 The summary of the R&M expenses approved by the Commission is shown in the table below:

Table 36 : Summary of approved R&M expenses (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2007-08					
Opening GFA	43.0	639.7	231.7	780.1	1,694.5
Approved R&M as a percentage of opening GFA					1.83%
Disaggregated R&M	0.79	11.7	4.2	14.3	31.0
FY 2008-09					
Opening GFA	42.9	668.9	243.9	872.5	1,828.3
Approved R&M as a percentage of opening GFA					1.83%
Disaggregated R&M	0.8	12.2	4.4	15.9	33.4
FY 2009-10					
Opening GFA	43.0	697.3	246.0	952.0	1,938.4
Approved R&M as a percentage of opening GFA					1.83%
Disaggregated R&M	0.8	12.8	4.5	17.4	35.5

5.81 The detailed break-up of disaggregated R&M expenses approved by the Commission for FY 2007-08 is shown in the table below:

Table 37 : Approved R&M expenses for FY 2007-08 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
R&M Plant & machinery	0.29	4.39	1.59	5.35	11.63
R&M Building	0.06	0.83	0.30	1.01	2.19
R&M Civil works	0.02	0.36	0.13	0.44	0.96
R&M Hydraulic works	0.00	0.06	0.02	0.08	0.16

R&M line cable net works	0.40	5.96	2.16	7.27	15.79
R&M Vehicles	0.00	0.03	0.01	0.04	0.08
R&M Furniture and Fixture	0.00	0.00	0.00	0.00	0.01
R&M Office equipment	0.00	0.07	0.02	0.08	0.18
Total	**0.8**	**11.7**	**4.2**	**14.3**	**31.0**

5.82 The detailed break-up of disaggregated R&M expenses approved by the Commission for FY 2008-09 is shown in the table below:

Table 38 : Approved R&M expenses for FY 2008-09 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
R&M Plant & machinery	0.29	4.46	1.63	5.81	12.18
R&M Building	0.05	0.82	0.30	1.07	2.25
R&M Civil works	0.09	1.47	0.54	1.92	4.02
R&M Hydraulic works	0.01	0.10	0.04	0.13	0.27
R&M line cable net works	0.34	5.27	1.92	6.88	14.41
R&M Vehicles	0.00	0.03	0.01	0.04	0.08
R&M Furniture and Fixture	0.00	0.01	0.00	0.01	0.02
R&M Office equipment	0.01	0.08	0.03	0.10	0.21
Total	**0.8**	**12.2**	**4.5**	**16.0**	**33.4**

5.83 The detailed break-up of disaggregated R&M expenses approved by the Commission for FY 2009-10 is shown in the table below:

Table 39 : Approved R&M expenses for FY 2009-10 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
R&M Plant & machinery	0.4	6.3	2.2	8.5	17.4
R&M Building	0.0	0.6	0.2	0.8	1.6
R&M Civil works	0.0	0.9	0.3	1.2	2.4
R&M Hydraulic works	0.0	0.1	0.0	0.1	0.3
R&M line cable net works	0.3	4.9	1.7	6.7	13.6
R&M Vehicles	0.0	0.0	0.0	0.0	0.1
R&M Furniture and Fixture	0.0	0.0	0.0	0.0	0.0
R&M Office equipment	0.0	0.0	0.0	0.0	0.1
Total	**0.8**	**12.8**	**4.5**	**17.4**	**35.5**

Gross Fixed Assets (GFA)

5.84 The Commission while scrutinizing the accounts submitted by the Petitioner noticed that the increase in loan, consumer contribution, grants and subsidies towards cost of capital assets was much more than the amount deployed in GFA and CWIP together. This anomaly was communicated to the Petitioner, to which, the Petitioner submitted that the amount received against as loan also goes into two other heads, namely cash and addition in capital stock. However, the Commission further probed into the accounts and found that that the increase in long-term funds is actually deployed towards meeting the revenue deficit of the Petitioner.

5.85 The Commission has approved the Gross Fixed Asset as per the provisional accounts of the respective year.

Table 40: Approved GFA for FY 2007-08, FY 2008-09, FY 2009-10 (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Closing GFA	1828.3	1938.4	1982.0
Less: Accumulated depreciation	635.6	679.7	727.8
Net Fixed Assets	**1192.7**	**1258.7**	**1254.2**

5.86 For funding of above GFA, the Commission has considered the normative debt equity ratio of 70:30 as provided in Regulation 19 of the Distribution Tariff Regulation, 2004. However, consumer contribution grants and subsidies for capital assets are first netted off from gross fixed assets and the normative debt equity ratio is applied on the remaining gross fixed assets only.

5.87 The Commission has considered the addition in consumer contribution, grants and capital subsidy on the basis of the provisional accounts of the Petitioner considering FY 2006-07 as the base year. The normative net loans are estimated after deducting accumulated depreciation from the value of gross loans.

5.88 Thus the approved sources of funding for FY 2007-08, FY 2008-09 and FY 2009-10 is tabulated hereunder:

Table 41: Approved Sources for FY 2007-08, FY 2008-09 and FY 2009-10 (Rs Cr)

Approved Sources	FY 2007-08	FY 2008-09	FY 2009-10
Consumer contribution, grants and subsidies deployed in GFA	716.1	863.4	902.3
Equity	333.7	322.5	323.9
Loan	142.9	72.8	27.9
Total	**1192.7**	**1258.7**	**1254.2**

5.89 The Commission notes with concern that the Petitioner is diverting its long-term fund for the purpose of meeting its deficit caused due to its own inefficiencies. The Commission directs the Petitioner to abstain from diversion of funds meant for creating long-term assets. In accordance with the regulations the Commission should provide the return on funds actually deployed in usable assets, as tabulated hereunder:

Table 42: Approved Sources for FY 2007-08, FY 2008-09 and FY 2009-10 (Rs Cr)

Approved Sources	Return	Basis
Consumer contribution, grants and subsidies deployed in GFA	0%	Cost –free funds
Equity	14%	As provided in Regulation 20 of the Tariff Regulations, 2004
Loan		
FY 2007-08	8.16%	Weighted average rate of interest on existing loans as per Regulation 11 of the Tariff Regulations
FY 2008-09	7.90%	Weighted average rate of interest on existing loans as per Regulation 11 of the Tariff Regulations
FY 2009-10	8.05%	Weighted average rate of interest on existing loans as per Regulation 11 of the Tariff Regulations

Return on Equity (RoE)

Petitioner's submission

5.90 The Petitioner in the Tariff Petition of FY 2011-12 submitted the return on equity as Rs 39.6 Cr, Rs 33.5 Cr and Rs 37.7 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively in accordance with Regulation 19 and 20 of JSERC (Terms and conditions for distribution tariff) Regulations, 2004

5.91 The Petitioner has stated that it has adjusted capital subsidies, grants, contribution from the opening GFA of each year to arrive at the assessed equity contribution in the allowable value of GFA for the purpose of determination of statutory return.

5.92 As per the Commission's directive, for submitting the detailed calculation of return on equity, the Petitioner submitted the details of the working in which the return on equity submitted for FY 2009-10 was different from the submission made by the Petitioner in the Tariff Petition of FY 2011-12. The Petitioner also requested the Commission to consider the revised submission for the purpose of truing-up.

5.93 The details submitted by the Petitioner in regards to the return on equity is mentioned in the following table:

Table 43: Proposed return on equity (Rs Cr)

Particulars	Generation	Transmission	Distribution	Total JSEB
FY 2007-08				
Opening GFA	682.7	231.7	780.1	1694.5
Capital Grants/ Subsidies	302.9	102.8	346.2	751.9
GFA for RoE	379.7	128.9	433.9	942.5
Normative Equity @ 30%	113.9	38.7	130.2	282.7
RoE @ 14%	15.9	5.4	18.2	39.6
FY 2008-09				
Opening GFA	711.9	243.9	872.5	1828.3
Capital Grants/ Subsidies	401.8	137.7	492.4	1031.9
GFA for RoE	310.1	106.3	380.1	796.5
Normative Equity @ 30%	93.0	31.9	114.0	238.9
RoE @ 14%	13.0	4.5	15.9	33.4
FY 2009-10				
Opening GFA	740.4	246.0	952.0	1938.4
Capital Grants/ Subsidies	533.3	177.2	685.7	1396.2
GFA for RoE	207.1	68.8	266.3	542.2
Normative Equity @ 30%	62.1	20.6	79.9	162.7
RoE @ 14%	8.7	2.9	11.2	22.8

Commission's analysis

5.94 The Commission has approved the return on equity for FY 2007-08, FY 2008-09 and FY 2009-10 based on the methodology mentioned in clause 5.86 to 5.89 of this Order. The normative equity of 30% is estimated by taking the gross fixed assets less consumer contribution.

5.95 For approving the return on equity function-wise, the Commission has disaggregated the normative equity in the ratio of opening GFA of each function and accordingly, the return on equity is calculated @ 14% on the normative equity deployed in each function.

5.96 The return on equity approved by the Commission is detailed in the table below:

Table 44: Approved disaggregated return on equity (Rs Cr)

Particulars	Generation- Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2007-08					
Opening GFA	42.9	639.7	231.7	780.1	1,694.5
Normative equity	8.5	125.9	45.6	153.6	333.7
Return on equity (%)	14%	14%	14%	14%	14%

Return on Equity	**1.2**	**17.6**	**6.4**	**21.5**	**46.7**
FY 2008-09					
Opening GFA	42.9	668.9	243.9	872.5	1828.3
Normative equity	7.6	117.9	43.0	153.9	322.5
Return on equity (%)	14%	14%	14%	14%	14%
Return on Equity	**1.1**	**16.5**	**6.0**	**21.5**	**45.1**
FY 2009-10					
Opening GFA	43.0	697.3	246.0	952.0	1,938.4
Normative equity	7.2	116.5	41.1	159.1	324
Return on equity (%)	14%	14%	14%	14%	14%
Return on Equity	**1.0**	**16.3**	**5.8**	**22.3**	**45.3**

Interest & financing charges (IFC)

Petitioner's submission

5.97 The Petitioner in the Tariff Petition for FY 2011-12 had submitted the interest on loans as Rs 455.9 Cr, Rs 449.2 Cr and Rs 451.5 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 based on provisional accounts for the respective years.

5.98 As per the Commission directive, the Petitioner submitted the following details on the basis of the normative interest on loan

Table 45: Allocation of Interest and Finance charges (IFC) (Rs Cr)

Particulars	Generation	Transmission	Distribution	Total
FY 2007-08				
Opening GFA	682.7	231.7	780.1	1694.5
Closing GFA	711.9	243.9	872.5	1828.3
Additions to GFA	29.2	12.3	92.4	133.9
IFC	196.3	67.3	240.5	504.0
Interest Capitalised	8.9	3.7	28.2	40.8
Net IFC	187.3	63.5	212.3	463.2
Net IFC on Normative Basis @ 70%	131.1	44.5	148.6	324.2
FY 2008-09				
Opening GFA	711.9	243.9	872.5	1828.3
Closing GFA	740.4	246.0	952.0	1938.4
Additions to GFA	28.5	2.1	79.5	110.1

IFC	213.6	70.9	274.6	559.1
Interest Capitalized	26.4	1.9	73.7	102.1
Net IFC	187.1	69.0	200.9	457.0
Net IFC on Normative Basis @ 70%	131.0	48.3	140.6	319.9
FY 2009-10				
Opening GFA	740.4	246.0	952.0	1938.4
Closing GFA	747.2	248.2	986.6	1982.0
Additions to GFA	6.8	2.2	34.6	43.6
IFC	229.9	76.4	303.5	609.7
Interest Capitalized	23.4	7.5	118.9	149.8
Net Interest & Finance Charges	206.4	68.8	184.6	459.9
Net IFC on Normative Basis @ 70%	144.5	48.2	129.2	321.9

Commission's analysis

5.99 The Commission has arrived at the normative loan based on the methodology mentioned in clause 5.86 to 5.89 of this Order.

5.100 JSERC (Terms and conditions for Distribution Tariff) Regulations, 2004 states that the normative loan shall be the opening normative loan after taking into account repayments worked out on normative basis. The weighted average rate of interest on loan shall be worked out on the actual outstanding loan and applied to the normative loan for calculation of interest on loan in the respective year.

5.101 Accordingly, the Commission has calculated interest on loan based on the weighted average rate of interest on the actual outstanding loan which works out to 8.16%, 7.90% and 8.05% for FY 2007-08, FY 2008-09 and FY 2009-10 respectively. The deemed repayment is considered to be equal to the depreciation allowed in that year.

5.102 The interest on loan approved by the Commission is tabulated hereunder:

Table 46: Approved Interest on Loan (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Opening Balance	166.7	142.9	72.8
Deemed Addition during the year	18.8	-26.0	3.3
Deemed Repayments during the year	42.6	44.0	48.2
Closing Balance	142.9	72.8	27.9
Average balance during the Year	154.8	107.9	50.4
Interest Rate	8.16%	7.90%	8.05%
Interest Expense	**12.6**	**8.5**	**4.1**

5.103 The interest on loan has been disaggregated in the ratio of opening GFA of each function in each year. Function-wise interest on loan approved by the Commission is tabulated below:

Table 47: Approved disaggregated Interest on Loan (Rs Cr)

Particulars	Generation- Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2007-08					
Opening GFA	42.9	639.7	231.7	780.1	1,694.5
Interest on loan	0.3	4.8	1.7	5.8	12.6
FY 2008-09					
Opening GFA	42.9	668.9	243.9	872.5	1828.3
Interest on loan	0.2	3.1	1.1	4.1	8.5
FY 2009-10					
Opening GFA	43.0	697.3	246.0	952.0	1,938.4
Interest on loan	0.1	1.5	0.5	2.0	4.1

Interest on Working Capital

Petitioner's submission

5.104 The Petitioner in the Tariff Petition for FY 2011-12, had submitted the interest on working capital as Rs -1.4 Cr, Rs 0.4 Cr and Rs 14.4 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively.

5.105 The Petitioner submitted that the interest on working capital allowed in the previous Tariff Order for FY 2011-12 is inadequate to cover the real working requirements of the integrated utility.

5.106 The Petitioner in the additional information resubmitted the calculation of interest on working capital as per the JSERC, (terms and Condition for determination of distribution tariff), 2010 and it has stated that the interest on working capital is being calculated at the bank rate. The calculation submitted by the Petitioner is detailed hereunder:

Table 48 : Interest on Working Capital submitted by the Petitioner (Rs Cr)

Particulars	Generation-Thermal	Transmission	Distribution	Total
FY 2007-08				
1 Month O&M	6.9	2.5	12.3	21.7
2 Months Receivables	55.8	15.0	393.2	463.9
Maintenance & Spares (@ 1% of opening GFA)	6.8	2.3	7.8	16.9
1 Month cost of Power Purchase	0.0	0.0	137.9	137.9
Security Deposit from Customers	0.0	0.0	144.3	144.3
Working Capital	69.5	19.8	131.0	220.3

Rate of Interest	12%	12%	12%	12%
Interest on Working Capital	8.3	2.4	15.7	26.4
FY 2008-09				
1 Month O&M	8.3	3.0	14.8	26.0
2 Months Receivables	66.4	16.6	403.6	486.5
Maintenance & Spares (@ 1% of opening GFA)	7.1	2.4	8.7	18.3
1 Month cost of Power Purchase	0.0	0.0	148.8	148.8
Security Deposit from Customers	0.0	0.0	156.4	156.4
Working Capital	81.8	22.0	419.4	523.2
Rate of Interest	12%	12%	12%	12%
Interest on Working Capital	9.8	2.6	50.3	62.8
FY 2009-10				
1 Month O&M	8.2	2.9	15.3	26.4
2 Months Receivables	69.0	16.1	404.3	489.5
Maintenance & Spares (@ 1% of opening GFA)	7.4	2.5	9.5	19.4
1 Month cost of Power Purchase	0.0	0.0	160.4	160.4
Security Deposit from Customers	0.0	0.0	168.4	168.4
Working Capital	84.6	21.5	421.1	527.4
Rate of Interest	12%	12%	12%	12%
Interest on Working Capital	10.1	2.6	50.5	63.3

5.107 The reasons for submitting negative working capital in the Tariff Petition were enquired from the Petitioner, to which the Petitioner submitted that there were inadvertent errors in the true-up proposed in the original petition and has requested the Commission to consider the revised submission.

Commission's analysis

5.108 The Commission is of the view that the 'JSERC Distribution Tariff Regulations, 2010' followed by the Petitioner are applicable from FY 2010-11 onwards and are not applicable for the FY 2007-08, FY 2008-09 and FY 2009-10. Therefore, the Commission does not find any merit in following the regulations which are not meant for the said years.

5.109 The Commission has considered the interest on working capital as per the norms specified in the following regulations:

(a) CERC, (Terms and conditions of Tariff Regulations), 2004 for computing the interest on working for Sikidri hydel power station

(b) JSERC, Generation Tariff Regulation, 2004" for computing the interest on working capital for the Patratu Thermal power station and

(c) JSERC, Distribution Tariff Regulations, 2004' for computing the interest on working capital for the distribution function.

5.110 Since, the tariff determination regulations for hydro generating stations of JSERC were not in place in FY 2007-08, FY 2008-09 and FY 2009-10, the Commission has decided to approve the interest on working capital based on the norms specified in the CERC regulations. The CERC (Terms and condition of tariff) Regulation, 2004' specify the computation of working capital as per the following norms:

(a) Operation & Maintenance expenses for one month.

(b) Maintenance spares @ 1% of historical cost escalated @ 6% p.a from the date of commercial operation, and

(c) Receivables equivalent to two months of the fixed charges for sale of electricity.

5.111 The computation of working capital for the generation- hydel function is shown in the table below. Since the working of JSEB is still as an integrated unit, the Commission has not considered any working capital for receivables.

Table 49: Approved IWC for Generation-Hydel function (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
O&M expenses (in months)	0.7	1	0.8
Maintenance Spares (% of equipment cost)	0.4	0.4	0.4
Total Working Capital	1.2	1.3	1.3
Rate of interest on working capital	12.25%	12.25%	12.25%
Interest on working capital	**0.1**	**0.2**	**0.1**

5.112 The "Generation Tariff Regulations, 2004' specify the computation of working capital as per the following norms:

(a) Cost of coal for one month corresponding to target availability.

(b) Cost of coal for ½ months for pit-head generating stations and one month for non-pithead generating stations, corresponding to the, "target availability".

(c) One month stock for secondary fuel oil, corresponding to "target availability".

(d) Operation & Maintenance expenses for one month.

(e) Maintenance spares @ 1% of plant & equipment cost as on 01.04.2004 or the date of commercial operation, whichever is later, and

(f) Receivables equivalent to two months of fixed and variable charges below the level of target availability shall be on pro-rata basis.

5.113 The computation of working capital for the thermal generation- function is shown in the table below. Since the working of JSEB is still as an integrated unit, the Commission has not considered any working capital for receivables.

Table 50: Approved IWC for Generation-Thermal function (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Cost of Coal for 1½ month	5.6	8.7	9.8
Secondary Fuel Oil for 1 month	2.0	2.8	1.6
Operation & Maintenance expenses for 1 month	5.4	6.2	6.2
Maintenance expenses @ 1% of Plant & Equipment	6.4	6.7	6.9
Total Working Capital	19.4	24.4	24.4
Interest rate considered for Working Capital	12.25%	12.25%	12.25%
Interest on Working Capital	**2.4**	**2.9**	**3.0**

5.114 The 'Distribution Tariff Regulations, 2004' states that the interest on working capital is required to meet the shortfall in collection over and above the target approved by the Commission. In case of the Petitioner, the shortfall is 1% of the total revenue; hence the interest on working capital has been computed accordingly.

5.115 The Computation of working capital for the Distribution function is shown in the table below:

Table 51: Approved IWC for Distribution function (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Bad & Doubtful debt as a % of revenue	1%	1%	1%
Revenue at existing tariff	1391.2	1584.9	1634.4
Bad & Doubtful debt (in Rs Cr)	13.9	15.9	16.3
Interest on Working Capital	**1.7**	**1.9**	**2.0**

Interest on Consumer Security Deposit

Petitioner's submission

5.116 The Petitioner in the Tariff Petition for FY 2011-12 submitted the interest on consumer deposit of Rs 7.3 Cr, Rs 7.8 Cr and Rs 8.4 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively based on the provisional accounts for the respective year.

Commission's analysis

5.117 The JSERC Distribution Tariff Regulations, 2004 specifies that the interest on consumer security deposits shall be at a rate prevalent to the bank rate of the Reserve Bank of India.

5.118 The Commission approved the interest on consumer security deposit paid by the Petitioner as per the provisional accounts of the respective year, which is in line with the methodology followed in previous Tariff Order. Although, the same shall be subject to true-up based, when the audited provisional accounts are made available by the Petitioner.

5.119 The Commission approved the interest on consumer security deposit as Rs 7.3 Cr, Rs 7.8 Cr and Rs 8.4 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively based on the provisional accounts for the respective year.

Depreciation

Petitioner's submission

5.120 The Petitioner in the Tariff Petition for FY 2011-12 submitted the depreciation expenses of Rs 43 Cr, Rs 48.4 Cr and Rs 49.8 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively based on the provisional accounts for the respective years.

5.121 As per the Commission's directive of submitting the disaggregated depreciation expenses, the Petitioner resubmitted the same and requested the Commission to consider the revised figures. The details submitted by the Petitioner is summarised in the table below:

Table 52 : Depreciation submitted by the Petitioner (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2007-08	0.8	7.2	8.1	27.4	43.4
FY 2008-09	0.8	6.9	7.4	30.4	45.6
FY 2009-10	0.8	8.4	7.7	32.9	49.8

5.122 The Petitioner submitted that the proposed depreciation is as per actual and the same is allocated in the ratio of opening GFA to each function.

Commission's analysis

5.123 The Commission has approved the depreciation charges based on the schedule 11 of the provisional accounts of the respective year. The depreciation has been split in the ratio of opening GFA of each function. However, the depreciation on the assets created out of consumer contribution has been deducted from the gross depreciation of the distribution function, to arrive at the net depreciation charge for distribution function

5.124 The summary of the depreciation charges approved by the Commission for each function for FY 2007-08, FY 2008-09 and FY 2009-10 is shown in the table below

Table 53 : Summary of Approved Depreciation Charge (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2007-08	0.8	7.2	8.1	26.6	42.6
FY 2008-09	0.8	6.9	7.5	28.9	44.1
FY 2009-10	0.8	8.4	7.7	31.3	48.2

Prior period expenses

Petitioner's submission

5.125 The Petitioner in the Tariff Petition of FY 2011-12 has also submitted the prior period expenses as Rs (-)12.3 Cr, Rs 47.9 Cr and Rs 147.4 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively based on the provisional accounts of the respective years.

5.126 The Petitioner submitted that the Commission had approved an amount of Rs 50 Cr towards the expenses to be incurred by JSEB for arrears pertaining to sixth pay Commission whereas the actual impact of the same has been Rs 172.7 Cr. The Petitioner has also stated that the Petitioner has already made a provision for the same under the head prior period expenses in the provisional accounts for FY 2009-10.

Commission's analysis

5.127 The Commission has scrutinized the provisional accounts for FY 2007-08, FY 2008-09 and FY 2009-10 submitted by the Petitioner. The Commission has observed that in the provisional accounts, there is a head for prior period expenses which has a provision for prior period income and prior period expenses. The Commission asked the Petitioner to submit the detailed break-up of the income and expenses included under this head.

5.128 The Petitioner as additional information submitted the break-up of prior period expenses and income for FY 2007-08, FY 2008-09 and FY 2009-10.

Table 54: Detailed break-up of Prior period expenses (Rs Cr)

Particulars	FY 2007-08			FY 2008-09			FY 2009-10		
	Credit	Charges	Net Balance (charge)	Credit	Charges	Net Balance (charge)	Credit	Charges	Net Balance (charge)
Prior Period Adjustment energy bill.	11.1	3.4	-	0.9	27.4	-	4.8	11.0	-
Provision of 6th pay revision arrear.			-	-	-	-	-	172.7	-
Adjustment of short/excess provision of bad debts of field accounting units.	755.9	755.9	-	-	-	-	-	-	-
Adjustment of power purchases bill related to previous financial years	-	-	-	-	10.2	-	-	-	-

Adjustment of excess power purchases bill charged by CPU/TVNL related to previous financial years	4.6	-	-	-	-	-	1.8	-	-
Adjustment of Excess provision of Interest/Panel Interest on State Govt. Loan related to previous financial years	-	-	-	-	-	-	28.5	-	-
Adjustment of Expenses against House Rent (H.E.C.) received during the year related to previous years	-	1.0	-	-	-	-	-	-	-
Adjustment of short provision of interest of G.P.F.	-	-	-	-	8.0	-	-	-	-
Adjustment of Excess Provision of other exp. related to previous years	0.9	-	-	9.5	-	-	1.1	-	-
Adjustment of Short Provision of other exp. related to previous years	-	0.0	-	-	12.7	-	-	-	-
Total	772.6	760.3	(12.3)	10.4	58.3	47.9	36.3	183.7	147.4

5.129 The Commission has observed that the prior period expenses/income arise as a result of errors or omission in the previous year's which are accounted in the subsequent financial year. The Commission has analysed the details submitted by the Petitioner and therefore, the Commission allows the same, although the same shall be trued up, when the audited accounts are made available by the Petitioner.

Inefficient Cost of PTPS

5.130 The Commission had computed the inefficient cost of PTPS as Rs 66.4 Cr, Rs 119.4 Cr and Rs 56.9 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 in the Tariff Order for FY 2010-11. However, in view of the provisional accounts for the said years, the inefficient cost for PTPS works out to Rs 66.4 Cr, Rs 119.4 Cr and Rs 56.9 Cr respectively. The Commission reiterates that the above has been done particularly to prevent inefficiencies of the Petitioner to be passed on to the consumers, who are already facing hardship due to poor quality of supply and poor availability of power. The summary of the inefficient cost computed by the Commission is as follows:

Table 55 : Inefficient Cost of PTPS

Particulars	Unit	Actual	Approved
FY 2007-08			
Net generation of PTPS	MUs	587.4	1931.8
Fixed Cost	Rs Crs	29	95.4
Per unit fixed cost	Rs/kWh		0.5
Inefficient cost of PTPS	Rs Crs		66.4
FY 2008-09			
Net generation of PTPS	MUs	875.7	2052.6
Fixed Cost	Rs Crs	88.8	208.2
Per unit fixed cost	Rs/kWh		1.0
Inefficient cost of PTPS	Rs Crs		119.4
FY 2009-10			
Net generation of PTPS	MUs	971.3	2173.3
Fixed Cost	Rs Crs	45.95	102.8
Per unit fixed cost	Rs/kWh		0.5
Inefficient cost of PTPS	Rs Crs		56.9

Non-Tariff Income (NTI)

Petitioner's submission

5.131 The Petitioner in the Tariff Petition of FY 2011-12 submitted the non-tariff income as Rs 52.7 Cr, Rs 45.9 Cr and Rs 61.9 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively. The Petitioner has attributed the entire non-tariff income earned by it to the Distribution function for all the years.

5.132 The Commission directed the Petitioner to submit the detailed break-up of non-tariff income claimed by the Petitioner for FY 2007-08, FY 2008-09 and FY 2009-10 as the Petitioner submission was not matching with the non tariff income specified in the provisional accounts.

5.133 The table below details the non-tariff income submitted by the Petitioner:-

Table 56: Proposed Non Tariff Income (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Interest on Staff Loan & Advance	0.0	0.0	0.0
Income from Investment (F.D)	7.8	5.3	1.4
Interest on Loan & advance to Petitioners	0.0	0.0	0.0
D.P.S from Consumer	19.9	26.6	25.1
Interest on advance to Supplier/Contractor	2.2	0.2	0.4
Interest from Bank (Other than F.D)	3.3	2.3	2.0
Income from Trading	1.9	1.3	1.2
Income from Staff Welfare activities	0.0	0.0	0.0
Miscellaneous Receipt.	17.5	10.2	27.3
Total	52.7	45.9	57.4

5.134 The Petitioner has also submitted that it has proposed all other values as per provisional accounts except for delayed payment surcharge from consumers, which has been proposed at 10% which is expected to be realised by JSEB. It has further submitted that the same is in accordance with the Tariff Order for FY 2010-11

Commission's analysis

5.135 In the previous Tariff Order of FY 2010-11, the Commission provisionally trued-up the non-tariff income for FY 2003-04 to FY 2006-07 on the basis of the provisional accounts for the respective years.

5.136 The Commission has adopted the same approach, as was followed in the previous Tariff Order of FY 2010-11 for FY 2003-04 to FY 2006-07 and has accordingly approved the non-tariff income as given in the provisional accounts for FY 2007-08, FY 2008-09 and FY 2009-10.

5.137 The non-tariff income is disaggregated based on the nature of income that is attributable to each function is detailed in the table below:

Table 57: Approved Non Tariff Income (Rs Cr)

Particulars	Generation–Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2007-08					
Interest on staff loan and advance	0	0	0	0	0
Income from investment (F.D)	0	0	0	8	8
Interest on loan and advance to licensees	0	0	0	0	0
D.P.S from consumer	0	0	0	199	199
Interest on advance to supplier/ Contractor	0.5	0.5	0.5	0.5	2.2
Interest from bank (Other than F.D)	0.8	0.8	0.8	0.8	3.3
Income from trading	0.5	0.5	0.5	0.5	1.9
Interest from staff welfare activities	0	0	0	0	0
Misc. Receipt	0.0	0.0	0.0	17.5	17
Total	**1.9**	**1.9**	**1.9**	**226.6**	**232**
FY 2008-09					
Interest on staff loan and advance	0	0	0	0	0
Income from investment (F.D)	0	0	0	5	5
Interest on loan and advance to licensees	0	0	0	0	0
D.P.S from consumer	0	0	0	266	266
Interest on advance to supplier/ Contractor	0	0	0	0	0
Interest from bank (Other than F.D)	0.6	0.6	0.6	0.6	2.3
Income from trading	0.3	0.3	0.3	0.3	1.3
Interest from staff welfare activities	0	0	0	0	0
Misc. Receipt	0.0	0.0	0.0	10.2	10.2
Total	**0.9**	**0.9**	**0.9**	**282.1**	**285**
FY 2009-10					
Interest on staff loan and advance	0	0	0	0	0
Income from investment (F.D)	0	0	0	1	1
Interest on loan and advance to licensees	0	0	0	0	0
D.P.S from consumer	0	0	0	251	251
Interest on advance to supplier/ Contractor	0	0	0	0	0
Interest from bank (Other than F.D)	0.5	0.5	0.5	0.5	2.0
Income from trading	0.3	0.3	0.3	0.3	1.2
Interest from staff welfare activities	0	0	0	0	0
Misc. Receipt	0.0	0.0	0.0	45.7	46
Total	**0.8**	**0.8**	**0.8**	**298.6**	**301**

Provision for bad debts

Petitioner's submission

5.138 The Petitioner submitted a sum of Rs 403 Cr and Rs 209.5 Cr towards bad & doubtful debts for FY 2007-08 and FY 2008-09 respectively based on the provisional accounts for the respective years and the same has been completely allocated to the distribution function.

5.139 The Petitioner has stated that power distribution utility like JSEB with Universal supply obligation is prone to difficulties of T&D losses and collection inefficiency. The Petitioner has given examples of various SERC which have allowed a provision for bad and doubtful debt.

5.140 The Petitioner submitted that the other Petitioners in the state enjoy a significantly favourable consumer mix and operate in limited supply areas and thus have higher load density and lesser line length of distribution networks which makes it easier for them to control losses whereas on the other hand JSEB's consumer mix is becoming more and more dominated by consumers pertaining to the economically weaker sections of the society.

5.141 The Petitioner has further stated that the distribution loss target of 19% given to JSEB is very strict considering SAIL Bokaro with a much more favourable consumer mix and a very limited urban supply area has a target level of 17% in FY 2011-12. Therefore, the Petitioner has requested that the target level of 100% collection efficiency given by the Commission to all Petitioners in the state needs to be relooked taking into consideration the ground realities of difference in consumer mix and the geographical spread of the licensed area.

Commission's analysis

5.142 The 'Distribution Tariff Regulations, 2004' categorically states that no amount can be allowed to be passed on the consumers on the ground of it being bad and doubtful debt as it will lead to inefficiency in collection, the Commission has not allowed any amount against bad & doubtful debts.

5.143 The Commission has to determine the ARR in consonance with Regulation 10 of the 'Distribution Tariff Regulations, 2004', according to which no provision for bad debts is to be allowed to the Petitioner.

Penalty for non-compliance of Standards of Compliance (SoP)

Petitioner's submission

5.144 In compliance to the directive given by the Commission in earlier Tariff Orders, the Petitioner submitted that it has implemented the Standards of Performance, Regulations issued by the Commission and submitted the following this regard:

(a) The Petitioner submitted that it has set-up fuse call centres at each circle level which registers the complaints of consumers and intimates respective JEE/ AEEs for corrective action and has stated that the reports of the fuse call centres for each circle have already been submitted to the Commission along with the communication dated November 30, 2010.

(b) It has further submitted that it is resolving consumer grievances within the timeframe specified in the SoP, Regulations and no consumer so far submitted any claim for non-compliance against any of the standards mentioned therein.

(c) It submitted that as per its existing procedures for measurement of compliance levels has reported 100% compliance against the standards mentioned in the SoP Regulations and has accordingly not paid any compensation due to its failure so far nor any consumer has claimed for any compensation from the Board.

(d) Thus, the terms and conditions of the SoP, Regulations are being duly complied by the JSEB. Customer care meets at 13 circles on November 15, 2010 was organized, several complaints were heard and resolved on the spot.

(e) It has stated that computerized complaint registration and monitoring system shall be made functional in Ranchi from January, 2011 which will be replicated to other cities.

(f) The Petitioner submitted that it also intends to put in place elaborate IT based systems for measuring and monitoring of compliance against the standards prescribed in the SoP Regulations and putting in place requisite systems for measurement and reporting will take time and also involve costs. The Petitioner has further submitted that the Commission may allow a budget of Rs 50 Cr, provisionally in the ARR for FY 2011-12 specifically to enable JSEB in invest in such systems and the same can be trued up in the subsequent years.

5.145 The Petitioner in the additional information has further submitted that it has taken every step to increase the awareness of the regulations amongst the consumer base. It has also uploaded the information on the company's website and can be accessed at http://www.jseb.in/revenue.html. In addition to this, the website address also includes the following:

a) Revenue collection

b) Distribution Petitioner standards

c) Electricity supply code

d) Shikayat Niwaran Prakriya

e) Consumer grievance Redressal forum (CGRF)

5.146 The Petitioner has further submitted that it has made all the efforts to widely publicize the regulations notified by the Commission. The Chairman- JSEB and secretary- JSEB have also launched a drive to arrange camps in all areas to release spot connections and also to address the various grievances of the consumers.

5.147 Further, in compliance to the directive, several camps have also been organised over the past year for the benefit of the consumers. The Petitioner submitted the progress details of the same.

5.148 The Petitioner has further stated that it has taken steps in the direction of implementation of SoP regulations in all areas with increased focus on the ensuing years. In light of the same, the board has prayed that the SoP penalty may not be imposed, failing which the board would be pushed further in financial crisis.

Commission's analysis

5.149 In the Tariff Order of FY 2006-07, the Commission directed the Petitioner to implement JSERC (Distribution Licensees'Standards of Performance), Regulations, 2005 by 1st January, 2008 and to submit a compliance report to the Commission, thereafter, failing which the energy charges for all the categories will be reduced by 2.5% from 1st January, 2008.

5.150 Till the issuance of the previous Tariff Order of FY 2010-11, the Petitioner had not submitted any compliance report an SoP, therefore, the Commission has imposed a penalty amounting to Rs 7.0 Cr, Rs 29.9 Cr and Rs 31.5 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively.

5.151 Since the Petitioner has submitted compliance from FY 2010-11 onwards, the Commission has computed the revised penalty for FY 2007-08, FY 2008-09 and FY 2009-10 and has waived the penalty for FY 2010-11 and FY 2011-12 as the Commission notes that the Petitioner has taken various steps to comply with the directive issued by the Commission.

5.152 Therefore, the Commission has imposed a penalty of 2.50% of energy charges and has accordingly disallowed an amount of Rs 6.9 Cr, Rs 28.7 Cr and Rs 30.9 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively, from the ARR of the Petitioner.

Revenue from Existing Tariff

5.153 The Commission has approved the revenue at existing tariffs as per the provisional accounts of the Petitioner. The revenue at existing tariff approved by the Commission is Rs 1391.23 Cr, Rs 1584.9 Cr and Rs 1634.4 Cr for FY 2007-08, FY 2008-09 and FY 2009-10 respectively.

Summary of the ARR on truing up of FY 2007-08 to FY 2009-10

5.154 In view of the above analysis, the annual revenue requirement along with the revenues at existing tariffs and revenue gap for FY 2007-08 to FY 2009-10 is summarized hereunder:

Functionally Disaggregated ARR

5.155 In view of the above, the functionally disaggregated ARR for Generation function-Hydel as approved by the Commission for FY 2007-08, FY 2008-09 and FY 2009-10 is summarised in table below.

Table 58 Approved ARR for Generation function-Hydel (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Employee Cost	6.6	7.2	7.6
R&M Expenses	0.8	0.8	0.8
A&G Expenses	1.3	2.1	1.5
Depreciation	0.8	0.8	0.8
Interest and FC	0.3	0.2	0.1
Interest on WC	0.1	0.2	0.1
RoE	1.2	1.1	1.0
Non-tariff Income	1.9	0.9	0.8
Net Revenue Required	**9.3**	**11.3**	**11.1**

5.156 The functionally disaggregated ARR for Generation function-Thermal as approved by the Commission for FY 2007-08, FY 2008-09 and FY 2009-10 is summarised in table below.

Table 59 Summary of ARR for Generation function-Thermal (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Fuel Expenses	68.6	103.3	97.2
Employee cost	44.6	48.4	51.5
R&M	11.7	12.2	12.8
A&G	9.0	14.1	10.2
Interest and finance charges	4.8	3.1	1.5
Interest on working capital	2.4	2.9	3.0
Depreciation	7.2	6.9	8.4
Inefficient cost of PTPS	66.4	119.4	56.9
Reasonable return	17.6	16.5	16.3
Non tariff income	1.9	0.9	0.8
ARR	**97.6**	**87.2**	**143.1**

5.157 The functionally disaggregated ARR for Transmission function as approved by the Commission for FY 2007-08, FY 2008-09 and FY 2009-10 is summarised in table below:

Table 60 Summary of ARR for Transmission Function (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Employee cost	18.2	19.8	21.0
R&M	4.2	4.5	4.5
A&G	3.7	5.8	4.2
Interest and finance charges	1.7	1.1	0.5
Interest on working capital	0.0	0.0	0.0
Depreciation	8.1	7.5	7.7
Reasonable return	6.4	6.0	5.8
Non tariff income	1.9	0.9	0.8
ARR	**40.5**	**43.7**	**42.8**

5.158 The functionally disaggregated ARR for Distribution function as approved by the Commission for FY 2007-08, FY 2008-09 and FY 2009-10 is summarised in table below:

Table 61 Summary of ARR for Distribution function (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Power Purchase cost	1655.9	1785.6	1924.4
Employee cost	99.4	113.9	127.7
R&M Costs	14.3	16.0	17.4
A&G	20.0	33.1	25.3
Interest and finance charges	5.8	4.1	2.0
Interest on working capital	1.7	1.9	2.0
Depreciation	26.6	28.9	31.3
Bad debts provision	0.0	0.0	0.0
Prior period expenses	-12.3	48.0	147.4
Interest on consumer security deposit	7.3	7.8	8.4
Reasonable return	21.5	21.5	22.3
Less: Disincentive for T&D Loss	272.3	382.2	335.6
Less: Penalty for SoP	6.9	28.7	30.9
Less: Non tariff income	226.6	282.1	298.6
ARR	**1334.5**	**1367.9**	**1643.2**

Consolidated ARR

5.159 The table below summarises the ARR approved by the Commission in the previous Tariff Order of FY 2010-11, as submitted by JSEB in Tariff Petition of FY 2011-12, as submitted by the Petitioner in the additional information and now approved by the Commission for FY 2007-08 is summarized hereunder:

Table 62 Summary of Annual Revenue Requirement for FY 2007-08 (Rs Cr)

Particulars	FY 2007-08			
	Approved by JSERC in the Tariff Order for FY 2010-11	Submitted by JSEB in the Tariff Petition for FY 2011-12	Submitted as Additional information	Provisional True-up by JSERC
Power Purchase	1552.5	1655.9	-	1,655.9
Generation Cost- Fuel Cost	79.0	88.8	-	68.6
Repair & Maintenance	32.4	57.2	-	31.0
Employee Cost	158.6	168.9	-	168.9
Admin and general expenses	33.7	34.1	-	34.1
Depreciation	52.5	43.5	43.4	42.6
Provision for Bad debts	0.0	403	-	0.0
Interest and finance charges	438.7	455.9	324.2	12.6
Prior period expenses	0	-12.3	-	-12.3
Interest on working capital	7.6	-1.4	26.4	4.2
Interest on consumer security deposit	0	7.3	-	7.3
Less: Inefficient cost of PTPS	96.6	0	-	66.4
Less: Disincentive on T&D losses	275.4	0	-	272.3
Less: Penalty for SoP	7.0	0	-	6.9
Total Expenditure	1976.0	2900.9	-	1667.4
Statutory return/RoE	42.7	39.6	-	46.7
Revenue required	2018.7	2940.5	-	1714.1
Temporary Contingency	0	0	-	0
Gross revenue requirement	2018.7	2940.5	-	1714.1
Less: Misc. Receipts	128.3	52.7	-	232
Net revenue required	1890.4	2887.8	-	1481.9
Revenue at current tariff	1431.4	1391.2	-	1,391.2
Grants-in-Aid of debt service	77.3	77.3	-	77
Subsidy for R.E Loss	0	0	-	0.0
Revenue (Gap)/Surplus	**(381.8)**	**(1419.3)**	**-**	**(13.4)**

5.160 The table below summarises the ARR approved by the Commission in the previous Tariff Order of FY 2010-11, as submitted by JSEB in Tariff Petition of FY 2011-12, as submitted by the Petitioner in the additional information and now approved by the Commission for FY 2008-09 is summarized hereunder:

Table 63 Summary of Annual Revenue Requirement for FY 2008-09(Rs Cr)

Particulars	FY 2008-09			
	Approved by JSERC in the Tariff Order for FY 2010-11	Submitted by JSEB in the Tariff Petition for FY 2011-12	Submitted as Additional information	Provisional True-up by JSERC
Power Purchase	1774.2	1785.6	-	1,785.6
Generation Cost- Fuel Cost	108.2	137.1	-	103.3
Repair & Maintenance	37.6	68.3	-	33.4
Employee Cost	312.2	189.2	-	189.2
Admin and general expenses	50.7	55.1	-	55.1
Depreciation	69.9	48.4	45.6	44.1
Provision for Bad debts	0.0	209.5	-	0.0
Interest and finance charges	524.9	449.2	319.9	8.5
Prior period expenses	0	48	-	48.0
Interest on working capital	10.6	0.4	62.8	5.0
Interest on consumer security deposit	0	7.8	-	7.8
Less: Inefficient cost of PTPS	131.7	0	-	119.4
Less: Disincentive on T&D losses	415.9	0	-	382.2
Less: Penalty for SoP	29.9	0	-	28.7
Total Expenditure	2310.7	2998.6	-	1749.9
Statutory return/RoE	52.6	33.5	33.4	45.1
Revenue required	2363.4	3032.1	-	1795.0
Temporary Contingency	0	0	-	0
Gross revenue requirement	2363.3	3032.1	-	1795.0
Less: Misc. Receipts	352.4	45.9	-	285
Net revenue required	2010.9	2986.2	-	1510.2
Revenue at current tariff	1541.6	1584.9	-	1,584.9
Grants-in-Aid of debt service	80.0	80	-	80
Subsidy for R.E Loss	0	0	-	0
Revenue (Gap)/Surplus	**(389.3)**	**(1321.3)**	**-**	**154.7**

5.161 The table below summarises the ARR approved by the Commission in the previous Tariff Order of FY 2010-11, as submitted by JSEB in Tariff Petition of FY 2011-12, as submitted by the Petitioner in the additional information and now approved by the Commission for FY 2009-10 is summarized hereunder:

Table 64 Summary of Annual Revenue Requirement for FY 2009-10 (Rs Cr)

Particulars	FY 2009-10			
	Approved by JSERC in the Tariff Order for FY 2010-11	Submitted by JSEB in the Tariff Petition for FY 2011-12	Submitted as Additional information	Provisional True-up by JSERC
Power Purchase	1861.8	1924.4	-	1924.4
Generation Cost- Fuel Cost	95.0	143.6	-	97.2
Repair & Maintenance	47.5	68.1	-	35.5
Employee Cost	222.3	208	-	207.8
Admin and general expenses	37.8	41.2	-	41.2
Depreciation	82.4	49.8	-	48.2
Provision for Bad debts	0.0	0	-	0.0
Interest and finance charges	524.9	451.5	321.9	4.1
Prior period expenses	0	147.4	-	147.4
Interest on working capital	10.1	14.4	63.3	5.2
Interest on consumer security deposit	0	8.4	-	8.4
Less: Inefficient cost of PTPS	117.8	0	-	56.9
Less: Disincentive on T&D losses	995.9	0	-	335.6
Less: Penalty for SoP	31.5	0	-	30.9
Total Expenditure	1736.7	3056.6	-	2096.0
Statutory return/RoE	64.3	37.7	22.8	45.3
Revenue required	1801	3094.3	-	2141.4
Temporary Contingency	0	0	-	0
Gross revenue requirement	1800.9	3094.3	-	2141.4
Less: Misc. Receipts	360.1	61.9	-	301
Net revenue required	1440.9	3032.4	-	1840.3
Revenue at current tariff	1625.4	1634.4	-	1,634.4
Grants-in-Aid of debt service	0.0	400	-	400
Subsidy for R.E Loss	0	0	-	0
Revenue (Gap)/Surplus	**184.5**	**(998)**	**-**	**194.0**

5.162 The cumulative revenue surplus as approved by the Commission for FY 2007-08 to FY 2009-10 amounts to Rs **335.3** Cr as against revenue gap of Rs 3738.6 Cr submitted by the Petitioner in the Tariff Petition of FY 2011-12.

SECTION 6: REVISED ESTIMATES FOR FY 2010-11

6.1 The Petitioner has filed the revised ARR for FY 2010-11 along with the ARR and Tariff Petition for FY 2011-12.

6.2 The Commission has carried out the revision based on the information submitted by the Petitioner although the same shall be trued-up when the audited accounts is made available by the Petitioner.

6.3 This section covers the component-wise Petitioner's submission and Commission's analysis for revised estimation of FY 2010-11.

Energy Sales

Petitioner's Submission

6.4 The Petitioner has estimated the total energy sales to intra state consumers at 5923.8 MUs alongwith 763 MUs of inter-state sales during FY 2010-11 on the basis of actual sales recorded during the first six months of FY 2010-11.

6.5 The Petitioner submitted that there is growth in number of Kutir-Jyoti/BPL consumers on account of the large scale electrification of rural areas under the RGGVY scheme undertaken by the Petitioner.

Commission's Analysis

6.6 While scrutinizing the sales figures for FY 2010-11, the Commission has sought the latest category-wise sales figures available with the Petitioner for FY 2010-11. In response, the Petitioner submitted the actual category-wise sales data for the first 8 months of FY2010-11.The Petitioner also submitted that the figures provided are provisional and subject to final reconciliation at the finalisation of accounts.

6.7 In the absence of the full year commercial information, the Commission, on the basis of actual sales recorded by the Petitioner upto November, 2010, estimated the sales during FY 2010-11 by proportionally increasing the sales for last 4 months of FY 2010-11 on the basis of first 8 months actual data. The approved category-wise energy sales for FY 2010-11 is tabulated hereunder:

Table 65: Approved Energy Sales for FY 2010-11 (in MU)

Category of Consumer	Sales (MU)
Domestic	2492.6
Non-Domestics Service (NDS)	311.3
Street light Service (SS)	145.8
Irrigation & Agricultural Services (IAS)	79.9
Bulk Supply to MES	76.7
Low-Tension Industrial & Medium Power Services	150.5
High Tension Voltage Supply Service (HTVSS)	1896.8
High Tension Special Service (HTSS)	204.6
Railway Traction Service (RTS)	592.2
Inter- State Sale	763.0
Total Energy Sales	**6713.3**

6.8 The sales figures approved by the Commission on the above basis are subject to true-up, as and when the actual sales data is submitted by the Petitioner for FY 2010-11.

Transmission & Distribution Losses (T&D Losses)

Petitioner's submission

6.9 The Petitioner has calculated the distribution losses on the basis of revised estimates of sales and power purchase for FY 2010-11. The transmission losses in the State transmission system which is owned and operated by the Petitioner have been taken at 5%, as approved by the Commission in the Previous Tariff Order for FY 2010-11.

6.10 The table below summarises the overall T&D loss levels submitted by the Petitioner for FY 2010-11:

Table 66: Distribution losses submitted by the Petitioner (in MU)

Description	FY 2010-11
Power Purchase from Outside JSEB Boundary	5138
Loss in external systems (%)	2.7%
MU's lost in external system	139
Net Outside State Power Purchase	4999
Energy Input Directly to State Transmission System	822
Own Generation	597
UI Payable	52
UI Sale/ Receivable	763
Energy available for onward transmission	5707
Transmission loss (%)	5%

Transmission loss (MUs)	285
Net Energy Sent to Distribution (MUs)	5422
Direct input at distribution voltage (33 kV)	3256
Total Energy Available for Distribution	8678
Sales (MU)	5924
Distribution loss (MU)	2754
Distribution loss (%)	31.73%
Overall T&D losses (%)	**34.92%**

6.11 The Petitioner has stated that concerted efforts have been made to reduce the distribution losses. Despite exponential growth in BPL/Kutir Jyoti connections in rural areas, the Petitioner has been able to control losses over the years.

6.12 The Petitioner also submitted that it has consistently enhanced its focus on conducting raids at consumer premises. The Petitioner submitted details of circle wise raids conducted and FIRs lodged for FY 2010-11 (upto Dec'10) which shows an increase of 97% in case of number of raids and 56% in case of number of FIRs from FY 2009-10 level.

Commission's analysis

6.13 The Commission appreciates the steps taken by the Petitioner to reduce T&D losses in its area of operation, but it is very much concerned that the actual level of T&D losses submitted by the Petitioner are still far exceeding the norms set by the Commission in the Previous Tariff Order. The Commission is of the view that such high T&D loss levels due to Petitioner's inefficiency cannot be passed on to the consumers.

6.14 In compliance to the APTEL's direction 10 in appeal no. 129 of 2007, the Commission, while issuing the Tariff Order for FY 2010-11, had directed the Petitioner to submit its own loss reduction trajectory but the Petitioner failed to respond. In these circumstances, the Commission was compelled to work out a loss reduction trajectory for the Petitioner to achieve the T&D loss level of 15% by the end of FY 2016-17. The Commission has also reiterated the same loss reduction trajectory in the 'JSERC Distribution Tariff Regulations, 2010' as specified in the Previous Tariff Order for FY 2010-11.

6.15 Therefore, continuing with its approach from the previous Tariff Order of FY 2010-11, the Commission approves the overall transmission & distribution losses (T&D) on the basis of the loss reduction trajectory set in the Tariff Order for FY 2010-11, and accordingly approves the losses at 20.66%.

Energy Requirement

Petitioner's submission

6.16 The Petitioner submitted the total energy requirement of 9864.8 MU on the basis of projected level of Sales and T&D losses for FY 2010-11.

Commission's analysis

6.17 Based on the approved sales projections of 5950.3 MU and T&D loss of 20.66% approved by the Commission, the total energy requirement for intra state consumers for FY 2010-11 comes out to be of 7499.7 MU.

6.18 In addition to above, the Petitioner is allowed an additional power purchase of 763 MU for inter-state sale of power. Thus, the total energy requirement including inter-state sale approved by the Commission for FY 2010-11 is 8262.7 MU, as tabulated hereunder:-

Table 67 : Approved Energy Requirement (in MU)

Energy Balance	FY 2010-11
Energy sales to intra-state consumers (MU)	5950.3
Overall T&D loss (%)	20.66%
Overall T&D loss (MU)	1549.4
Total Energy Required for Intra-state sale of power	7499.6
Inter State Sales (MU)	763
Total Energy Requirement (MU)	**8262.7**

Own Generation & Fuel cost- PTPS

Petitioner's submission

6.19 The Petitioner submitted that all units of PTPS are old and the Central Electricity Authority (CEA), vide its letter dated August 2009, has proposed retirement of unit 1 to 6 during 11^{th} and 12^{th} plan.

6.20 The Petitioner in its present Tariff Petition has also submitted that Unit-3 is shut down since August'03 and Unit-5 is shut down since May'03. The derated capacity for Unit-3 & Unit-4 is 40 MW and 90 MW respectively. The Petitioner also submitted that as per the CEA recommendation, these units are being retired thereby reducing the overall derated capacity to 640 MW with effect from Aprl, 2011.

6.21 The Petitioner further submitted that two of its units, 9 & 10, of 110 MW each, which were under renovation, are also expected to commence operations during FY 2011-12.

6.22 The Petitioner accordingly requested the Commission to consider the usable capacity of 640 MW and calculate PLF on the available capacity of 370 MW for the operational units of the plant, that is, Unit 1, 2, 4, 6, and 7 for the period up to March, 2011.

6.23 The Petitioner has requested the Commission to notice the improvement in own generation and reconsider the inefficiency charges that has been levied on the generating station in the FY 2010-11 Tariff Order.

6.24 The variable cost calculation submitted by the Petitioner for PTPS is tabulated below:-

Table 68 : Proposed Plant parameters & Fuel cost determinants for PTPS

Particulars	Units	FY 2010-11
Installed capacity	MW	840
Derated Capacity (Usable)	MW	640
Proposed for consideration for PLF calculation	MW	370
PLF	%	21.2%
Auxiliary Consumption	%	13.4%
Station Heat Rate	kcal/KWh	4274.9
Calorific value of coal	kcal/kg	4540.1
Calorific value of FO/LDO	kcal/l	10500
Coal Transit Loss	%	2.6%
Price of Coal- Landed cost (Including transit loss)	Rs/tonne	1084.9
Price of Oil (FO)	Rs/kL	28772.1
Price of Oil (LDO)	Rs/kL	45611.6
Specific Coal Consumption	kg/kWh	0.9
Sp. Oil consumption (FO)	ml/kWh	7.1
Sp. Oil consumption (LDO)	ml/kWh	4.9
Gross units generated	MU	687.1
Net Units generated	MU	595.1
Total heat required	Mkcal	2937129.0
Calorific value of sec fuel	Kcal/Litre	10500.0
Secondary Oil consumption (FO)	Kl	4888.9
Secondary Oil consumption (LDO)	Kl	3390.2
Heat generated by secondary oil	MKcal	35597.0
Heat required from coal	MKcal	2901532.0
Coal Consumption	MT	0.7
Secondary Oil (FO) Cost per Klitres	0	28772.1
Secondary Oil (LDO) Cost per Klitres	Rs/klitres	45611.6
Secondary Oil Cost (FO+LDO) per kL	Rs Million	295.3
Coal Cost per Ton	Rs/ Ton	1084.9
Coal Cost	Rs million	711.7
Fuel Cost/Unit (on Gross Generation)	Rs/kWh	1.47
Net Fuel Cost	Rs Cr	100.7*

**In Petition, the figure was submitted at Rs. 71.7 Cr but submitted asRs. 100.7 Cr as per addition information*

Commission's analysis

6.25 The Commission noted that Unit-3 and Unit-5 of PTPS are shut down since August 03 and May'04 respectively. Moreover, the CEA has also recommended phasing out the said units. Based on the CEA recommendation and Petitioner's submission, the Commission has considered the overall usable capacity of PTPS as 640 MW for the time being and will consider as derated only when the confirmation is provided by the Petitioner.

6.26 Moreover, the Commission in its Previous Tariff Order has specified a trajectory of operational parameters of PTPS. The table below summaries the trajectory approved by the Commission for FY 2010-11:-

Table 69 : Operational Parameters set by the Commission in the previous Tariff Order

Years	PLF	Auxiliary Consumption	Transit loss of coal	Specific Oil Consumption	SHR
FY 2010-11	38%	10.5%	0.3%	2.0	3250

6.27 The Commission has approved the variable cost of PTPS based on the actual parameters submitted by the Petitioner subject to prudence check and also as per trajectory set by the Commission in the previous Tariff Order of FY 2010-11. Accordingly, the Commission approves the fuel cost of Rs 55 Cr for FY 2010-11 based on the per unit fuel cost determined by the Commission and the actual generation submitted by the Petitioner. The Operational parameters and details of variable cost component allowed by the Commission is stated below:-

Table 70 : Plant parameters & fuel cost determinants and Approved Generation from PTPS for FY 2010-11

Particulars	Units	FY 2010-11
Installed capacity	MW	840
Usable Capacity	MW	640
PLF	%	38.0%
Auxiliary Consumption	%	10.50%
Station Heat Rate	kcal/KWh	3250
Calorific value of coal	kcal/kg	4540.1
Calorific value of FO/LDO	kcal/l	10500
Coal Transit Loss	%	0.30%
Price of Coal- Landed cost	Rs/tonne	1056.9
Price of Oil (FO)	Rs/kL	28772.1
Price of Oil (LDO)	Rs/kL	45611.6
Specific Coal Consumption	kg/kWh	0.7
Sp. Oil consumption (FO)	ml/kWh	1.2
Sp. Oil consumption (LDO)	ml/kWh	0.8
Gross units generated	MU	2130.4
Net Units generated	MU	1906.7
Total heat required	Mkcal	6923904
Secondary Oil consumption (FO)	Kl	2521.0

Secondary Oil consumption (LDO)	Kl	1739.9
Heat generated by secondary oil	MKcal	26471
Heat required from coal	MKcal	6897433.4
Coal Consumption	MT	1.5
Secondary Oil Cost (FO+LDO) per kL	Rs Million	151.9
Coal Cost	Rs million	1610.5
Fuel Cost/Unit (on Gross Generation)	Rs/kWh	0.83
Fuel Cost/Unit (on Net generation)	Rs/kWh	0.92
Coal Cost (on net gen)	Rs/Kwh	0.84
Coal Cost (on net gen)	Rs Crores	50.26
Oil Cost (on net gen)	Rs/Kwh	0.08
Oil Cost (on net gen)	Rs Crores	4.74
Approved fuel cost (on the basis of Net generation)	Rs Crores	55.0

Own Generation- SHPS

Petitioner's submission

6.28 The Petitioner submitted generation from SHPS at 2 MU for FY 2010-11. The Petitioner submitted that SHPS is practically not operational since June 2010 and no generation is expected in ensuing months of FY 2010-11 due to scanty rainfall.

Commission's analysis

6.29 In line with the methodology followed in previous years, the Commission approves the net generation of SHPS based on the actual gross generation submitted by the Petitioner and the auxiliary consumption as per 'JSERC Generation Tariff Regulations, 2004'. The summary of the operational parameters for SHPS as per the revised estimates submitted by the Petitioner and as approved by the Commission for FY 2010-11 is tabulated hereunder:-

Table 71 : Approved Generation from SHPS

Hydel Generation	Units	FY 2010-11	
		Submitted	Approved
Capacity	MW	130	130
Gross Generation	MU	2	2
Aux. Consumption	%	2.49%	0.20%
Net Generation	MU	1.9	1.9

Power Purchase

Petitioner's submission

6.30 The Power Purchase Cost submitted by the Petitioner in the Tariff Petition for FY 2010-11 is Rs 2352 Cr. The Petitioner submitted the details of source-wise break up of Quantum and cost, the details of which are given below:-

Table 72: Proposed Power Purchase rate, quantum and cost for FY 2010-11

Source	Unit Rate (Rs/kWh)	MUs	Amt. (Rs Cr)
Farakka	3.51	969	340
Kahalgaon	2.80	227	64
Kahalgaon II	3.41	127	43
Talcher	2.44	610	149
WBSEB	5.85	59	34
DVC	3.00	3197	959
Rangit(NHPC)	2.01	45	9
Teesta(NHPC)	1.65	320	53
Chukha	1.61	199	32
TVNL	2.05	2178	447
UI Payable	4.19	52	22
UI Receivable	2.46	763	188
PTC (Tala HEP)	1.86	407	76
DVC (ST)	2.77	878	243
Own Generation (Thermal)	0.0	595	0
Own Generation (Hydel)	0.0	2	0
PGCIL			61.0
ERLDC			7.3
Payable		9268	2539
Receivable		763	188
Net Purchase/ Cost	**2.54**	**8505**	**2352**

6.31 The Petitioner submitted that cost of power from each source for the year FY 2010-11 has been based on the actual costs incurred/bills received for the period April'2010-November'2010.

Commission's analysis

6.32 The Commission has approved UI sales under the head "Inter-state sale" of power as per the revised estimates submitted by the Petitioner which shall be trued-up, when the actual provisional accounts are made available by the Petitioner.

6.33 The Commission enquired from the Petitioner regarding discrepancies in the power purchase units submitted by it and the figures provided in ERPC website on which the Petitioner replied that they have submitted actual for April'2010 to September'2010 and for rest of the months on the basis of past trend observations. As the figures on the website of ERPC are actual figures for the complete financial year, the Commission has considered them for calculating power purchase cost for FY 2010-11.

6.34 Accordingly, the source-wise power purchase approved by the Commission for FY 2010-11 is depicted in the table given below:-

Table 73: Approved Power Purchase quantum, rate and cost for FY 2010-11

Sources	FY 2010-11		
	Unit Rate (Rs/kWh)	MUs	Amount (Rs Cr)
Farakka	3.43	990.9	340.1
Kahalgaon	2.74	232.0	63.5
Kahalgaon II	3.11	139.7	43.5
Talcher	2.35	634.2	148.9
NTPC- Sub Total		**1996.7**	**596.0**
WBSEB	5.85	58.8	34.4
DVC	3.00	3197.3	959.2
DVC short term power	2.77	877.7	243.1
DVC-Sub Total		**4075.0**	**1202.3**
NHPC-Rangit	1.99	45.2	9.0
NHPC-Teesta	1.65	318.8	52.8
NHPC- Sub Total		**364.1**	**61.8**
Chukha	1.62	196.9	32.0
PTC-Tala HEP	1.85	408.7	75.8
PTC- Sub Total		**605.6**	**107.8**
TVNL	2.05	2206.8	453.1
UI payable	4.19	52.0	21.8
UI Receivable	2.46	763.0	187.8
PGCIL	-	-	61.0
ERLDC	-	-	7.3
Power Purchase/Cost from outside state	2.71	9359.1	2538.8
Own generation-Thermal	-	595.1	-
Own generation-Hydel	-	2.0	-
Net Power Purchase Cost (Including own generation)	**-**	**9956.1**	**2538.8**
Disincentive for non-achievement of T&D losses	-	1693.4	459.4
Power Purchase allowed	**-**	**8262.7**	**2079.5**

Disincentive for non-achievement of T&D loss reduction Targets

6.35 The difference in the actual power purchase and the power purchase requirement approved by the Commission is disallowed at the average power purchase rate and is treated as 'Disincentive for non-achievement of T&D loss targets'.

6.36 In the previous Tariff Order for FY 2010-11, the Commission had computed the disincentive for non-achievement of T&D loss reduction targets from FY 2006-07 onwards, on the basis of the Trajectory set for the respective years.

6.37 As per the trajectory, the T&D loss reduction target for FY 2010-11 was set at 20.66% which the Petitioner was not able to achieve as submitted in section 6.10 above. Accordingly, the Commission has computed the disincentive for non-achievement of T&D loss reduction targets at Rs 459.4 Cr for FY 2010-11, as shown below:-

Table 74: Disincentive for non-achievement of T&D loss reduction target for FY 2010-11

Description	Unit (MU)	Per Unit (Rs/kWh)	Cost (Rs Cr)
Power purchased from outside sources	9359.1	2.71	2538.8
Own Generation	597.1	-	-
Power purchase including own generation	9956.1	-	2538.8
Disincentive for non-achievement of T&D loss reduction target	1693.4	2.71	459.4

Employee Cost

Petitioner's Submission

6.38 The Petitioner in the Tariff Petition submitted the employee cost of Rs 371.07 Cr for FY 2010-11.

6.39 The Petitioner submitted the disaggregated function wise employee cost as additional information along with the basis of segregation for FY 2010-11.

6.40 The Petitioner submitted that the employee expenses proposed for FY 2010-11 are based on the latest revised estimates for the year. It has also submitted that the there is a substantial increase in the employee expenses in FY 2010-11 owing to the following reasons:

(a) The annual increment including 3% in basic and 18% increase in DA thereon;

(b) While the JSEB had started paying sixth pay commission salaries with effect from May, 2009, pensions continued to be on the old salaries, which are now being paid as per the revised salaries along with arrears for the period May, 2009 onwards.

(c) Several employees have approached for commutation of pension which has led to increase in employee expenses for the year 2010-11.

6.41 The following table summarises the disaggregated employee cost and number of employees engaged in each function submitted by the Petitioner for FY 2010-11:

Table 75: Proposed Disaggregated employee cost for FY 2010-11 (Rs Cr)

Particulars	Generation-Hydel	Generation - Thermal	Transmission	Distribution	Total
No. of Employees	**208**	**1276**	**566**	**3425**	**5475**
Employee cost	13.6	91.9	37.7	227.9	371.1

Commission's analysis

6.42 The Commission observed that the Petitioner has not provided any details of the expenses capitalised during the year. Thus, the Commission has approved the gross employee costs of Rs 283.9 Cr for FY 2010-11, by considering an escalation factor of 6% on the employee cost of the previous years, in accordance with the 'JSERC Generation Tariff Regulation, 2004', which shall be trued-up once the actual accounts for FY 2010-11 are submitted by the Petitioner.

6.43 The Petitioner has mentioned that the substantial increase in employee cost in FY 2010-11 is attributed to the arrears in pensions on account of revised salaries as per the Sixth Pay Commission which the Petitioner has started paying for the period May 2009 onwards. However, the Petitioner has not provided the required details of the same in the Tariff Petition. Accordingly, the Commission has provisionally approved Rs 100 Cr of terminal benefits including the arrears of pension on revised salaries on account of Sixth Pay Commission. The same would be trued up with the next Tariff Petition provided the provisional accounts for FY 2010-11 are made available by the Petitioner.

6.44 As stated earlier, the Commission has not considered any capitalization on employee cost.

6.45 In view of the above, the Commission approves the net employee cost of Rs 283.9 Cr for FY 2010-11, as depicted in the table given below:-

Table 76: Approved employee cost for FY 2010-11 (Rs Cr)

Particulars	Gen- Hydel	Gen- Thermal	Transmission	Distribution	Total
Salaries	4.86	29.80	13.22	79.98	127.85
Over time	0.10	0.60	0.26	1.60	2.56
Dearness allowance	1.33	8.18	3.63	21.95	35.08
Other allowance*	0.39	2.39	1.06	6.43	10.27
Bonus	0.00	0.00	0.00	0.00	0.00
Sub-Total	**6.68**	**40.96**	**18.17**	**109.96**	**175.77**
Medical expenditure (Re-imbursement)	0.03	0.19	0.08	0.51	0.81
Leave travel Assistance	0.00	0.01	0.01	0.04	0.06
Earned Leave encashment	0.23	1.40	0.62	3.77	6.02
Payment under workmen compensation Act	0.00	0.02	0.01	0.06	0.10
Total other staff cost	0.00	0.00	0.00	0.00	0.00

Staff welfare expenses*	0.04	0.27	0.12	0.73	1.17
Terminal benefits**	3.80	23.31	10.34	62.56	100.00
Impact of VI Pay Commission	-	-	-	-	-
Total	**10.8**	**66.2**	**29.4**	**177.6**	**283.9**
Less : Expenses Capitalised	0.00	0.00	0.00	0.00	0.00
Net Employee Cost	**10.8**	**66.2**	**29.4**	**177.6**	**283.9**

Administrative & General Expenses

Petitioner's submission

6.46 The Petitioner in the Tariff Petition submitted the A&G expenses of Rs 47.7 Cr based on the revised estimates for FY 2010-11.

6.47 The Commission had asked the Petitioner to submit disaggregated A&G cost along with the basis of segregation for FY 2010-11. The Petitioner submitted the disaggregated function-wise A&G cost as additional information and stated the basis of segregation is the employees engaged in each function. The table below summarises the disaggregated A&G cost and number of employees engaged in each function submitted by the Petitioner for FY 2010-11:-

Table 77: Summary of proposed A&G expenses for FY 2010-11 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
No. of employees	**208**	**1276**	**566**	**3425**	**5475**
A&G Cost	0.9	15.5	4.4	26.8	47.7

Commission's analysis

6.48 The Commission has approved the A&G cost of Rs 43.7 Cr for FY 2010-11, by considering an escalation factor of 6% on all the components of A&G cost in accordance with the 'Generation Tariff Regulation, 2004', over the provisionally trued expenses for FY 2009-10.

Table 78 : Approved disaggregated A&G Costs for FY 2010-11 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
Rent Rates & Taxes	0.04	0.27	0.12	0.73	1.16
Insurance	0.03	0.18	0.08	0.47	0.76
Telephone charges, Postage telegram and telex Charges	0.06	0.39	0.17	1.04	1.66
Legal Charges	0.04	0.25	0.11	0.68	1.09
Audit Fee	0.04	0.25	0.11	0.66	1.06
Consultancy charges	0.02	0.15	0.06	0.39	0.63

Technical fees	0.00	0.00	0.00	0.00	0.00
Other professional Charges	0.02	0.14	0.06	0.36	0.58
Conveyance & Travel	0.20	1.23	0.54	3.30	5.27
Fees & subscription	0.01	0.04	0.02	0.12	0.18
Books & Periodicals	0.00	0.03	0.01	0.08	0.13
Printing & Stationery	0.06	0.39	0.17	1.04	1.66
Advertisements	0.04	0.27	0.12	0.73	1.16
Water Charge	0.00	0.00	0.00	0.01	0.02
Electric Charges	0.10	0.61	0.27	1.63	2.60
Entertainment Charges	0.00	0.02	0.01	0.06	0.09
Misc. Expenses	0.95	5.80	2.57	15.57	24.88
Freight	0.02	0.12	0.05	0.32	0.52
Other purchase related expenses	0.01	0.06	0.03	0.15	0.24
Total	**1.7**	**10.2**	**4.5**	**27.3**	**43.7**
Less expenses capitalized	0.00	0.00	0.00	0.00	0.00
Net Expenses	**1.7**	**10.2**	**4.5**	**27.3**	**43.7**

Repair & Maintenance (R&M) Expenses

Petitioner's submission

6.49 The Petitioner, in the ARR & Tariff Petition for FY 2011-12 submitted the revised estimates for the R&M cost at Rs 75.4 Cr for FY 2010-11.

6.50 The Petitioner submitted that it has considered the actual trend of expenses observed over the period FY 2005-06 to FY 2009-10.

6.51 The table below summarises the disaggregated R&M expenses submitted by the Petitioner for FY 2010-11:-

Table 79: Proposed R&M expenses for FY 2010-11 (Rs Cr)

Particulars	Generation-Hydel	Generation Thermal	Transmission	Distribution	Total
R&M Expenses	1.6	26.2	10.0	37.5	75.4

Commission's analysis

6.52 The Commission has considered the same percentage of 1.83% on opening GFA as considered in the Previous Tariff Order for FY 2010-11 to arrive at the R&M cost for FY 2010-11.

6.53 The summary of the R&M expenses approved by the Commission is shown below:-

Table 80 : Summary of Approved Repair & maintenance expenses for FY 2010-11 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
Opening GFA	43.0	704.2	248.2	986.6	1,982.0
Approved R&M as a percentage of opening GFA					1.83%
Disaggregated R&M	**0.8**	**12.9**	**4.5**	**18.1**	**36.3**

6.54 The detailed break-up of disaggregated R&M expenses approved by the Commission for FY 2010-11 is detailed in the table below:-

Table 81 : Approved Repair & maintenance expenses for FY 2010-11 (Rs Cr)

Particulars	Gen-Hydel	Gen-Thermal	Transmission	Distribution	Total
R&M Plant & machinery	0.39	6.32	2.23	8.86	17.80
Buildings	0.04	0.59	0.21	0.83	1.67
Civil Works	0.05	0.88	0.31	1.23	2.48
Hydraulics	0.01	0.09	0.03	0.13	0.26
Lines, Cables, Network	0.30	4.93	1.74	6.91	13.89
Vehicles	0.00	0.03	0.01	0.04	0.08
Furniture & Fixture	0.00	0.00	0.00	0.00	0.01
Office Equipments	0.00	0.03	0.01	0.04	0.08
Total	**0.79**	**12.88**	**4.54**	**18.05**	**36.26**

Capital Expenditure

Petitioner's submission

6.55 The Petitioner submitted that the Units 1 to 6 of the PTPS plant are quite old and require substantial capital investments. The Petitioner submitted that the renovation and modernisation (R&M) for unit 9 and 10 is underway with a total revised capital outlay of Rs 331.1 Cr.

6.56 The Petitioner has also submitted that construction of eight new grid substations and associated transmission lines have been funded by REC loan routed through the State Government. Additional schemes for strengthening of the transmission network and connectivity are in the process of being added by the Petitioner.

6.57 The Petitioner has further submitted that it has taken up substantial IT and network strengthening related works under the Part-A and Part-B of the R-APDRP scheme introduced by the Ministry of Power for the distribution function.

6.58 The Petitioner further submits that it has undertaken large scale electrification works under the centrally funded RGGVY Scheme which is aimed at creation of Rural Electrification Backbone (REDB), electrification of villages and providing electricity connectivity to 100% BPL households. The scheme is being implemented by NTPC, DVC and the Petitioner in the entire State of Jharkhand with a revised estimated cost of Rs 3534.9 Cr.

6.59 The planned capital expenditure outlay of the Petitioner has been summarized in the table below:-

Table 82: Capital Expenditure Plan (Rs Cr)

Plan Outlay/ Proposed Schemes	FY 2010-11
Generation	90.0
Transmission	145.0
Distribution	378.3
Total JSEB	**613.3**

Commission's analysis

6.60 The Commission approves the capital expenditure (Capex) plan as submitted by the Petitioner for FY 2010-11. However, the capitalization for the year has been approved after due diligence of the schemes submitted by the Petitioner and the previous years conversion levels. Accordingly, the Commission has approved the Capex and capitalization figures, which shall be subjected to true up once the provisional accounts are submitted for FY 2010-11 with the next Tariff Petition.

6.61 The capital expenditure plan as approved by the Commission has been summarised in the table below:

Table 83: Capital Expenditure Plan and capitalisation for FY 2010-11

Plan Outlay/ Proposed Schemes	Capex	Capitalization
Generation	90.0	113.4
Transmission	145.0	50.0
Distribution	378.3	299.9
Total JSEB	**613.3**	**463.3**

Gross Fixed Asset

Petitioner's submission

6.62 The Commission directed the Petitioner to submit the break-up of function wise GFA for FY 2010-11. The Petitioner submitted the total closing GFA of Rs 2535.4 Cr in additional information as given below:

Table 84: Function wise Break-up of GFA as submitted by the Petitioner (Rs Cr)

Particulars	FY 2010-11
Generation- Hydel	56.4
Generation-Thermal	804.1
Transmission	352.7
Distribution	1322.2
Total	**2535.4**

Commission's analysis

6.63 The Commission approved the Gross Fixed asset as per the capitalization approved for the year.

Table 85: Approved GFA for FY 2010-11 (Rs Cr)

Particulars	FY 2010-11
Opening GFA	1982
Additions in GFA	463.4
Closing GFA	2445.4
Less: Accumulated depreciation	784.2
Net Fixed Assets	**1661.1**

6.64 For funding of above GFA the Commission has considered the normative debt equity ratio of 70:30 as provided in regulation 19 of the Distribution Tariff Regulation, 2004. However, consumer contribution grants and subsidies for capital assets are first netted off from gross fixed assets and the normative debt equity ratio is applied on the remaining gross fixed assets only.

6.65 The Petitioner has not provided any details of addition in consumer contribution, grants and subsidies for capital assets in its Tariff Petition. Therefore, the Commission has estimated the addition during FY 2010-11 on the basis of past trend. The normative net loans are estimated after deducting accumulated depreciation from the value of gross loans.

6.66 Thus the approved sources of funding for the approved GFA of Rs 1661.1 Cr for FY 2010-11 is tabulated hereunder:-

Table 86: Approved Sources for FY 2010-11 (Rs Cr)

Approved Sources	FY 2010-11
Consumer contribution, grants and subsidies deployed in GFA	940.2
Equity	451.5
Loan	269.4
Total	**1661.1**

6.67 The Commission notes with concern that the Petitioner is diverting its long-term fund for the purpose of meeting its deficit caused due to its own inefficiencies. The Commission directs the Petitioner to abstain from diversion of funds meant for creating long-term assets. In accordance with the Tariff Regulations issued by the Commission in 2010, the Commission should provide the return on funds actually deployed in usable assets, as tabulated hereunder:-

Table 87: Proportion of Approved Sources for FY 2010-11 (Rs Cr)

Approved Sources	Return	Basis
Consumer contribution, grants and subsidies deployed in GFA	0%	Cost –free funds
Equity	14%	As provided in Regulation 20 of the Tariff Regulations, 2004
Loan	8.05%	Weighted average rate of interest on existing loans as per Regulation 11 of the Tariff Regulations, 2004

Return on Equity (RoE)

Petitioner's submission

6.68 The Petitioner submitted that the equity for the purpose of calculating Return on Equity has been calculated in accordance with the approvals made by the Commission in FY 2010-11 Tariff Order and the Terms and Conditions of Distribution Regulations, 2004; normative equity of 30% is estimated by taking the gross fixed assets less consumer contribution.

6.69 The Petitioner has proposed Rs 38.3 Cr RoE for FY 2010-11 as given in the table below:-

Table 88: Return on Equity submitted by the Petitioner (Rs Cr)

Particulars	FY 2010-11
Thermal Generation	13.1
Hydel Generation	0.8
Transmission	5.3
Distribution	19.1
Total	**38.3**

Commission's analysis

6.70 Based on the methodology mentioned in clause 6.64 & 6.65, the Commission has approved the RoE of Rs 63.2 Cr for FY 2010-11, as tabulated hereunder:

Table 89: Approved Return on Equity for FY 2010-11 (Rs Cr)

Particular	Gen- Hydel	Gen- Thermal	Transmission	Distribution	Total
Opening GFA	43.0	704.2	248.2	986.6	1,982.0
Normative Equity	9.8	160.4	56.5	224.8	451.5
Return on Equity (%)	14.0%	14.0%	14.0%	14.0%	
Return on Equity	**1.4**	**22.5**	**7.9**	**31.5**	**63.2**

Interest and Other Finance Charges

Petitioner's submission

6.71 The Petitioner in the ARR & Tariff Petition for FY 2011-12 submitted the interest on loans as Rs 236 Cr for FY 2010-11 as given in the table below:

Table 90: Interest & Finance Charges (Rs Cr)

Interest Expenses	Generation	Transmission	Distribution	Total
Interest on existing loans	116.9	67.5	360.6	544.9
Interest on new loans	5.8	9.4	16.8	32.1
Sub-total	122.7	76.9	377.4	577.0
Less: IDC	85.2	34.4	120.2	239.9
Net Interest	**37.5**	**42.5**	**257.2**	**337.1**
Interest considered for ARR (70%)	**26.2**	**29.7**	**180.0**	**236**

Commission's analysis

6.72 On the basis of the methodology mentioned in Section 6.64 & Section 6.65, the Commission estimates the aggregate interest and other finance charges at Rs 12.0 Cr for FY 2010-11, as given in the table below:-

Table 91: Approved Interest & Finance Charges (Rs Cr)

Particulars	FY 2010-11
Normative Opening Balance	28.0
Deemed Addition during the year	297.8
Deemed Repayments during the year	56.4
Normative Closing Balance	269.4
Normative Average balance during FY 2010-11	148.7
Interest Expense @ 8.05%	**12.0**

6.73 The Commission shall true-up the interest and finance charges once the provisional accounts for the respective years are submitted by the Petitioner.

Interest on Working Capital

Petitioner's submission

6.74 The Petitioner submitted the interest on Working Capital as per the 'Terms and Condition for determination of distribution tariff, 2004'. Accordingly, 1/12th of O&M, maintenance spares at 1% of opening GFA, two months expected revenue from sale of power at existing tariff minus amount held as security deposit minus one month equivalent of cost of power purchase has been considered for calculation of working capital.

6.75 The Petitioner submitted that the interest on working capital is calculated at the bank rate.

Table 92 : Interest on Working Capital submitted by the Petitioner for FY 2010-11 (Rs Cr)

Particulars	Generation-Thermal	Generation-Hydel	Transmission	Distribution	Total
1 month primary fuel	5.9	0.0	0.0	0.0	5.9
1 month sec fuel	2.5	0.0	0.0	0.0	2.5
1 month O&M	11.2	1.3	4.3	24.4	41.2
Maintenance Spares	20.6	0.6	7.8	9.9	38.8
Receivables	0.0	0.0	0.0	485.2	485.2
Less: 1 month cost of power purchase	0.0	0.0	0.0	195.9	195.9
Less: Security Deposit from Customers	0.0	0.0	0.0	192.6	192.6
Total Working Capital requirement	40.1	1.9	12.2	130.8	185.0
Interest on Working Capital	**4.8**	**0.2**	**1.5**	**15.7**	**22.2**

Commission's analysis

6.76 The Commission has considered the interest on working capital as per the norms specified in the following regulations:

(a) CERC, (Terms and Conditions of Tariff Regulations), 2004 for computing the interest on working for Sikidri Hydel Power Station

(b) JSERC (Terms and Conditions for Determination of Thermal Generation Tariff), 2004 for computing the interest on working capital for the Patratu Thermal Power Station and;

(c) JSERC (Terms and Conditions for Distribution Tariff) Regulations, 2004, for computing the interest on working capital for the distribution function.

6.77 Since, the tariff determination regulations for hydro generating stations of JSERC were not in place in FY 2010-11, the Commission has decided to approve the interest on working capital based on the norms specified in the CERC Regulations. The 'CERC (Terms and Condition of Tariff) Regulation, 2004' specify the computation of working capital as per the following norms:-

(a) Operation & Maintenance expenses for one month.

(b) Maintenance spares @ 1% of Historical cost escalated @ 6% p.a from the date of commercial operation, whichever is later, and

(c) Receivables equivalent to two months sale of electricity.

6.78 The computation of working capital for the generation- hydel function is shown in the table below. Since the working of JSEB is still as an integrated unit, the Commission has not considered any working capital for receivables of Generation-Hydel function.

Table 93: Approved IWC for Generation-Hydel function (Rs Cr)

Particulars	FY 2010-11
O&M expenses (in months)	1.1
Maintenance Spares (% of equipment cost)	0.4
Total Working Capital	1.5
Rate of interest on working capital	11.75%
Interest on working capital @ 11.75%	**0.2**

6.79 The "JSERC Generation Tariff Regulations, 2004' specify the computation of working capital as per the following norms:

(a) Cost of coal for one month corresponding to target availability.

(b) Cost of coal for ½ months for pit-head generating stations and one month for non-pithead generating stations, corresponding to the, “target availability”.

(c) One month stock for secondary fuel oil, corresponding to “target availability”.

(d) Operation & Maintenance expenses for one month.

(e) Maintenance spares @ 1% of plant & equipment cost as on 01.04.2004 or the date of commercial operation, whichever is later, and

(f) Receivables equivalent to two months of fixed and variable charges below the level of target availability shall be on pro-rata basis.

6.80 The computation of working capital for the generation function is shown in the table below. Since the working of JSEB is still as an integrated unit, the Commission has not considered any working capital for receivables of Generation- Thermal function.

Table 94: Approved IWC for Generation-Thermal function (Rs Cr)

Particulars	FY 2010-11
Cost of Coal for 1½ month	6.3
Secondary Fuel Oil for 1 month	0.4
Operation & Maintenance expenses for 1 month	7.4
Maintenance expenses @ 1% of Plant & Equipment	7.0
Total Working Capital	21.2
Interest rate considered for Working Capital	11.75%
Interest on Working Capital @ 11.75%	**2.5**

6.81 The ‘Distribution Tariff Regulations, 2004’ states that the interest on Working capital is required to meet the shortfall in collection over and above the target approved by the Commission. In case of the Petitioner, the shortfall is 1% of the total revenue; hence the interest on Working capital has been computed accordingly.

6.82 The Computation of working capital for the Distribution function is shown in the table below:-

Table 95: Approved IWC for Distribution function (Rs Cr)

Particulars	FY 2010-11
Bad & Doubtful debt as a % of revenue	0.01
Revenue at existing tariff	1915.4
Bad & Doubtful debt (in Rs Cr)	19.2
Interest on Working Capital @ 11.75%	**2.3**

6.83 The summary of interest on working capital for FY 2010-11 is shown in the following table:-

Table 96: Calculation of Working capital for FY 2010-11 (Rs Cr)

Description	Generation - Thermal	Generation - Hydel	Distribution	Total
Interest on Working Capital	0.2	2.5	2.3	4.9

Interest on Consumer Security Deposit

Petitioner's submission

6.84 The Petitioner has proposed the Interest on consumer security deposits (CSD) in accordance with 'Jharkhand Electricity Supply Code Regulations, 2005'. The interest on CSD has been calculated at an interest rate of 6%.

6.85 The Petitioner has projected the Consumer Security Deposit on the basis of 5 year actual CAGR observed during the period 2004-05 to 2009-10. The interest on CSD for each of the years has been considered at the average of opening and closing balance of CSD. The interest on security deposit has been proposed at Rs 11.0 Cr for FY 2010-11

Commission's analysis

6.86 In accordance with the Regulation 13 of the 'JSERC Distribution Tariff Regulations, 2004' the Commission approves the interest on consumer security deposit on the basis of the bank rate, which is at 6%. The Commission has considered the Consumer Security Deposit on the basis of average for the year and accordingly an amount of Rs10.8 Cr has been approved for FY 2010-11.

Depreciation

Petitioner's submission

6.87 The Petitioner submitted the revised estimated depreciation of Rs 60.6 Cr for FY 2010-11 as given below:-

Table 97 : Depreciation submitted by the Petitioner for FY 2010-11 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2010-11	0.6	9.4	9.3	41.3	60.6

Commission's analysis

6.88 The Commission has scrutinized the depreciation expenses submitted in the petition and found it to be in line with the earlier methodology followed for approval of depreciation. However, depreciation on addition in fixed assets added during the year has been considered on the basis of approved capitalisation during the year.

6.89 The depreciation charge as calculated on the above basis is proportionately reduced by the amount of depreciation on assets funded from capital contribution, grants and subsidies, to arrive at the net depreciation charge for distribution function.

6.90 The calculation of function-wise depreciation charges approved by the Commission for FY 2010-11 is detailed in the table given below:

Table 98 : Function wise approved Depreciation for FY 2010-11 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2010-11	0.6	8.7	8.4	38.7	56.4

6.91 As per the above calculations, the Commission approves the total net depreciation charge (thermal generation, hydel generation, transmission and distribution) of Rs 56.4 Cr for FY 2010-11.

Inefficient Cost of PTPS

6.92 The performance of PTPS has been a matter of concern for the state of Jharkhand. Even though the station is old, the performance of the plant in comparison to other similar plants in the country has been below par. The Commission is of the view that inefficiencies on the part of the plant cannot be passed on to the consumers.

6.93 The Commission has computed the inefficient cost of PTPS as Rs 115.0 Cr in the Tariff Order for FY 2010-11. However, based on the estimated actual net-generation of 1906.7 MU during FY 2010-11, the Commission has projected an amount of Rs 86.9 Cr towards inefficient fixed cost of PTPS for FY 2010-11, as shown below:

Table 99 : Inefficient cost of PTPS for FY 2010-11

Particulars	Unit	Actual	Approved
Net generation of PTPS	MUs	595.1	1906.7
Fixed Cost	Rs Crs	39.4	126.3
Per unit fixed Cost	Rs/kWh		0.6
Inefficient cost of PTPS	Rs Crs		86.9

Non Tariff Income (NTI)

Petitioner's submission

6.94 The Petitioner has attributed the entire non-tariff income earned by it to the Distribution function for FY 2010-11.

6.95 The details of non-tariff income submitted by the Petitioner in additional information for FY 2010-11 is given in the table below:

Table 100: Non Tariff Income submitted by the Petitioner (Rs Cr)

Particulars	FY 2010-11
Income from Investment (F.D)	5.6
Interest from Bank (other than FD)	1.5
Interest on loans and advances to staff	0.0
Interest on loans and advances to licensee	0.0
Interest on advance to Supplier/Contractor	0.5
Income from trading	2.0
Income from staff Welfare Activities	0.0
Miscellaneous Receipt.	47.4
DPS from Consumer	30.8
Total	**87.8**

Commission's analysis

6.96 The Commission views the delayed payment surcharge (DPS) should be considered as per the policy followed for DPS in accounts. Since, as per the provisional accounts for the previous years, the DPS has been given on assessment basis, the Commission has computed the DPS in line with the actual DPS specified in the accounts. Accordingly, after scrutinizing other components submitted by the Petitioner, the Commission has approved the Non-Tariff Income of Rs 365 Cr for FY 2010-11.

6.97 The component-wise break-up of approved Non-Tariff Income as per prudence check for FY 2010-11 is summarised in the table given below:

Table 101: Approved Non Tariff Income (Rs Cr)

Particulars	Generation–Hydel	Generation-Thermal	Transmission	Distribution	Total
Income from investment (F.D)	0	0	0	6	6
D.P.S from consumer	0	0	0	308	308
Interest from bank (Other than F.D)	0.4	0.4	0.4	0.4	1.5
Income from trading	0.5	0.5	0.5	0.5	2.0
Misc. Receipt	0.0	0.0	0.0	47.4	47.4
Total	**0.9**	**0.9**	**0.9**	**361.9**	**365.0**

Provision for Bad & Doubtful Debts

Petitioner's submission

6.98 The Petitioner has stated that it shall make all efforts to achieve 100% collection efficiency during 2010-11 in accordance with the applicable JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2010. However, it is submitted that while other utilities in the State have enjoy a favourable consumer mix and operate in limited supply areas, the Petitioner submitted that it is the distribution Petitioner for the entire State of Jharkhand including rural and far flung areas.

6.99 The Petitioner has requested the Commission to relook the target of 100% collection efficiency given by the Hon'ble Commission for all Petitioners in the State consideration the ground realities of difference in consumer mix and the geographical spread of its license area.

6.100 The Petitioner has further submitted that it shall submit its petition for truing-up of provision for bad debts, if any for the purpose of truing-up based on actual, after finalization of provisional accounts for FY 2010-11 and FY2011-12.

Commission's analysis

6.101 The Commission views that it is the obligation of every Petitioner to supply power to every consumer as per the consumer's requirement. Similarly, it is the responsibility of every Petitioner to ensure that it collects the amount for energy billed and supplied to the consumers In case the consumers do not pay, the Petitioner has full right to disconnect the supply by following requisite procedures. However, if the Petitioner is not able to collect the amount billed from any consumer, it has no right to pass on its efficiency to the paying consumers.

6.102 The Regulation 10 of the 'JSERC Distribution Tariff Regulations, 2004', which states that no amount can be allowed to be passed on the consumer on the ground of it being bad and doubtful debt as it will lead to inefficiency in collection, was prepared in view of the above mentioned philosophy of the Commission. Accordingly, the Commission disallows any provision for bad and doubtful debts to be allowed to the Petitioner.

Revenue from Existing Tariff

Petitioner's submission

6.103 The Petitioner submitted revenue at existing tariffs at Rs 1904.6 Cr for FY 2010-11.

Commission Analysis

6.104 The Commission has approved the revenue at existing tariffs as per the approved sales and the applicable energy and demand charges for FY 2010-11. The revenue at existing tariff is computed at Rs 1915.4 Cr against the amount of Rs 1904.6 Cr submitted by the Petitioner.

Summary of the ARR for FY 2010-11

6.105 In view of the above analysis, the disaggregated annual revenue requirement (ARR) for each function along with the revenues at existing tariffs and revenue gap for FY 2010-11 is summarised below.

Functionally disaggregated ARR for FY 2010-11

6.106 The summary of the ARR for Thermal generation function approved by the Commission for FY 2010-11 is summarised in the table below:-

Table 102: Approved ARR of Thermal Generation Function for FY 2010-11 (Rs Cr)

Annual Revenue Requirement	FY 2010-11
Fuel	55.0
Employee	66.2
Repair & Maintenance	12.9
Admin & General	10.2
Interest & Financing Charges	4.3
Interest on working capital	2.5
Depreciation	8.7
Less: Inefficient cost of PTPS	86.9
Total Costs	**72.8**
Add: Reasonable return	22.5
Less: Non tariff income	0.9
ARR	**94.4**

6.107 The summary of the ARR for Hydel generation function approved by the Commission for FY 2010-11 is summarised in the table below:

Table 103: Approved ARR of Hydel Generation Function for FY 2010-11 (Rs Cr)

Annual Revenue Requirement	FY 2010-11
Employee	10.8
Repair & Maintenance	0.8
Admin & General	1.7
Depreciation	0.6
Interest & Financing Charges	0.3
Interest on working capital	0.2
RoE	1.4
Less: Non Tariff Income	0.9
Net revenue Required	**14.7**

6.108 The summary of ARR for transmission function approved by the Commission for FY 2010-11 is summarised in the table below:

Table 104: Summary of ARR for Transmission Function for FY 2010-11 (Rs Cr)

Annual Revenue Requirement	FY 2010-11
Employee	29.4
Repair & Maintenance	4.5
Admin & General	4.5
Interest & financing charges	1.5
Depreciation	8.4
Total Cost	48.3
Add: Reasonable return	7.9
Less: Non tariff income	0.9
ARR	**55.4**

6.109 The summary of ARR for distribution function approved by the Commission for FY 2010-11 is summarised in the table below:

Table 105: Summary of the ARR for Distribution Function for FY 2010-11 (Rs Cr)

Annual Revenue Requirement	FY 2010-11
Net Power Purchase cost	2538.8
Employee	177.6
Repair & Maintenance	18.1
Admin & General	27.3
Interest and financing charges	6.0
Interest on working capital	2.3
Depreciation	38.7
Bad debt provision	0.0
Interest on consumer security deposit	10.8
Less: Disincentive for T&D Loss	459.4
Total Costs	2360.2
Reasonable return	31.5
Less: Non tariff income	361.9
ARR	**2029.8**

Consolidated ARR

6.110 The table below summarises the ARR approved by the Commission for FY 2010-11.

Table 106 : Approved ARR for FY 2010-11 (Rs Cr)

Annual Revenue Requirement	FY 2010-11 Submitted by JSEB	FY 2010-11 Approved by JSERC
Net Power Purchase Cost	2351.7	2538.8
Fuel Cost	100.7	55.0
R&M Cost	75.4	36.3
Employee's Cost	371.1	283.9
A&G Cost	47.7	43.7
Depreciation	60.6	56.4
Interest & Financing Charges	236	12.0
Interest on Working Capital	22.2	4.9
Interest on consumer security Deposit	11	10.8
Less: Inefficient Cost of PTPS	0	86.9
Less: Disincentive for non-achievement of T&D Loss targets	0	459.4
Total Expenditure	3276.4	2495.6
Return on Equity	38.3	63.2
Gross revenue requirement	3314.7	2558.8
Less: Non-Tariff income	87.8	365.0
Net revenue required	**3227**	**2193.8**
Revenue at current tariff	1904.6	1915.4
Revenue (Gap)/Surplus	**(1322.3)**	**(278.4)**

6.111 The Commission approves the net revenue gap of Rs 278.4 Cr for FY 2010-11.

SECTION 7: PROJECTIONS FOR FY 2011-12

7.1 This section covers the component-wise Petitioner's submission and Commission's analysis for the Tariff Petition and ARR of FY 2011-12.

7.2 The Commission has carried out the projections based on the information submitted by the Petitioner although; the same shall be revised when the provisional accounts is made available by the Petitioner.

Energy Sales

Petitioner's Submission

7.3 The Petitioner has proposed the total energy sales of 6627.6 MUs for FY 2011-12 based on five years CAGR for previous years. The inter-state sales have been considered at 785 MUs. The net energy sale is submitted at 7412.6 MUs.

7.4 The Petitioner has proposed the additions to the Kutir Jyoti category as per its base case considerations for the purpose of projecting sales growth.

Commission's Analysis

7.5 The Commission has projected the energy sales for FY 2011-12 using the method adopted by the Petitioner by applying five years compound annual growth rate (CAGR) for all consumer categories after considering approved sales of FY 2010-11. The Commission has also allowed the inter-state sales of 785 MUs, after scrutinizing the details submitted and analysing the historical trends. The net energy sales approved at 7561.2 MUs, as shown below:

Table 107: Approved Energy Sales (MU)

Category	FY 2011-12
Domestic	3,052.0
Commercial	355.2
Public Lighting	184.7
Irrigation	84.8
Bulk Supply to MES	79.0
Low-Tension Industrial & Medium Power Services	163.8
High Tension Voltage Supply Service (HTVSS)	2012.4
High Tension Special Service (HTSS)	217.1
Railway	627.2
Bulk Supply	0.0
Energy Sales to Consumers	6776.2
Inter-state sale	785.0
Net Energy Sales	**7,561.2**

Transmission & Distribution Losses (T&D Losses)

Petitioner's submission

7.6 The Petitioner has stated that the losses for the FY 2011-12 have been projected taking into consideration the recommendations of the Abraham Committee Report on restructuring of the APDRP. Accordingly, a reduction of over 3% with respect to the distribution losses assessed in the year FY 2009-10 has been proposed by the Petitioner.

7.7 The Petitioner submitted that the power purchase/ energy input required for the FY 2011-12 have been worked out in the reverse manner considering the sales, targeted distribution loss reduction and the past trend of losses observed in the system at higher levels including state level transmission system and that in the regional/ inter-regional transmission systems beyond the State boundaries.

7.8 The table below summarises the overall distribution loss levels submitted by the Petitioner for FY 2011-12:-

Table 108: T&D losses submitted by the Petitioner

Description	FY 2011-12
Power Purchase from Outside JSEB Boundary	4668
Loss in external systems (%)	2.7%
MU's lost in external system	126
Net Outside State Power Purchase	4542
Energy Input Directly to State Transmission System	822
Own Generation	1784
UI Payable	0
UI Sale/ Receivable	785
Energy available for onward transmission	6362
Transmission loss (%)	5%
Transmission loss (MUs)	318
Net Energy Sent to Distribution (MUs)	6044
Direct input at distribution voltage (33 kV)	3256
Total Energy Available for Distribution	9300
Sales (MUs)	6628
Distribution loss (MUs)	2673
Distribution loss (%)	28.7%
Overall T&D Losses	**31.9%**

7.9 The Petitioner submitted that driven by the targets and directives given by the Hon'ble Commission, the JSEB has made concerted efforts to reduce distribution losses which has already come down significantly during the last three to four years. The Petitioner has also reiterated that despite exponential growth in BPL/ Kutir Jyoti connections in rural areas, the JSEB has been able to control losses over the years.

7.10 The Petitioner has also stated that, in order to reduce distribution losses and to enforce discipline in the erring consumers, the JSEB has consistently enhanced its focus on conducting raids at consumer premises and there has been a sharp increase in number of raids/ FIRs since 2007-08 and especially in 2010-11.

7.11 The Petitioner further submitted that it is making all efforts to reduce distribution losses by metering of consumers, introduction of AMR/ Remote Metering, introducing spot billing, undertaking network up-gradation/ improvement projects, undertaking R-APDRP projects in 30 towns etc.

7.12 The Petitioner has requested the Commission to reconsider the loss reduction trajectory set in the Previous Tariff Order for FY 2011-12 as well as the 'JSERC Tariff Regulations, 2010'. The Petitioner submitted that the loss trajectory is not reasonable and the deduction on account of disincentive on non-achievement of T&D losses would cripple the JSEB financially and the JSEB will not be to able meet its genuine expenses which are essential to serve its consumers The Petitioner has also referred to a state-wise comparison of loss levels achieved to showcase that the maximum annual average T&D loss reduction has been achieved by NDPL which is at 4%, and it is not feasible to achieve an annual loss level reduction of 13% in one single year.

7.13 The Petitioner has also quoted the National Tariff Policy clause 8.2.1 (2) which states that the "*ATC loss reduction should be incentivised by linking returns in a MYT framework to an achievable trajectory.*" The Petitioner has prayed to the Commission to revise the loss reduction targets in accordance with guiding principles of the National Tariff Policy and the Abraham Committee recommendations and taking cognizance of the existing level of losses for implementation of the APTEL order in its true spirit. The APTEL Order dated 8.5.2008 against appeal no 129 of 2007 stated that *"We direct that the Commission lays down time bound targets for reduction of T&D losses and norms for improvement of the Power Stations and increasing the overall efficiency of the Board."*

Commission's analysis

7.14 The Commission appreciates the steps taken by the Petitioner to reduce T&D losses in its area of operation but the same is not reflected in the T&D loss figures submitted in the ARR & Tariff Petition. As is evident from the actual T&D losses submitted by the Petitioner, the T&D losses are still far exceeding the norms set by the Commission. The Commission is of the view that such high T&D loss level due to Petitioner's inefficiency cannot be passed on to the consumers.

7.15 It is pertinent to mention that the Commission in its Tariff Order for FY 2003-04 had approved a T&D loss level of 42.66%. This was against the then proposed ambitious target of 10% T&D loss reduction (from 47.66% to 37.66%) by the Petitioner. Further, through the Tariff Order for FY 2003-04, the Commission had directed the Petitioner to strictly monitor and implement the T&D loss reduction programme.

7.16 Subsequently, the Commission in its Tariff Order for FY 2006-07 had approved a T&D loss level of 36.66%, i.e., 6% less than the T&D loss level of 42.66% approved by the Commission in its Tariff Order for FY 2003-04.

7.17 The Hon'ble APTEL in its direction no. 10 of appeal no. 129/2007 had expressed concern on the excessive Transmission and Distribution (T&D) losses of the Petitioner and had directed the Commission to lay down time bound targets for reduction of T&D losses and norms for improvement of the power generating stations and increasing the overall efficiency of the Board.

7.18 In compliance to the APTEL's direction 10 in appeal no. 129 of 2007, the Commission, while issuing the Tariff Order for FY 2010-11, had directed the Petitioner to submit its own loss reduction trajectory but the Petitioner failed to respond.

7.19 It is evident from the above, that the Petitioner had been given numerous opportunities over the years to set and achieve the loss levels as per its own T&D loss reduction plan. However, as was elaborated in the Previous Tariff Order of FY 2010-11, the Petitioner has not been able to achieve any sort of loss reduction since FY 2003-04 till the issue of the previous Tariff Order, as shown below:

Table 109 : Approved & Actual T&D Losses for FY 2003-04 to FY 2006-07

Years	As proposed by Petitioner in Tariff Petitions	As approved by JSERC in Tariff Order	T&D Loss as per Prov. accounts	As approved in Provisional True up
FY 2003-04	37.66%	42.66%	48.28%	42.66%
FY 2004-05	-	-	48.48%	40.66%
FY 2005-06	-	-	47.62%	38.66%
FY 2006-07	42.50%	36.66%	42.86%	36.66%

7.20 After the Petitioner was given numerous opportunities over the years to reduce the loss levels and also to propose its own T&D loss reduction trajectory during the determination of Previous Tariff Order for FY 2010-11, which the Petitioner did not submit, the Commission was compelled to work out a loss reduction trajectory for the Petitioner to achieve T&D loss level of 15% by the end of FY 2016-17. The Commission has also reiterated the same loss reduction trajectory in the 'JSERC Distribution Tariff Regulations, 2010' as specified in the Previous Tariff Order for FY 2010-11.

7.21 It is also evident from the above table that, as per the provisional accounts of FY 2006-07, the Petitioner was able to achieve a T&D loss reduction of almost 5.24% in a single year. Considering that in today's scenario, when there are numerous funds from R-APDRP and other sources available and the technology has also improved, the Petitioner should make all out efforts to reduce the losses as per the loss reduction trajectory set by the Commission.

7.22 In any case, the Commission views that the T&D losses submitted by the Petitioner are too high and it does not find any merit in passing on the inefficiencies of the past and present to the consumers beyond the T&D loss reduction levels approved by the Commission. Therefore, the Commission has decided to continue with the trajectory specified in the FY 2010-11 Tariff Order for projecting T&D loss target for FY 2011-12.

7.23 Meanwhile, in S.No. 3.13 of the ARR & Tariff Petition for FY 2011-12 filed by the Petitioner, it has been mentioned by the Petitioner that the Commission has given some relaxation to the JSEB by revising the target for T&D losses at 19% for 2011-12 in the previous Tariff Order for FY 2010-11 to a distribution loss target of 19% for 2011-12 in the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2010.

7.24 The Commission views that the Petitioner has misinterpreted the loss trajectory target set by the Commission by considering the trajectory mentioned in the 'JSERC Distribution Tariff Regulations, 2010' as losses without transmission system losses. It is pertinent to mention that since JSEB is still a Board; the Commission has considered the distribution losses as losses including Transmission system losses in the aforesaid Regulations. Moreover, the loss targets set for JSEB in the 'JSERC Distribution Tariff Regulations, 2010' were set in accordance with the T&D loss reduction trajectory set in the Previous Tariff Order of JSEB for FY 2010-11, which were for the complete transmission and distribution system only.

7.25 Therefore, the Commission clarifies that it has not given any relaxation to the Petitioner from the transmission loss reduction trajectory set in the Previous Tariff Order for FY 2010-11.

7.26 In view of the above, the Commission approves the transmission & distribution losses (T&D) for FY 2011-12, as detailed hereunder:

Table 110 : Approved T&D Losses for FY 2011-12

Description	FY 2011-12
Total intra state energy sales (MU)	6776.2
Overall T&D loss %	19.00%
Overall T&D Loss (MU)	1589.5

Energy Requirement

Petitioner's submission

7.27 The Petitioner submitted the total energy requirement of 10529.4 MU on the basis of projected level of Sales and T&D losses for FY 2011-12.

Commission's analysis

7.28 Based on the approved intra state sales projections of 6776.2 MU, inter-state sales of 785 MUs and T&D loss of 19.00% by the Commission, the total energy requirement during FY 2011-12 is approved at 9150.7 MUs, as shown hereunder:

Table 111 : Approved Energy Requirement for FY 2011-12 (in MU)

Energy Balance	FY 2011-12
Total energy sales	6,776
Overall T&D loss %	19.0%
Overall T&D loss	1589.5
Gross Energy Requirement	**8,365.7**
Inter-state Sales	785
Total Energy Requirement	**9150.7**

Own Generation- PTPS

Petitioner's submission

7.29 The Petitioner submitted in the additional information that for PLF consideration, the operational units of PTPS i.e. Units 1, 2, 4, 6 and 7 can be considered as per the restoration plan. Unit no. 9 and 10 can also be considered for PLF calculations as they are estimated to be commissioned by October, 2011 and February, 2012 respectively whereas Unit 8 is expected to be operational only post FY 2011-12.

Table 112: Operational status of various Units of PTPS Plants in FY 2011-12

Unit Details	De-rated capacity (MW)	Operational Status
Unit 1	40	Jul-11
Unit 2	40	Jul-11
Unit 3	40	shut down
Unit 4	40	Running
Unit 5	90	shut down
Unit 6	90	Running
Unit 7	105	Jun-11

Unit 8	105	
Unit 9	110	Feb-12
Unit 10	110	Oct-11
Total Derated Capacity for PLF consideration	**535**	

7.30 The Petitioner submitted that the parameters have been estimated using simple statistical techniques on the last five years data.

7.31 The variable cost calculations submitted by the Petitioner is tabulated in the table below:-

Table 113 : Plant parameters & Fuel cost determinants for PTPS Proposed by the Petitioner

Particulars	Units	FY 2011-12
Installed capacity	MW	690
Derated Capacity (Usable)	MW	640
Proposed for consideration for PLF calculation	MW	590
PLF	%	67.4%
Auxiliary Consumption	%	12.9%
Station Heat Rate	kcal/KWh	3800
Calorific value of coal	kcal/kg	4540.1
Calorific value of FO/LDO	kcal/l	10500
Coal Transit Loss	%	2.6%
Price of Coal- Landed cost	Rs/tonne	1148.2
Price of Oil (FO)	Rs/kL	30776.9
Price of Oil (LDO)	Rs/kL	52782.3
Specific Coal Consumption	kg/kWh	0.8
Sp. Oil consumption (FO)	ml/kWh	7.1
Sp. Oil consumption (LDO)	ml/kWh	4.9
Gross units generated	MU	1993
Net Units generated	MU	1735.9
Total heat required	Mkcal	3800
Secondary Oil consumption (FO)	Kl	14178.2
Secondary Oil consumption (LDO)	Kl	9831.9
Heat generated by secondary oil	MKcal	103234.8
Heat required from coal	MKcal	7468426.3
Coal Consumption	MT	1.7
Secondary Oil Cost (FO+LDO) per kL	Rs Million	955.3
Coal Cost per Ton	Rs/ Ton	1148.2
Coal Cost	Rs million	1938.8
Fuel Cost/Unit (on Gross Generation)	Rs/kWh	1.45
Net Fuel Cost	Rs. Cr	289.4

Commission's analysis

7.32 As mentioned in clause 6.25 of the Tariff Order, the Commission has considered the overall usable capacity of PTPS as 640 MW.

7.33 The Commission in its previous Tariff Order has specified a trajectory of operational parameters of PTPS. The table below summaries the trajectory approved by the Commission for FY 2011-12:-

Table 114 : Operational Parameters set by the Commission in the previous Tariff Order

Years	PLF	Auxiliary Consumption	Transit loss of coal	Specific Oil Consumption	SHR
FY 2011-12	40%	10.5%	0.3%	2.0	3150

7.34 The Commission has approved the variable cost of PTPS based on the parameters submitted by the Petitioner subject to prudence check and also as per trajectory set by the Commission in the previous Tariff Order of FY 2010-11. Meanwhile, since the PLF considered by the Petitioner at 67.4 % is more than the target set by the Commission (even at 770 MW de-rated capacity, the PLF is more than the Target set by the Commission), the Commission has decided to consider the PLF submitted by the Petitioner at the operational capacity of 590 MW for FY 2011-12. The Commission has calculated the gross generation of 2094.9 MUs as per the above mentioned parameters.

7.35 The summary of the operational parameters and the corresponding generation cost for PTPS as approved by the Commission in the previous Tariff Order of FY 2010-11, submitted by the Petitioner in the Tariff Petition of FY 2011-12 and approved by the Commission for FY 2011-12 is detailed in the table given below:

Table 115 : Plant parameters & fuel cost determinants and Approved Generation from PTPS for FY 2011-12

Particulars	Units	FY 2011-12
Installed capacity	MW	840
Usable Capacity	MW	640
Proposed for consideration for PLF calculation	MW	590
PLF	%	67.4%
Auxiliary Consumption	%	10.50%
Station Heat Rate	kcal/KWh	3150
Calorific value of coal	kcal/kg	4540
Calorific value of FO/LDO	kcal/l	10500
Coal Transit Loss	%	0.3%
Price of Coal- Landed cost	Rs/tonne	1118.6
Price of Oil (FO)	Rs/kL	30776.9
Price of Oil (LDO)	Rs/kL	52782.3
Specific Coal Consumption	kg/kWh	0.7
Sp. Oil consumption (FO)	ml/kWh	1.2

Sp. Oil consumption (LDO)	ml/kWh	0.8
Gross units generated	MU	2094.9
Net Units generated	MU	1874.9
Total heat required	Mkcal	6599104.3
Secondary Oil consumption (FO)	Kl	2479.0
Secondary Oil consumption (LDO)	Kl	1710.9
Heat generated by secondary oil	MKcal	26030.8
Heat required from coal	MKcal	6573075.5
Coal Consumption	MT	1.45
Secondary Oil Cost (FO+LDO) per kL	Rs Million	166.6
Coal Cost	Rs million	1624.3
Fuel Cost/Unit (on Gross Generation)	Rs/kWh	0.85
Fuel Cost/Unit (on Net generation)	Rs/kWh	0.96
Coal Cost (on net gen)	Rs/Kwh	0.87
Coal Cost (on net gen)	Rs Crores	150.4
Oil Cost (on net gen)	Rs/Kwh	0.09
Oil Cost (on net gen)	Rs Crores	15.4
Approved fuel cost (on the basis of Net generation)	Rs Crores	165.8

7.36 The Commission has calculated the fuel cost of Rs 165.81 Cr based on per unit fuel cost determined by the Commission and the projected generation submitted by the Petitioner.

Own Generation- SHPS

Petitioner's submission

7.37 The Petitioner submitted generation from SHPS at 49.4 MU for FY 2011-12. The Petitioner further submitted that the plant is practically not operational since June 2010 and there are least chances of any generation from SHPS until September 2011. Accordingly, the Petitioner has considered expected generation from SHPS from October 2011 to March 2012.

Commission's analysis

7.38 The Commission approves the net generation of SHPS as submitted by the Petitioner and the auxiliary consumption as per 'JSERC Generation Tariff Regulations, 2010'. The summary of the operational parameters for SHPS as per the projections submitted by the Petitioner and as approved by the Commission for FY 2011-12 is tabulated hereunder:-

Table 116 : Approved generation from SHPS

Particulars	Units	FY 2011-12	
		Submitted	Approved
Capacity	MW	130	130
Gross Generation	MU	49.4	49.4
Aux. Consumption	%	2.5%	0.7%
Net Generation	**MU**	**48.1**	**49.0**

Power Purchase Cost

Petitioner's submission

7.39 The power purchase cost submitted by the Petitioner in the Tariff Petition for FY 2011-12 is Rs 2447.4 Cr.

7.40 The Petitioner submitted that in accordance with Regulation 5, clause 5.2 of the 'JSERC Renewable Purchase Obligation and its Compliance, Regulations, 2010', it has considered a total purchase of 3% from Renewable/ Non-Conventional energy sources which includes 0.5% from solar power generation plants.

7.41 The Petitioner submitted that it has taken due considerations of the loss reduction targets in accordance with Abraham Committee Recommendations for arriving at the power purchase requirement for the FY 2011-12.

7.42 The Petitioner submitted that the cost of power from various sources for FY 2011-12 is based on the growth in cost observed during the last two years

7.43 The Commission had asked the Petitioner to submit the basis of power purchase projections for FY 2011-12. For which the Petitioner submitted that it has computed total power projected from long term sources based on the source's best generation in the last three years and in some cases of hydro power stations, the Petitioner has used the average of the actual generation in the last three years

7.44 The Petitioner further submitted that for power purchase through renewable sources, The Petitioner has followed the "Renewable Purchase Obligation and its Compliance, 2010" issued by the Commission.

7.45 The Petitioner submitted the details of source-wise break up of Quantum and cost. The details of which are given in the following table:

Table 117: Power Purchase Cost Projected by the Petitioner for FY 2011-12

Source	FY 2011-12		
	Unit Rate (Rs/kWh)	MUs	Amt. (Rs Cr)
Farakka	4.22	969.0	408.9
Kahalgaon	2.93	227.0	66.5
Kahalgaon II	2.92	127.4	37.2
Talcher	3.72	610.1	227.0
WBSEB	5.85	58.8	34.4
DVC	3.14	3197.3	1004.0
Rangit(NHPC)	1.75	43.8	7.7
Teesta(NHPC)	1.50	289.1	43.4
Chukha	1.61	198.7	32.0
PTC (ST)	0.00	0.0	0.0
TVNL	2.05	2178.2	446.5
UI Payable	0.00	0.0	0.0
UI Receivable	2.46	785.0	193.1
Power traded through IEX	0.00	0.0	0.0
PTC (Tala HEP)	1.84	407.4	75.0
DVC (ST)	2.85	146.5	41.7
Own Generation (Thermal)	-	1734.5	-
Own Generation (Hydel)	-	49.4	-
Solar	5.50	48.7	26.8
Other renewable	5.00	243.6	121.8
PGCIL	0.00	0.0	0.0
ERLDC	0.00	0.0	0.0
Payable	-	8745.7	2640.6
Receivable	-	785.0	193.1
Purchase/ Cost	**3.07**	**7960.7**	**2447.4**

Commission's analysis

7.46 The Commission has approved UI sales under the head "Inter-state sale" of power as per the projections submitted by the Petitioner which will be revised, when the latest information is made available by the Petitioner with the next Tariff Petition.

7.47 For estimating the power purchase cost for FY 2011-12, the Commission has considered the power purchase projections for FY 2011-12 and actual power purchase recorded during the year FY 2010-11.

Table 118: Approved Power Purchase Cost for FY 2011-12

Sources	FY 2011-12		
	Unit Rate (Rs/kWh)	MUs	Amount (Rs Cr)
Farakka	4.22	969.0	408.9
Kahalgaon	2.93	226.9	66.5
Kahalgaon II	2.92	127.4	37.2
Talcher	3.72	610.1	226.9

WBSEB	5.85	58.8	34.4
DVC	3.14	3197.3	1004.0
DVC short term power	2.85	146.5	41.7
NHPC-Rangit	1.75	43.8	7.7
NHPC-Teesta	1.50	289.1	43.4
Chukha	1.61	198.7	32.0
PTC-ST	0.00	0.0	0.0
PTC-tala HEP	1.84	407.4	75.0
TVNL	2.39	2497.3	596.8
Power traded thru IEX	0.00	0.0	0.0
Solar	5.50	48.7	26.8
Other renewable	5.00	243.6	121.8
UI payable	0.00	0.0	0.0
UI Receivable	2.46	785.0	193.1
PGCIL	0.00	0.0	66.5
UI + PGCIL	-	785	259.6
ERLDC	0.00	0.0	1.2
Power Purchase/Cost from Outside Sources	**2.91**	**9064.8**	**2,640.6**
Own Generation-Thermal	-	1874.9	-
Own Generation-Hydel	-	49.4	-
Net Power Purchase/Cost	**2.91**	**9064.8**	**2,640.6**
Disincentive for non-achievement of T&D Losses	2.91	-1838.5	-535.5
Power Purchase Allowed	**2.30**	**9150.7**	**2105.0**

Disincentive for non-achievement of T&D loss reduction Targets

7.48 The difference in the actual power purchase and the power purchase requirement approved by the Commission is disallowed at the average power purchase rate and is treated as 'Disincentive for non-achievement of T&D loss targets'.

7.49 In the previous Tariff Order for FY 2010-11, the Commission had computed the disincentive for non-achievement of T&D loss reduction targets from FY 2006-07 onwards, on the basis of the Trajectory set for the respective years. As per the trajectory, the T&D loss reduction target for FY 2011-12 is set at 19% whereas the Petitioner has proposed at target of targeting of 31.99%. Accordingly, the Commission has computed the disincentive for non-achievement of T&D loss reduction targets at Rs 535.5 Cr for FY 2011-12, as shown below:

Table 119: Disincentive for non-achievement of T&D loss reduction targets

Description	Unit (MU)	Per Unit (Rs/kWh)	Cost (Rs Cr)
Power purchased from outside sources	9064.8	2.91	2640.6
Own Generation	1924.4		
Power purchase including own generation	10989.1		
Deemed Power traded	1838.5	2.91	535.5
Disincentive for non-achievement of T&D loss reduction targets			535.5

Employee Cost

Petitioner's Submission

7.50 The Petitioner, in the Tariff Petition had submitted the employee cost of Rs 393.3 Cr for FY 2011-12.

7.51 The Petitioner has proposed the employee cost for FY 2011-12 considering an escalation rate of 6% in accordance with the Tariff Order for FY 2010-11 approved by the Commission and the 'Generation Tariff Regulation, 2004' and the Terms and Conditions of Distribution Tariff Regulations, 2004.

7.52 The Commission asked the Petition to submit disaggregated employee cost along with the basis of segregation for FY 2011-12. The Petitioner requested the Commission to condone the requirement of function wise breakup of the number of employees for the FY 2011-12. However, the Petitioner has requested to consider the number of employees based on the information available for FY 2010-11.

7.53 The table below summarises the disaggregated employee cost and number of employees engaged in each function submitted by the Petitioner for FY 2011-12:

Table 120: Employees Cost Proposed for FY 2011-12 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
No. of Employees	**1484**		**566**	**3425**	**5475**
Employee cost	14.4	97.5	39.9	241.6	393.3

Commission's analysis

7.54 The Commission has approved the gross employee costs of Rs 295.0 Cr for FY 2011-12, by considering an escalation factor of 6% on the normal employee cost of the previous year, in accordance with the norms specified for the transition period as per 'JSERC Generation Tariff Regulation, 2010'.

7.55 Meanwhile, the Petitioner has mentioned that it has started paying arrears in pensions on account of revised salaries as per the sixth pay commission from May 2009 onwards. However, the Petitioner has not provided the required details of the same in the Tariff Petition. Accordingly, the Commission has provisionally approved Rs 100 Cr of terminal benefits including the arrears of pension on revised salaries on account of Sixth Pay Commission. The same would be revised with the next Tariff Petition as per the latest information made available by the Petitioner for FY 2011-12.

7.56 The Commission approves the net employee cost of Rs 295.0 Cr for FY 2011-12, as depicted in the table given below:-

Table 121: Approved employee cost for FY 2011-12 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
Salaries	5.15	31.59	14.01	84.78	135.52
Over time	0.10	0.63	0.28	1.70	2.71
Dearness allowance	1.41	8.67	3.84	23.26	37.19
Other allowance*	0.41	2.54	1.13	6.81	10.89
Bonus	0.00	0.00	0.00	0.00	0.00
Sub-Total	**7.08**	**43.42**	**19.26**	**116.55**	**186.32**
Medical expenditure (Re-imbursement)	0.03	0.20	0.09	0.54	0.86
Leave travel Assistance	0.00	0.01	0.01	0.04	0.06
Earned Leave encashment	0.24	1.49	0.66	3.99	6.38
Payment under workmen compensation Act	0.00	0.03	0.01	0.07	0.11
Total other staff cost	0.00	0.00	0.00	0.00	0.00
Staff welfare expenses	0.05	0.29	0.13	0.77	1.24
Terminal benefits	3.80	23.31	10.34	62.56	100.00
Impact of VI Pay Commission	0.00	0.00	0.00	0.00	0.00
Total	**11.2**	**68.7**	**30.5**	**184.5**	**295.0**
Less : Expenses Capitalised	0.00	0.00	0.00	0.00	0.00
Net Employee Cost	**11.2**	**68.7**	**30.5**	**184.5**	**295.0**

Administrative & General Expenses

Petitioner's submission

7.57 The Petitioner, in the Tariff Petition submitted the A&G expenses of Rs 50.6 Cr based on the projections for FY 2011-12.

7.58 The Petitioner submitted the A&G cost considering an escalation rate of 6% in accordance with the Tariff Order for FY 2010-11 approved by the Hon'ble Commission and the 'Generation Tariff Regulation, 2004' and the Terms and Conditions of Distribution Tariff Regulations, 2004. The table below summarises the disaggregated A&G cost and number of employees engaged in each function submitted by the Petitioner for FY 2011-12:

Table 122: Disaggregated A&G cost Projected by the Petitioner for FY 2011-12 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
No. of Employees	**1484**		**566**	**3425**	**5475**
A&G Cost	1.0	16.4	4.7	28.4	50.6

Commission's analysis

7.59 The Commission has approved the A&G cost of Rs 46.3 Cr for FY 2011-12, by considering an escalation factor of 6% on all the components of A&G cost in accordance with the 'Generation Tariff Regulation, 2010', over the approved A&G expenses for FY 2010-11, as shown below:-

Table 123 : Approved disaggregated A&G Costs for FY 2011-12 (Rs Cr)

Particulars	Gen-Hydel	Gen-Thermal	Transmission	Distribution	Total
Rent Rates & Taxes	0.05	0.29	0.13	0.77	1.23
Insurance	0.03	0.19	0.08	0.50	0.80
Telephone charges, Postage telegram and telex Charges	0.07	0.41	0.18	1.10	1.76
Legal Charges	0.04	0.27	0.12	0.72	1.15
Audit Fee	0.04	0.26	0.12	0.70	1.12
Consultancy charges	0.03	0.15	0.07	0.42	0.66
Technical fees	0.00	0.00	0.00	0.00	0.00
Other professional Charges	0.02	0.14	0.06	0.39	0.62
Conveyance & Travel	0.21	1.30	0.58	3.49	5.59
Fees & subscription	0.01	0.05	0.02	0.12	0.20
Books & Periodicals	0.01	0.03	0.01	0.08	0.13
Printing & Stationery	0.07	0.41	0.18	1.10	1.76
Advertisements	0.05	0.29	0.13	0.77	1.23
Water Charges	0.00	0.01	0.00	0.01	0.02
Electric Charges	0.10	0.64	0.29	1.73	2.76
Entertainment Charges	0.00	0.02	0.01	0.06	0.10
Misc. Expenses	1.00	6.15	2.73	16.50	26.38
Freight	0.02	0.13	0.06	0.34	0.55
Other purchase related Expenses	0.01	0.06	0.03	0.16	0.26
Total	**1.8**	**10.8**	**4.8**	**29.0**	**46.3**

Repair & Maintenance (R&M) Expenses

Petitioner's submission

7.60 The Petitioner, in the Tariff Petition submitted the R&M cost at Rs 146.7 Cr based on the revised estimates for FY 2011-12.

7.61 The Petitioner submitted that it has segregated the Thermal Generation, Hydel General, Transmission and Distribution functions on the basis of the closing GFA for FY 2011-12.

7.62 The table below summarises the disaggregated R&M expenses submitted by the Petitioner for FY 2011-12:

Table 124 : Summary of Repair & maintenance costs submitted by Petitioner for FY 2011-12 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
R&M Expenses	2.1	35.1	26.6	82.9	146.7

Commission's analysis

7.63 The Commission has considered the same percentage of 1.83% on opening GFA as considered during previous years to arrive at the R&M cost for FY 2011-12.

7.64 The summary of the R&M expenses approved by the Commission is shown below:-

Table 125 : Summary of Approved Repair & Maintenance costs for FY 2011-12 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2011-12					
Opening GFA	56.4	804.1	289.2	1286.6	2445.4
Approved R&M as a percentage of opening GFA					1.83%
Disaggregated R&M	**1.0**	**14.7**	**5.5**	**23.5**	**44.7**

7.65 The detailed break-up of disaggregated R&M expenses approved by the Commission for FY 2011-12 is detailed in the table below:

Table 126 : Approved Repair & maintenance costs for FY 2011-12 (Rs Cr)

Description	Gen-Hydel	Gen-Thermal	Transmission	Distribution	Total
R&M Plant & Machinery	0.51	7.22	2.68	11.55	21.96
Buildings	0.05	0.68	0.25	1.08	2.06
Civil Works	0.07	1.01	0.37	1.61	3.06
Hydraulics	0.01	0.07	0.03	0.12	0.22
Lines, Cables, Network	0.40	5.67	2.10	9.07	17.24
Vehicles	0.00	0.03	0.01	0.05	0.10
Furniture & Fixture	0.00	0.00	0.00	0.00	0.01
Office Equipments	0.00	0.03	0.01	0.05	0.10
Total	**1.03**	**14.71**	**5.46**	**23.54**	**44.74**

Capital Investment Plan

Petitioner's submission

7.66 The Petitioner submitted that certain new works under renovation, restoration and modernization (R&M) of PTPS and SHPS are planned to be undertaken by the Petitioner in FY 2011-12.

7.67 The Petitioner further submitted that the project works totalling Rs 1600 Cr for construction of new GSS and transmission lines have been sanctioned by the REC through the State Government. Out of Rs 1600 Cr, projects worth Rs 800 Cr are proposed to be undertaken/ initiated in FY 2011-12.

7.68 The Petitioner submitted that under R-APDRP, major expenditure amounting Rs 150 Cr has been planned under Hardware installation and other relevant works, payments to IT Consultant, Development Infrastructure, and R-APDRP Manpower. The Petitioner submitted that for FY 2011-12 they have planned Rs 353.5 Cr of expenditure under RGGVY.

7.69 The planned capital expenditure outlay of the Petitioner for all the functions has been summarized in the table below:-

Table 127: Capital Expenditure Plan (Rs Cr)

Plan Outlay/ Proposed Schemes	FY 2011-12
Generation	162.9
Transmission	1671.5
Distribution	1487.5
Total JSEB	**3321.9**

Commission's analysis

7.70 The Commission has approved the capital expenditure plan at. Rs. 3259 Cr for the Petitioner for FY 2011-12 as per prudence check. Meanwhile, the capitalization for the year has been approved after due diligence of the schemes submitted by the Petitioner as well as the historical trends of capitalizations achieved during a year.

7.71 The capital expenditure plan as approved by the Commission has been summarised in the table below:

Table 128: Capital Expenditure Plan & Capitalization for FY 2011-12 (Rs Cr)

Plan Outlay/ Proposed Schemes	Capex	Capitalization
Generation	100.0	395.3
Transmission	1671.5	149.8
Distribution	1487.5	500.7
Total	**3259.0**	**1045.8**

7.72 The capex and capitalization shall be subjected to revision, once the Petitioner will submit the latest information with the next Tariff Petition.

Gross Fixed Assets

7.73 The Commission directed the Petitioner to submit the break-up of function wise GFA for FY 2011-12. The Petitioner submitted the total GFA of Rs 5111.0 Cr in additional information as given below:

Table 129: Function wise Break-up of GFA (Rs Cr)

Particulars	FY 2011-12
Generation	1255.8
Transmission	935.9
Distribution	2919.3
Total	**5111.0**

7.74 The Commission approves the Gross Fixed asset as per the capitalization approved for the year.

Table 130: Approved GFA, Equity and Loan for FY 2011-12 (Rs Cr)

Particulars	FY 2011-12
Opening GFA	2445.4
GFA Additions	1045.8
Closing GFA	3491.2
Less: Accumulated depreciation	865.2
Net Fixed Assets	**2625.9**

7.75 For funding of above GFA the Commission has considered the normative debt equity ratio of 70:30 as provided in MYT Regulations, 2010 of all the functions. However, consumer contribution grants and subsidies for capital assets are first netted off from gross fixed assets and the normative debt equity ratio is applied on the remaining gross fixed assets only.

7.76 The Petitioner has not provided any details of addition in consumer contribution, grants and subsidies for capital assets in its Tariff Petition. Therefore, the Commission has estimated the addition during FY 2011-12 on the basis of past trend. The normative net loans are estimated after deducting accumulated depreciation from the value of gross loans.

7.77 Thus the approved sources of funding for the approved GFA of Rs 2625.9 Cr. for FY 2011-12 is tabulated hereunder:

Table 131: Approved Sources for FY 2011-12 (Rs Cr)

Approved Sources	FY 2011-12
Consumer contribution, grants and subsidies deployed in GFA	965.7
Equity	757.6
Loan	902.6
Total	**2625.9**

7.78 The Commission notes with concern that the Petitioner is diverting its long-term funds for the purpose of meeting its deficit caused due to its own inefficiencies. The Commission directs the Petitioner to abstain from diversion of funds meant for creating long-term assets. In accordance with the regulations the Commission should provide the return on funds actually deployed in usable assets, as tabulated hereunder.

Table 132: Approved Sources for FY 2011-12 (Rs Cr)

Approved Sources	Return	Basis
Consumer contribution, grants and subsidies deployed in GFA	0%	Cost –free funds
Equity	19.93%	As provided in MYT Tariff Regulations, 2010
Loan	8.05%	Weighted average rate of interest on existing loans

Return on Equity (RoE)

Petitioner's submission

7.79 The Petitioner submitted that the equity for the purpose of calculating Return on Equity has been calculated in accordance with the prevalent regulations.

7.80 The Petitioner has considered average GFA for each of the years after adjusting for Grants & Consumer Contributions for calculating RoE.

7.81 The Petitioner has calculated RoE for FY 2011-12 by taking prescribed rates for the transition period as in the MYT regulations approved by the Commission.

7.82 The Petitioner proposed RoE of Rs 112.3 Cr for FY 2011-12 as given in the table below:-

Table 133: Return on Equity Proposed by the Petitioner for FY 2011-12 (Rs Cr)

Return on Equity	FY 2011-12
Thermal Generation	25.5
Hydel Generation	1.6
Transmission	21.3
Distribution	64.0
Total	**112.3**

Commission's analysis

7.83 Based on the methodology mentioned in Section 7.75 & Section 7.76, the Commission approves the RoE of Rs 146.7 Cr for FY 2011-12. The following table summarises the return on equity:-

Table 134: Approved Return on Equity for FY 2011-12 (Rs Cr)

Particulars	Gen- Hydel	Gen- Thermal	Transmission	Distribution	Total
Opening GFA	56.4	804.1	298.2	1286.6	2445.4
Normative Equity	17.5	249.1	92.4	398.6	757.6
Return on Equity (%)	19.36%	19.36%	19.36%	19.36%	
Return on Equity	3.4	48.2	17.9	77.2	146.7

Interest and Other Finance Charges

Petitioner's submission

7.84 The Petitioner in the Tariff Petition submitted the interest on loans as Rs 391.5 Cr for FY 2011-12 as explain in the table given below:-

Table 135: Interest & Finance Charges (Rs Cr)

Interest Expenses	Generation	Transmission	Distribution	Total
Interest on existing loans	119.8	95.1	380.6	595.5
Interest on new loans	18.2	127.5	122.7	268.4
Sub-total	137.9	222.6	503.3	863.9
Less: IDC	71.1	117.7	115.9	304.6
Net Interest	66.9	104.9	387.5	559.3
Interest considered for ARR (70%)	46.8	73.4	271.2	391.5

Commission's analysis

7.85 Based on the methodology mentioned in Section 7.75 & Section 7.76, the Commission has computed the aggregate interest and other finance charges at Rs 47.2 Cr for FY 2011-12, as given in the table below:

Table 136: Approved Interest & Finance Charges (Rs Cr)

Particulars	FY 2011-12
Opening Balance	269.4
Deemed Addition during the year	714.2
Deemed Repayments during the year	81.0
Closing Balance	902.6
Average balance during the Year	586.0

Interest Rate %	8.05%
Interest Expense	47.2
Actual capitalisation (%)	0.0
Less: Capitalized	0.0
Net interest	**47.2**

7.86 The Commission has considered loans employed to GFA hence, no capitalisation has been considered while calculating interest and finance charges for FY 2011-12. The Function wise Interest and finance charges have been approved at Rs. 15.5Cr, Rs. 1.1 Cr, Rs. 5.8 Cr and Rs. 24.8 Cr for Generation, Hydel, Transmission and Distribution respectively on the basis of the opening GFA of these respective funtions.

7.87 The Commission shall revise the interest and finance charges, subject to prudence check, as per the latest information made available for FY 2011-12 with the next Tariff Petition.

Interest on Working Capital

Petitioner's submission

7.88 The Petitioner submitted the interest on Working Capital as per the 'Terms and Condition for determination of distribution tariff, 2010'. Accordingly, 1/12th of O&M, maintenance spares at 1% of opening GFA, two months expected revenue from sale of power at existing tariff minus amount held as security deposit minus one month equivalent of cost of power purchase has been considered for calculation of working capital.

7.89 The Petitioner submitted that the interest on working capital is calculated at the bank rate.

Table 137 : Interest on Working Capital submitted by the Petitioner for FY 2011-12 (Rs Cr)

Particulars	Generation-Thermal	Generation-Hydel	Transmission	Distribution	Total
1 month primary fuel	32.3	0.0	0.0	0.0	32.3
1 month sec fuel	15.9	0.0	0.0	0.0	15.9
1 month O&M	12.4	1.5	5.9	29.4	49.2
Maintenance Spares	29.8	2.6	10.7	13.2	56.3
Receivables	0.0	0.0	0.0	540.9	540.9
Less: 1 month cost of power purchase	0.0	0.0	0.0	204.1	204.2
Less: Security Deposit from Customers	0.0	0.0	0.0	212.9	212.9
Total Working Capital requirement	90.5	4.1	16.6	166.6	277.7
Interest on Working Capital	**10.9**	**0.5**	**1.9**	**19.9**	**33.3**

Commission's analysis

7.90 The Commission has considered the interest on working capital as per the norms specified for computation of working capital requirements in the "JSERC Generation Tariff Regulations, 2010", 'JSERC Transmission Tariff Regulations, 2010' and 'JSERC Distribution Tariff Regulations, 2010'.

7.91 As per 'JSERC Generation Tariff Regulations, 2010, the working capital requirements for hydel stations shall be determined as per the following norms:-

(a) Operation & Maintenance expenses for one month.

(b) Maintenance spares @ 15% of operation and maintenance expenses of Historical cost escalated @ 6.60% p.a to arrive at permissible

(c) Operation and maintenance expenses for subsequent years of the Tariff Period, and

(d) Receivables equivalent to two months of fixed cost

7.92 The computation of working capital for the generation- hydel function is shown in the table below. Since the working of the Petitioner is still as an integrated unit, the Commission has not considered any working capital for receivables.

Table 138: Approved IWC for Generation-Hydel function (Rs Cr)

Particulars	FY 2011-12
O&M expenses (in months)	1.2
Maintenance Spares (% of equipment cost)	2.1
Total Working Capital	3.3
Rate of interest on working capital	13.25%
Interest on working capital	**0.43**

7.93 The "Generation Tariff Regulations, 2010' specify the computation of working capital for thermal stations as per the following norms:

(a) Cost of coal for ½ months for pit-head generating stations and one month for non-pithead generating stations, corresponding to the, "target availability".

(b) One month stock for secondary fuel oil, corresponding to "target availability".

(c) Operation & Maintenance expenses for one month.

(d) Maintenance spares @ 15% of operation and maintenance expenses or the date of commercial operation as per Terms and condition of Determination of Generation Tariff Regulations, 2004, and

(e) Receivables equivalent to two months of fixed and variable charges below the level of target availability shall be on pro-rata basis.

7.94 The computation of working capital for the generation- thermal function is shown in the following table:

Table 139: Approved IWC for Generation-Thermal function (Rs Cr)

Particulars	FY 2011-12
Cost of Coal for 1½ month	18.8
Secondary Fuel Oil for 1 month	1.3
Operation & Maintenance expenses for 1 month	7.8
Maintenance expenses @ 1% of Plant & Equipment	14.1
Total Working Capital	42.1
Interest rate considered for Working Capital	13.25%
Interest on Working Capital	**5.57**

7.95 The " JSERC Transmission Tariff Regulations, 2010' specify the computation of working capital as per the following norms:-

(a) One month of the amount of O&M expenses; plus

(b) Maintenance spares @ 15% of operation and maintenance expenses; plus.

(c) Two months equivalent of the Transmission charges

7.96 The Computation of Working capital for the Transmission function is shown in the table below:

Table 140: Approved IWC for Transmission function (Rs Cr)

Particulars	FY 2011-12
O&M expenses (in months)	3.4
Receivables (in months)	0
Rs Maintenance Spares (% of equipment cost)	6.1
Total Working Capital	9.5
Rate of interest on working capital	13.25%
Interest on working capital	**1.26**

7.97 The " JSERC Distribution Tariff Regulations, 2010' specify the computation of working capital as per the following norms:-

(a) One-twelfth of the amount of Operation and Maintenance expenses for such financial year; plus

(b) Maintenance spares at 1% of Opening GFA; plus.

(c) Two months equivalent of the expected revenue from sale of electricity at the prevailing tariffs; minus

(d) Amount held as security deposits under clause (a) and clause (b) of subsection (1) of Section 47 of the Act from consumers and Distribution system users; minus

(e) One month equivalent of cost of power purchased, based on the annual power procurement plan.

7.98 The Computation of Working capital for the Distribution function is shown in the table below:

Table 141: Approved IWC for Distribution function (Rs Cr)

Particulars	FY 2011-12
O&M expenses	19.75
Maintenance spares	13
Receivable	356.1
Less Consumer Security Deposit (CSD)	192.6
Less Power Purchase (PP)	175.4
Total Working Capital	20.7
Rate of Interest on Working Capital	13.35%
Interest on Working Capital	**2.75**

7.99 The calculation of interest on working capital for FY 2011-12 is summarised below:

Table 142: Calculation of Interest on working capital for FY 2011-12 (Rs Cr)

Description	Generation - Thermal	Generation - Hydel	Transmission	Distribution	Total
Interest on Working Capital	0.43	5.57	1.26	2.75	10.0

Interest on Consumer Security Deposit

Petitioner's submission

7.100 The Petitioner has proposed the Interest on Consumer Security Deposits (CSD) in accordance with 'Jharkhand Electricity Supply Code Regulations, 2005'. The interest on CSD has been calculated at an interest rate of 6%.

7.101 The Petitioner has projected the Consumer Security Deposit on the basis of 5 year actual CAGR observed during the period 2004-05 to 2009-10. The interest on CSD for each of the years has been considered at the average of opening and closing balance of CSD. The interest on consumer security deposit has been proposed at Rs 12.2 Cr for FY 2011-12.

Commission's analysis

7.102 In accordance with the Regulation 13 of the 'JSERC Distribution Tariff Regulations, 2004' the Commission approves the interest on consumer security deposit on the basis of the bank rate, which is at 6%. The Commission has considered the Consumer Security Deposit on the basis of average for the year and accordingly an amount of Rs12.2 Cr has been approved for FY 2011-12.

Depreciation

Petitioner's submission

7.103 The Petitioner submitted the revised estimated depreciation of Rs 109.0 Cr for FY 2011-12 as given below:-

Table 143 : Depreciation submitted by the Petitioner for FY 2011-12 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2011-12	0.8	12.5	19.8	75.9	109.0

Commission's analysis

7.104 The Commission has scrutinized the depreciation expenses submitted in the petition and found it to be in line with the earlier methodology followed for approval of depreciation. However, depreciation on addition assets has been considered as per the capitalization computed by the Commission for FY 2011-12.

7.105 The assets created out of consumer contribution have also been deducted from the gross depreciation of the distribution function, to arrive at the net depreciation charge for distribution function.

7.106 The calculation of function-wise depreciation charges approved by the Commission for FY 2011-12 is detailed in the table given below:

Table 144 : Function wise Depreciation approved for FY 2011-12 (Rs Cr)

Particulars	Generation-Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2011-12	0.8	12.9	13.2	54.2	80.9

7.107 As per the above calculations, the Commission approves the total net depreciation charge (thermal generation, hydel generation, transmission and distribution) of Rs 80.9 Cr for FY 2011-12.

Non Tariff Income (NTI)

Petitioner's submission

7.108 The Petitioner has attributed the entire non-tariff income earned by it to the Distribution function for FY 2011-12.

7.109 The Petitioner has considered Delayed Payment Surcharge (DPS) in accordance with the principle adopted by the Commission in the previous Tariff Orders.

7.110 The Petitioner has considered proposed income from Sale of Water/ Trading at the 5 year average of the actual income under the same head recorded in the provisional accounts from FY05 to FY09.

7.111 The Petitioner has considered proposed income from Meter Rent by applying 5 year CAGR on the actual information available in the provisional accounts for the FY09.

7.112 The Petitioner has not considered any income from sale of power under trading/ UI owing to the fact that income from UI is not certain and shall be dependent on actual drawl and scheduling of contracted power.

7.113 Details of the non-tariff income submitted by the Petitioner for FY 2011-12 is given in the table below:-

Table 145: Non Tariff Income submitted by the Petitioner (Rs Cr)

Particulars	FY 2011-12
Realizable DPS @ 10% of DPS	30.8
Sale of Water/ Income from trading	2.0
Meter Rent	5.3
Income from Investment (FD)	5.6
Income on advance to supplier/ contractor	0.5
Income from Staff Welfare Activities	0.0
Miscellaneous Receipts	47.4
Income from sale of power under trading/ UI	0.0
Total Non-Tariff Income	**93.1**

Commission's analysis

7.114 The Commission views the delayed payment surcharge (DPS) should be considered as per the policy followed for DPS in accounts. Since, as per the provisional accounts, the DPS has been given on assessment basis, the Commission has computed the DPS in line with the actual DPS submitted by the Petitioner. Accordingly, after scrutinizing other components submitted by the Petitioner, the Commission has approved the Non-Tariff Income of Rs 365.0 Cr for FY 2011-12.

7.115 The component-wise break-up of approved Non-Tariff Income for FY 2011-12 is summarised in the table given below:-

Table 146: Approved Non Tariff Income (Rs Cr)

Particulars	Generation–Hydel	Generation-Thermal	Transmission	Distribution	Total
FY 2011-12					
Interest on staff loan & advance	0	0	0	0	0
Income from investment (F.D)	0	0	0	6	6
Interest on loan & advance to Petitioners	0	0	0	0	0
D.P.S from consumer	0	0	0	308.0	308.0
Interest on advance to supplier/ Contractor	0	0	0	0	0
Interest from bank (Other than F.D)	0.4	0.4	0.4	0.4	1.5
Income from trading	0.5	0.5	0.5	0.5	2.0
Income from staff welfare activities	0	0	0	0	0
Misc. Receipt	0.0	0.00	0.00	47.4	47.4
Total	**0.9**	**0.9**	**0.9**	**361.9**	**365.0**

Provision for Bad & Doubtful Debts

7.116 The Petitioner has stated that it shall make all efforts to achieve 100% collection efficiency during 2010-11 in accordance with the applicable JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2010. However, it is submitted by the Petitioner that while other utilities in the State enjoy a favourable consumer mix and operate in limited supply areas, the Petitioner is the distribution Petitioner for the entire State of Jharkhand including rural and far flung areas.

7.117 The Petitioner has requested the Commission to relook the target of 100% collection efficiency given by the Hon'ble Commission for all Petitioners in the State consideration the ground realities of difference in consumer mix and the geographical spread of its license area.

7.118 The Petitioner has further submitted that it shall submit its petition for truing-up of provision for bad debts, if any for the purpose of truing-up based on actual, after finalization of provisional accounts for the year FY 2010-11 and FY 2011-12.

Commission's analysis

7.119 The Commission views that it is the obligation of every Petitioner to supply power to every consumer as per its requirement. Similarly, it is the responsibility of every Petitioner to ensure that it collects the amount for energy billed and supplied to the consumers. In case the consumers do not pay, then the Petitioner has full right to disconnect the supply by following requisite procedures. However, if the Petitioner is not able to collect the amount billed from any consumer, it has no right to pass on its efficiency to the paying consumers.

7.120 The collection efficiency of 100% was fixed in the 'JSERC Distribution Tariff Regulations, 2010' in consideration of the above mentioned philosophy of the Commission. Accordingly, the Commission disallows any provisional for doubtful debt to be allowed to the Petitioner.

Revenue from Existing Tariff

Petitioner's submission

7.121 The Petitioner submitted revenue at existing tariffs at Rs 2046.6 Cr for FY 2011-12.

Commission Analysis

7.122 The Commission has approved the revenue at existing tariffs as per the approved sales and the existing energy and demand charges for FY 2011-12. The revenue at existing tariff is computed at Rs 2136.8 Cr against the amount of Rs 2046.6 Cr submitted by the Petitioner.

Summary of the ARR for FY 2011-12

7.123 In view of the above analysis, the proposed annual revenue requirement (ARR) is summarised hereunder:

7.124 The table below summarises the ARR for generation function:

Table 147: Approved ARR of Thermal Generation Function for FY 2011-12 (Rs Cr)

Annual Revenue Requirement	FY 2011-12
Fuel	165.8
Employee	68.7
Repair & Maintenance	14.7
Admin & General	10.8
Interest & Financing Charges	15.5

Interest on working capital	5.6
Depreciation	12.9
Total Costs	**294.0**
Add: Reasonable return	48.2
Less: Non tariff income	0.9
ARR	**341.4**

7.125 ARR for Hydel generation function approved by the Commission for FY 2011-12 is summarised in the table below:-

Table 148: Approved ARR of Hydel Function for FY 2011-12 (Rs Cr)

Annual Revenue Requirement	FY 2011-12
Employee	11.2
Repair & Maintenance	1.0
Admin & General	1.8
Depreciation	0.8
Interest & Financing Charges	1.1
Interest on working capital	0.4
RoE	3.4
Less: Non Tariff Income	0.9
Net revenue required	**18.8**

7.126 ARR for transmission function approved by the Commission for FY 2011-12 is summarised in the table below:

Table 149: Summary of the ARR for Transmission Function for FY 2011-12 (Rs Cr)

Annual Revenue Requirement	FY 2011-12
Employee	30.5
Repair & Maintenance	5.5
Admin & General	4.8
Interest & financing charges	5.8
Interest on working capital	1.3
Depreciation	13.2
Total Cost	**60.9**
Add: Reasonable return	17.9
Less: Non tariff income	0.9
ARR	**77.9**

7.127 ARR for distribution function approved by the Commission for FY 2011-12 is summarised in the table below:

Table 150: Summary of the ARR for Distribution Function for FY 2011-12 (Rs Cr)

Annual Revenue Requirement	FY 2011-12
Power Purchase	2640.6
Employee	184.5
Repair & Maintenance	23.5
Admin & General	29.0
Interest and financing charges	24.8
Interest on working capital	2.75
Depreciation	54.2
Provision for bad & doubtful debts	0.0
Interest on consumer security deposit	12.2
Less: Disincentive for T&D Loss	535.5
Total Costs	**2436.0**
Reasonable return	77.2
Less: Non tariff income	361.9
ARR	**2151.2**

Consolidated ARR

7.128 The table below summarises the ARR approved by the Commission for FY 2011-12.

Table 151 : Approved ARR for FY 2011-12 (Rs Cr)

Annual Revenue Requirement	Projected by the Petitioner FY 2011-12	Approved by the JSERC FY 2011-12
Power Purchase Cost	2447.4	2640.6
Fuel Cost	289.4	165.8
R&M Cost	146.7	44.7
Employee's Cost	393.3	295.0
A&G Cost	50.6	46.3
Depreciation	109.0	80.9
Provision for Bad debts	0.0	0.0
Interest & Financing Charges	391.5	47.2
Prior period expenses	0.0	0.0
Interest on Working Capital	33.3	10.0
Interest on consumer security Deposit	12.2	12.2
Less: Disincentive for non-achievement of T&D Loss targets	0.0	535.5
Less: Disincentive for non-compliance of SoP	0.0	0.0
Total Expenditure	3873.1	2807.2
Statutory Return	112.3	146.7
Revenue Requirement	3985.9	2953.8
Temporary Contingency	0.0	0.0
Gross revenue requirement	3985.9	2953.8
Less: Misc. Receipts	93.1	365.0
Net revenue required	**3892.8**	**2588.8**
Revenue at current tariff	2046.0	2136.8

Grants-in-Aid of debt service	0.0	0.0
Subsidy for R.E Loss	0.0	0.0
Revenue (Gap)/Surplus	**(1846.8)**	**(452.1)**
Total Accumulated Losses Gap	(10140.8)	
Average Cost of Supply (Rs/kWh)		3.42

7.129 The Commission approved the net revenue gap of Rs 452.1 Cr for FY 2011-12.

SECTION 8: SUMMARY OF ARR FOR FY 2007-08 TO FY 2011-12

Summary of the Annual Revenue Requirement

8.1 The Commission has conducted the detailed analysis and provisional truing up for FY 2007-08 to FY 2009-10 based on the provisional accounts of these years as well as the analysis ARR for FY 2010-11 and FY 2011-12.

8.2 The summary of revenue gap/surplus approved by the Commission is given in the table below:

Table 152: Approved Revenue Gap/Surplus for FY 2007-08 to FY 2011-12

Particulars	Units	Approved by JSERC
Annual Revenue Requirement for FY 2011-12	Rs Cr	2588.8
Revenue (Gap)/Surplus for FY 2010-11 (as per revision for FY 2010-11)	Rs Cr	(278.4)
Revenue (Gap)/Surplus for FY 2009-10 (as per provisional true up for FY 2009-10)	Rs Cr	194.0
Revenue (Gap)/Surplus for FY 2008-09 (as per provisional true up for FY 2008-09)	Rs Cr	154.7
Revenue (Gap)/Surplus for FY 2007-08 (as per provisional true up of FY 2007-08)	Rs Cr	(13.4)
Total Revenue Requirement up to FY 2011-12	**Rs Cr**	**2531.9**
Revenue at Existing Tariff FY 2011-12	Rs Cr	2136.8
Cumulative Revenue (Gap)/Surplus	**Rs Cr**	**395.1**

8.3 The aggregate ARR for FY 2011-12 and revenue gap from FY 2007-08 to FY 2011-12 approved by the Commission amounts to **Rs 2531.9 Cr** while the approved revenue at existing tariff for FY 2011-12 amounts to **Rs 2136.8 Cr,** thereby resulting in a cumulative revenue gap of **Rs 395.1 Cr upto FY 2011-12.**

SECTION 9: TREATMENT OF REVENUE GAP

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

(a) Revenue Gap of Rs 395.1 Cr envisaged 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) The National Tariff Policy; and

(e) National Electricity Policy.

9.2 As mentioned in Table 152 above, the Commission has envisaged a total revenue gap of **Rs 395.1 Cr** upto FY 2011-12. The tariffs have been increased to the extent of covering this gap only.

9.3 It is pertinent to update the tariffs in Jharkhand especially since, as per the analysis of the Commission, a revenue gap of **Rs 395.1 Cr** has been estimated upto FY 2011-12.

9.4 Meanwhile, the Commission, while determining the tariffs for various categories, has taken into consideration the relevant provisions of Section 61 (g) of the Electricity Act, 2003 which states that tariffs should progressively reflect the cost of supply of electricity and the Commission reduces cross subsidies within a specified period.

SECTION 10: APPROVED TARIFFS FOR FY 2011-12

Generation Tariff

10.1 The Commission has determined the generation tariff of both PTPS and SHPS for FY 2011-12 on the basis of the approved operational parameters, estimated generation and the cost of generation for these plants.

10.2 The summary of the approved generation tariff of PTPS and SHPS for FY 2011-12 is tabulated hereunder:

Table 153: Approved Generation Tariff for FY 2011-12 (Rs/Unit)

Description	Unit	PTPS	SHPS
Net generation	MU	1874.9	49.4
Variable Charges	Rs Cr	165.8	0.0
Fixed Charges	Rs Cr	160.9	17.8
Total Charges	Rs Cr	326.7	17.8
Generation tariff	Rs/unit	1.74	3.60

Transmission Tariff

10.3 The Commission has determined the tariff for the transmission business on the basis of the approved energy available at the transmission system. The Transmission losses have been approved at 5%. The summary of the approved transmission tariff for FY 2011-12 is depicted below

Table 154: Approved Transmission Tariff for FY 2011-12

Description	Unit	Transmission
Net energy available at Transmission level	MU	9064.8
Transmission losses	%	5%
Net energy available at Distribution level	MU	8611.5
Transmission ARR	Rs Cr	77.9
Transmission tariff	Rs/unit	**0.1**

Distribution- Wheeling Tariff

10.4 The JSERC (Terms and Conditions for determination of Distribution Tariff) Regulations, 2010 have signified the importance of proper allocation of retail and wheeling supply business for determination of ARR and respective tariffs.

10.5 As per clause 5.4 of the said Regulations, each distribution licensee is required to "segregate the accounts of licensed business in to wheeling and retail supply business".

10.6 As per clause 5.5 of the said Regulations, "Till such time the accounts are segregated, the Licensee shall prepare an allocation statement to apportion cost and revenues to respective business. The allocation statement, approved by the Board of Directors of the licensee, shall be accompanied with an explanation of the basis and methodology used for segregation which should be consistent over the Control Period."

10.7 Since the aforementioned regulations are for the Control Period starting FY 2013-14, the Licensees would be required to submit the segregated accounts/allocation statement before the start of the control period.

10.8 Till such time, the Commission has decided to retain the same wheeling tariff as was approved in the Tariff Order of FY 2010-11 at Rs 0.14/KWh.

Distribution- Retail Supply Tariff

10.9 As mentioned earlier, the Commission has determined the revenue gap of **Rs 395.1 Cr** up to FY 2011-12. In line with the Tariff principles mentioned in Section 9: of this Tariff Order, the Commission has determined the category wise retail tariffs for FY 2011-12, as depicted in the table below:-

Table 155: Existing and Approved Tariff

Category	Units for Fixed Charge	Existing Fixed Charge	Approved Fixed Charge by JSERC	Existing Energy Charge (Rs/Kwh)	Approved Energy Charge by JSERC (Rs/Kwh)
Domestic					
DS-I (a), Kutir Jyoti (metered) (0-50)	Rs/ Conn/Month	0	12	1.10	1.10
DS-I (a), Kutir Jyoti (metered) (50-100)	Rs/ Conn/Month	0	12	1.10	1.10
DS-I (a), Kutir Jyoti (Unmetered)	Rs/ Conn/Month	30	35	0.00	0.00
DS-I (b), metered (0-200)	Rs/ Conn/Month	0	20	1.10	1.25
DS-I (b), metered (above 200)	Rs/ Conn/Month	0	20	1.10	1.25
DS-I (b), unmetered	Rs/ Conn/Month	72	85	0.00	0.00

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-I, metered (<= 2 Kw) (0-100)	Rs/ Conn/Month	0	25	1.35	1.50
NDS-I, metered (<= 2 Kw) (above 100)	Rs/ Conn/Month	0	25	1.35	1.50
NDS-I, unmetered (<= 2 KW)	Rs/Kw/Month	120	Rs. 150 up to 1 KW and Rs. 60 for every additional KW	0.00	0.00
NDS-II	Rs/Kw/Month	110	Rs. 150 per KW per Month or part thereof	3.95	4.80
Low Tension					
LTIS-I	Rs/HP/Month	75	110	3.50	4.10
Irrigation & Agricultural					
IAS-I	Rs/HP/Month	0	0	0.50	0.55
IAS-I Unmetered	Rs/HP/Month	50	60	0.00	0.00
IAS-II	Rs/HP/Month	0	0	0.75	0.85
Agriculture-IAS-II (unmetered)	Rs/HP/Month	200	240	0.00	0.00
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
HT Special S					
11 KV	Rs/Kva/Month	330	370	2.50	2.85
33 KV	Rs/Kva/Month	330	370	2.50	2.85
132 KV	Rs/Kva/Month	330	370	2.50	2.85
Traction					
RTS	Rs/Kva/Month	180	205	4.50	4.85
Street Light Service					
SS-I	Rs/ Conn/Month	25	30	3.50	3.85
SS-II	Rs/ Conn/Month	110	Rs. 125 per 100 watt lamp and Rs. 30 for every additional 50 watt	0.00	0.00
REC		0	0	0.70	0.77
MES	Rs/Kva/Month	160	180	3.00	3.50

SECTION 11: REDUCTION IN CROSS SUBSIDY

11.1 The Commission strongly believes that a cost based tariff structure promotes efficient and economic investment and consumption. Section 61 (g) of the Electricity Act, 2003 also states that tariffs should progressively reflect the cost of supply of electricity and the Commission reduces cross subsidies within a specified period. Section 61 (d) of the Act provides for safeguarding of the consumers' interest and at the same time recovery of the cost of electricity in a reasonable manner.

11.2 The existing tariff structure in Jharkhand is not based on the cost of supply and the categories of commercial and industrial consumers have been cross subsidizing other consumers like domestic and agricultural to a great extent. The Commission intends to move in the direction of removing this distortion.

11.3 For this purpose, the Commission has used the average cost of supply due to lack of reliable data on the cost of supply at various voltage levels. The average cost of supply (including past recoveries) as approved by the Commission for FY 2011-12 is Rs 3.33 per kWh.

Category	Sales	Average Current Tariff	Average CoS	Revenues at existing tariff	Revenues at Average CoS	Cross Subsidy Generated/ Utilized	Revenue at Proposed Tariff	Average Proposed Tariff	Cross Subsidy Generated/Utilized (As per Approved Tariff)
Domestic	3051.99	1.59	3.33	486.06	1016.31	-530.25	629.09	1.90	-387.22
Non-Domestic	355.20	4.54	3.33	161.10	118.28	42.65	202.54	5.40	84.26
Low Tension	163.81	5.25	3.33	86.04	54.54	31.50	109.27	6.10	54.73
Irrigation & Agricultural	84.84	0.66	3.33	5.60	28.25	-22.65	6.46	0.73	-21.79
High Tension service	1528.46	5.07	3.33	774.39	508.97	265.42	885.01	5.77	376.04
HT Special S	700.97	3.55	3.33	248.83	233.42	15.41	283.25	3.99	49.83
Traction	627.22	5.19	3.33	325.43	208.86	116.57	359.64	5.66	150.78
Street Light Service	184.74	1.29	3.33	23.84	61.52	-37.68	27.01	1.46	-34.51
MES	78.95	3.23	3.33	25.49	26.29	-0.80	29.66	3.76	3.37
Total	**6776.18**			**2136.76**	**2256.47**	**-119.71**	**2531.91**		**275.49**
Cross Subsidy Gen						-591.38			-443.52
Cross Subsidy Utilized						471.55			719.01

11.4 From the table given above, it can be seen that cross subsidy shall be reduced from Rs 591.38 Cr (based on existing tariff) to Rs 443.52 Cr once new tariff structure comes into effect.

SECTION 12: TARIFF RELATED OTHER ISSUES

Tariff Proposal

Petitioner's submission

12.1 The Petitioner submitted a revenue gap of Rs 5731 Cr from FY 2007-08 upto FY 2011-12. The Petitioner has proposed a tariff hike of 51% over the existing revenue while for the balance proposed gap the Petitioner has proposed creation of regulatory asset.

12.2 The proposed tariff structure submitted by the Petitioner is given as below:

Table 156: Tariff Proposal of JSEB for FY 2011-12

Category	Units for Fixed Charge	Existing Fixed Charge	Proposed Fixed Charges	Existing Energy Charge (Rs/Kwh)	Proposed Energy Charges (Rs/Kwh)
Domestic					
DS-I (a), Kutir Jyoti (metered) (0-50)	Rs/ Conn/Month	0	20	1.10	1.10
DS-I (a), Kutir Jyoti (metered) (50-100)	Rs/ Conn/Month		20		2.00
DS-I (a), Kutir Jyoti (Unmetered)	Rs/ Conn/Month	30	50	0.00	0.00
DS-I (b), metered (0-200)	Rs/ Conn/Month	0	50	1.10	2.10
DS-I (b), metered (above 200)	Rs/ Conn/Month		50		2.90
DS-I (b), unmetered	Rs/ Conn/Month	72	200	0.00	0.00
DS-II, <= 4KW Total					
0-200	Rs/ Conn/Month	25	60	1.50	2.95
201 & above	Rs/ Conn/Month	30	70	1.90	3.95
DS-III, Above 4 KW	Rs/ Conn/Month	50	100	1.90	3.95
DS HT	Rs/Kva/Month	40	80	1.65	3.75
Non-Domestic					
NDS-I, metered (<= 2 Kw) (0-100)	Rs/ Conn/Month	0	100	1.35	2.50
NDS-I, metered (<= 2 Kw) (above 100)	Rs/ Conn/Month		100		4.00
NDS-I, unmetered (<= 2 KW)	Rs/Kw/Month	Rs 120 up to1KW And Rs 50 for every additional KW	Rs 300 up to1KW And Rs 100 for every additional KW	0.00	0.00
NDS-II	Rs/Kw/Month	Rs 110 per KW per Month or part thereof	Rs 195 per KW per Month or part thereof	3.95	5.50

Low Tension					
LTIS-I	Rs/HP/Month	75	120	3.50	4.80
Irrigation & Agricultural					
IAS-I	Rs/HP/Month	0	25	0.50	1.00
IAS-I Unmetered	Rs/HP/Month	50	100	0.00	0.00
IAS-II	Rs/HP/Month	0	100	0.75	4.00
Agriculture-IAS-II (unmetered)	Rs/HP/Month	200	500	0.00	0.00
HTS					
11 KV & 33 KV	Rs/Kva/Month	165	250	4.35	5.10
132 KV	Rs/Kva/Month	165	250	4.35	5.10
HT Special S					
11 KV	Rs/Kva/Month	330	250*	2.50	5.10*
33 KV	Rs/Kva/Month	330	250*	2.50	5.10*
132 KV	Rs/Kva/Month	330	250*	2.50	5.10*
Traction					
RTS	Rs/Kva/Month	180	300	4.50	5.25
Street Light Service					
SS-I	Rs/ Conn/Month	25	150**	3.50	6.50
SS-II	Rs/ Conn/Month	Rs 110 per 100 watt lamp And in addition. Rs 25 would be charged for each additional 50 watt	Rs 250 per 100 watt lamp. and In addition. Rs100 would be charged for each additional 50 watt	0.00	0.00
REC		0	0	0.70	1.50
MES	Rs/Kva/Month	160	240	3.00	4.50
Note: * JSEB has proposed the HTSS category to be merged with HTS;					
**** JSEB has Proposed the fixed charge unit to be converted from Re/Connection/Month to Rs/Kw/Month**					

Commission's analysis

12.3 The Commission has computed the revenue gap of Rs 395.1 Cr on the basis of provisional true up for FY 2007-08, FY 2008-09 and FY 2009-10, revised estimation for FY 2010-11 and review of ARR for FY 2011-12 and updated the tariff keeping in to consideration the proposal of JSEB, the approved revenue gap and cross subsidy levels of various categories.

12.4 The approved tariff structure for FY 2011-12 is as shown in section 10.9 of this Order.

Introduction of New Slabs in DS-I (a), (b) and NDS-I Categories

Petitioner's submission

12.5 The Petitioner has proposed to introduce new slabs for domestic and non-domestic categories. The Petitioner submitted that the tariff structure has been designed in such a way that the poorer categories have lesser impact as compared to the other categories and at the same time various categories are brought closer to the Cost of Supply.

Commission's analysis

12.6 The Commission has agreed to the tariff design philosophy proposed by the Petitioner for introduction of new slabs. However, the Petitioner has not submitted any bifurcated commercial information for the new slabs due to which it is not feasible for the Commission to determine the impact of revision in tariffs on the new slabs. Accordingly, the Commission has decided to keep the same tariff rates for the new slabs as approved in various categories and directs the Petitioner to submit the required commercial information for the new slabs with the next Tariff Petition for FY 2012-13 so that the Commission can analyse the commercial information of each of the new slabs.

Changes in Tariff schedule

DS category

Petitioner's submission

12.7 The Petitioner submitted that in the Service Character, item (i) the load limit for Kutir Jyoti connections has been increased from 0.03 kW as in the approved tariff to 100 W. This has been proposed to remove anomaly with respect to the load specified in the Category of Services, item (a).

Commission's analysis

12.8 The Commission agrees with the proposal of the Petitioner to change the load limit of Kutir Jyoti connections from 0.03 KW as it brings simplicity to the tariff structure and its applicability.

12.9 The Commission has also modified the Category of service clause for DS-HT category as follows:

"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 above 75 KW."

12.10 Meanwhile, the Commission has also included the Service Character for DS-HT category, which was not available in the Tariff Schedule for FY 2010-11.

12.11 The Commission also directs the Petitioner to meter all the unmetered connection under DS-I(a)unmetered and DS-I(b)unmetered categories so that they can be billed under the DS-I(a)metered and DS-I(b)metered categories. This would assist in additional revenue as well as reduction in T&D losses for the Petitioner.

NDS category

Petitioner's submission

12.12 The Petitioner has proposed the kVAR ratings of the inductive load at different loads.

12.13 The Petitioner has also submitted that all such existing consumers shall be levied a surcharge at 5% on the total billed amount charge (metered or flat), till they have installed the required capacitors.

12.14 The Petitioner has also proposed that it shall not release any new LT connections having aggregate inductive load greater than 5 HP/ 4 KW unless the capacitors of suitable rating are installed.

Commission's analysis

12.15 The Commission has approved the ratings at various inductive load levels proposed by the Petitioner as it views that it would bring clarity among consumers on the type of shunt capacitors to be installed at different inductive load levels.

12.16 The Commission also accepts the proposal of the Petitioner that it shall not release any new LT connections having aggregate inductive load greater than 5 HP/ 4 KW unless the capacitors of suitable rating are installed.

12.17 For existing consumer, the Commission agrees with the Petitioner that the consumers should immediately install shunt capacitors as per the ratings specified in the Tariff Schedule otherwise a penalty mechanism has to be in place. However, the Commission views that the Petitioner should first serve one month's notice to all such consumers who do not have or have defective shunt capacitors, and 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.

LTIS category

Petitioner's submission

12.18 The Petitioner has proposed that the total connected load shall not exceed the sanction load.

12.19 The Petitioner has also proposed that the billing demand will be the maximum demand recorded during the month or 75% of the sanctioned load, whichever is higher.

12.20 The Petitioner has also proposed the ratings of the inductive load at different loads.

12.21 The Petitioner has also submitted that all such existing consumers shall be levied a surcharge at 5% on the total billed amount charge (metered or flat), till they have installed the required capacitors.

12.22 The Petitioner has further proposed that it shall not release any new LT connections having aggregate inductive load greater than 5 HP/ 4 KW unless the capacitors of suitable rating are installed

Commission's analysis

12.23 The Commission has made the following modification in the Tariff Structure of LTIS category.

(a) The Tariff Structure has been designed separately for installation based tariff and demand based tariff.

(b) **Installation based tariff**: The fixed charges and energy charges as approved under LTIS category shall apply. 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.

(c) **Demand based tariff:** The demand charges for HTS-11 KV are made applicable whereas energy charges are as per the charges approved under LTIS category. 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.

(d) 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.

HTS Category

Petitioner's submission

12.24 The Petitioner has proposed contracted demand at different voltage levels.

12.25 The Petitioner has also proposed the introduction of Annual Minimum Guarantee as per different load factors at different voltage levels.

12.26 The Petitioner has further proposed that the billing demand will be the maximum demand recorded during the month or 85% of the Contract Demand, whichever is higher. The Petitioner has also proposed that 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.

Commission's analysis

12.27 The Petitioner has not given any rational for the proposed contracted demand at different voltage levels, hence not allowed.

12.28 The Commission has disallowed introduction of Annual Minimum Guarantee Charges to be recovered from consumers since as directed in the Previous Tariff Order for FY 2010-11, the Commission had asked for the impact of introduction of Annual Minimum Guarantee Charges on which the Petitioner has not submitted any information. The Commission would review the proposal as and when the Petitioner submits the required information.

12.29 The Commission allows Billing demand at maximum recorded demand or 75% of the Contract Demand. 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 have to get into a new agreement for the revised contracted demand with the Petitioner.

12.30 The Commission has allowed the applicable rebates to be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate authority/Courts. Such dues would not be treated as arrears till the judgement is pronounced by the competent authority.

HTSS Category

Petitioner's submission

12.31 The Petitioner has proposed merger of HTS and HTSS category and has given elaborative justification of the same in the Tariff Schedule.

Commission's analysis

12.32 The Commission views that the HTSS category is primarily meant for Induction furnaces/Arc furnaces used by foundries/ingot making plants which consume large quantity of power. Electricity is a raw material for these industries as it forms a high percentage of the total cost of production.

12.33 The Commission recognises the requirement of HTSS category consumers to have access to cheap and reliable source of power in order to maintain their competitiveness and hence disallows the proposal of the Petitioner to merge the HTS and HTSS category. Further HTSS consumer consumes bulk power at a higher voltage and thereby the licensee/utility will be benefitted with minimum losses.

12.34 The Commission has disallowed introduction of Annual Minimum Guarantee Charges to be recovered from consumers since as directed in the Previous Tariff Order for FY 2010-11, the Commission had asked for the impact of introduction of Annual Minimum Guarantee Charges on which the Petitioner has not submitted anything. The Commission would review the proposal as and when the Petitioner submits the required information.

12.35 The Commission allows Billing demand at maximum recorded demand or 75% of the Contract Demand. 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.

12.36 The Commission has allowed the applicable rebates to be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate authority/Courts. Such dues would not be treated as arrears till the judgement is pronounced by the competent authority.

RTS Category

Petitioner's submission

12.37 The Petitioner has proposed that the billing demand will be the maximum demand recorded during the month or 85% of the Contract Demand, whichever is higher.

12.38 The Petitioner has also proposed that the demand charge shall be applied on maximum demand recorded or contract demand whichever is higher at any fifteen minutes time block for which the meter installed should have 15 minutes integration time.

Commission's analysis

12.39 The Commission allows Billing demand at maximum recorded demand or 75% of the Contract Demand.

12.40 The Commission approves the clause of maximum demand recorded or contract demand which is higher at any fifteen minutes time block.

12.41 The Commission has allowed the applicable rebates to be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate authority/Courts. Such dues would not be treated as arrears till the judgement is pronounced by the competent authority.

SS-I category

Petitioner's submission

12.42 The Petitioner has proposed change in fixed charges unit of measurement for SS-I category from Rs/Connection/month to Rs/kW/month.

Commission's analysis

12.43 The Commission observes that the Petitioner has neither submitted any rational for the proposed change in unit of measurement of fixed charge for SS-I category nor has it submitted the impact of such a change on the SS-I category. Accordingly, the Commission disallows the proposal of the Petitioner. The Commission may consider the proposal in future provided the Petitioner submits the required information for making such a change.

REC category

Petitioner's submission

12.44 The Petitioner submitted that the difference between the per unit approved energy charge for REC category and the average Cost of Supply approved (by the Hon"ble Commission) shall be revenue subsidy/ support from the State Government.

12.45 The Petitioner has proposed revenue subsidy/ support from the State Government on taking cognizance of the tripartite agreement between the Rural Electrification Corporation Limited, the Government of Jharkhand and the JSEB dated July 22, 2005. The State Government of Jharkhand has agreed to provide revenue subsidy to JSEB in all areas where rural franchisee schemes are implemented.

12.46 The Petitioner submitted that the REC consumer shall charge the Electricity Duty at applicable rate and remit the same to JSEB.

Commission's analysis

12.47 The Commission notes the submission of the Petitioner but feels that the same is not required to be part of the Tariff Schedule.

Miscellaneous charges

Petitioner's submission

12.48 The Petitioner has proposed to increase the miscellaneous charges for various activities, as proposed in the Section 13 of the ARR & Tariff Petition for FY 2011-12.

Commission's Analysis

12.49 In the Previous Tariff Order for FY 2010-11, the Commission had directed Petitioner to consider the impact of the proposed miscellaneous charges including the minimum guaranteed consumption charges and show separate calculations for NTI at existing miscellaneous charges and NTI at proposed miscellaneous charges with details through a separate petition or while filing the next ARR. The Commission observes that the Petitioner has not complied with the directives. The Commission would review the proposal as and when the Petitioner submits the required information. Till such time, the Commission retains all the miscellaneous charges as approved in the Tariff Order of FY 2010-11.

Schedule of Charges

Petitioner's submission

12.50 The Petitioner has proposed the schedule of charges with the ARR & Tariff Petition for FY 2011-12.

Commission's analysis

12.51 The Commission views that the schedule of charges need to be looked in to for the state of Jharkhand as a whole and has decided that it will separately determine the schedule of charges though a stakeholder consultation process before the Tariff determination process for FY 2012-13 for all the Petitioners.

Other Terms and Conditions of Supply

Petitioner's submission

12.52 **Connected load at different voltage levels:** The Petitioner has proposed minimum and maximum connected load to be for different voltage levels.

12.53 **Penalty for exceeding Contract Demand:** The Petitioner has requested for levy of penalty for exceeding contract demand. The Petitioner has proposed that a surcharge of 5% on the demand charges and energy charges be allowed on defaulting consumers found exceeding contract demand. No rebate of any kind shall be allowed to such consumer in that month.

12.54 **Minimum Contract Demand requirements:** The Petitioner has proposed that the Billing demand should be the maximum demand recorded during the month or 85% of the contract demand, whichever is higher. In case high 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.

12.55 **Point of Supply:** The Petitioner has proposed that the Power supply shall normally be provided at a single point for the entire premises. In certain categories like coal mines power may be supplied at more than one point on request of consumer subject to technical feasibility. But in such cases metering and billing shall be done separately for each point.

12.56 **Tariff for Temporary Connections:** The Petitioner has proposed the following:

(a) 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.

(b) Temporary connections shall be made to pay consumption security deposit equivalent to 45 days of sale of power which shall be based on the assessment formula (LDHF) prescribed by the Commission.

(c) Temporary connections shall initially be provided for a period of up to 45 days which can be extended to six months on approval from the JSEB.

12.57 **Dishonored Cheques:** The Petitioner has proposed that in the event of dishonored cheque for payment against a particular bill, the JSEB shall charge an interest at the rate of 2.5% per month on unpaid amount from the due date of payment till the time the amount is entirely paid.

12.58 **Stopped/ Defective Meters:** The Petitioner has proposed the following:

(a) The Petitioner has proposed that the 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:

Table 157: Load factor for provisional billing in case of Stopped/ Defective Meters

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

(b) The Petitioner has also proposed that for the consumption of the consumer recorded in twelve months after installation of a meter, the provisional average bill raised earlier shall be compared and the higher of the two shall be taken as final bill during the period of meter being defective.

12.59 **Resale of energy:** The Petitioner has proposed that no consumer shall be allowed to resell the electricity purchased from the JSEB to any other person/ entity. Defaulters shall be subject to immediate disconnection of supply.

12.60 **Release of new connections:** The Petitioner has proposed that it shall not provide any new connections without appropriate meter. The tariff for un-metered connections shall be applicable only to the existing un-metered connections, until they are metered.

12.61 **kVAh Billing:** The Petitioner has proposed introduction of kVAh Billing for all three phase LT consumers (except domestic) as well as HT consumers where appropriate meters for recording are installed billing in energy shall be done on kVAh billing basis.

12.62 **Installation of Shunt Capacitors:** The Petitioner has proposed the following:

(a) The Petitioner has proposed that 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:

Table 158: Ratings of capacitors for inductive load

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

(b) The Petitioner has proposed that all such consumers shall be levied a surcharge at 5% on the total billed amount charge (metered or flat), till they have installed the required capacitors.

(c) The Petitioner further proposed that it shall not release any new LT connections having aggregate inductive load greater than 5 HP/ 4 KW (except domestic and street light) unless the capacitors of suitable rating are installed.

12.63 **Transformer Capacity:** The Petitioner has proposed that the transformer capacity of all HT consumers (DS-HT, HTS, HTSS etc.) shall in no case be more than 150% of the contract demand. If any consumer is found violating this provision, his service connection shall be disconnected after serving 15 days notice and in addition to the above, the consumer shall be liable to pay the demand in proportion to contract demand commensurate with the capacity of the installed transformer.

12.64 **Installation of Circuit Breaker & ELCB:** The Petitioner has proposed that 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 JSEB official. Appropriate ratings of ELCB + MCBs for the different type of loads are as follows:

Table 159: Ratings ELCB +MCB devise

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 official in-charge of Power Supply of the Area.

12.65 The Petitioner has proposed the following applicability of installation of MCB and ELCB shall be:

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

(b) Consumers connected at 400/ 440 volts; and

(c) 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 JSEB.

12.66 The Petitioner also proposed that for all existing consumers, where such devices as mentioned above have not been installed a surcharge at the rate of 1 percent of the billed amount shall be charged and shall continue to be charged till such time the consumer installs the device.

12.67 **Electricity Duty:** The Petitioner submitted that in addition to the charges laid down in the tariff approved by the Hon'ble Commission, State Electricity Duty as per provisions laid down by the State Government, as amended from time to time shall be levied on the consumer. The total Electricity Duty chargeable and realizable from a consumer every year will be subject to adjustment as per final assessment made by the Commercial Taxes Department of the State Government on the basis of rate notified by the Govt. of Jharkhand from time to time.

12.68 **Conversion factors:** The Petitioner has proposed that, wherever necessary, the following conversion factors shall be adopted:

(a) (PF=0.85):

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

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

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

12.69 **Fuel & Power Purchase Cost Adjustment (FPPCA):** The Petitioner has proposed that the (FPPCA) charge shall be charged from time to time on approval by the Hon'ble Commission for all consumer categories, except rural domestic and non-domestic consumers.

Commission's analysis

12.70 **Connected load at different voltage levels:** The Petitioner has not given any rational for the proposal, hence not allowed.

12.71 **Penalty for exceeding Contract Demand:** The Commission concurs with the proposal of the Petitioner for penalty on 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.

12.72 **Minimum Contract Demand requirements:** The Commission approves the following

"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."

12.73 **Point of Supply:** The Commission has approved the clause proposed by the Petitioner.

12.74 **Tariff for Temporary Connections:** The Commission has approved the clause proposed by the Petitioner, with the following conditions:

(a) Temporary tariff is approved 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.

(b) 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.

(c) 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.

12.75 **Dishonored Cheques:** The Commission has approved the clause of Dishonored Cheque with the following condition:

"In the event of dishonored cheque for payment against a particular bill, the Petitioner 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."

12.76 **Stopped/ defective meters:** The Commission has approved the following conditions:

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

(b) 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

Table 160: Load factor for provisional billing in case of stopped/ defective meters

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

(c) The Commission has disallowed the proposal of Petitioner for the consumption of the consumer recorded in twelve months after installation of a meter, the provisional average bill raised earlier shall be compared and the higher of the two shall be taken as final bill during the period of meter being defective.

12.77 **Resale of energy:** The Commission approves the terms and condition proposed by the Petitioner.

12.78 **Release of new connections:** The Commission approves the terms and condition proposed by the Petitioner.

12.79 **kVAh Billing:** The Commission does not find merit in immediate implementation of kVAh Billing. The Commission directs the Petitioner to submit the impact of kVAh based billing on different categories along with cost benefit of implementation of kVAh meters and billing system with the next Tariff Petition.

12.80 **Installation of Shunt Capacitors:**

(a) The Commission approves the proposal that 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:

Table 161: Ratings of capacitors for inductive load

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

(a) For existing consumer, the Commission agrees with the Petitioner that the consumers should immediately install shunt capacitors as per the ratings specified in the Tariff Schedule otherwise a penalty mechanism has to be in place. However, the Commission views that the Petitioner should first serve one month's notice to all such consumers who do not have or have defective shunt capacitors, and in case the consumers do 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.

(b) The Commission also accepts the proposal of the Petitioner that it shall not release any new LT/LTIS connections having aggregate inductive load greater than 5 HP/ 4 KW unless the capacitors of suitable rating are installed.

12.81 **Transformer Capacity:** The Commission does not find merit in the proposal for disconnection of supply if transformer capacity is beyond 150%, as the introduction of clause for penalizing the consumers on exceeding contract demand beyond 110% shall itself work as a deterrent for consumers to over load the system.

12.82 **Installation of Circuit Breaker & ELCB:** The Commission allows the proposal that 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 JSEB official. Appropriate ratings of ELCB + MCBs for the different type of loads are as follows:

Table 162: Ratings ELCB +MCB devise

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 JSEB official/ in-charge of power Supply of the area.

12.83 The Commission allows the following applicability of installation of MCB and ELCB:

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

(b) Consumers connected at 400/ 440 volts; and

(c) 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 JSEB.

12.84 The Commission views that the Petitioner should generate awareness among consumers for installation of such devise and not penalize them.

12.85 **Electricity Duty:** As applicable

12.86 **Conversion factors:** The Commission has approved the proposed the following conversion factors

(a) (PF=0.85):

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

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

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

12.87 **Fuel & Power Purchase Cost Adjustment (FPPCA):** As per the applicable Regulations issued by the Commission.

SECTION 13: TARIFF SCHEDULE

APPLICABLE FROM 1ST AUGUST 2011

Domestic Service (DS)

Applicability:

Domestic Service–I, 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-1(a): For Kutir Jyoti Connection only for connected load up to 100 Watt for Rural Areas.

(b) Domestic Service – DS-I (b): - For rural areas not covered by area indicated under DS-II and for connected load not exceeding 2 KW.

(c) 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.

(d) 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.

(e) 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:

(i) For DS-I (a): AC, 50 Cycles, Single phase at 230 volts for Kutir Jyoti connection for load upto 100 W

(ii) For DS-I (b): AC, 50 Cycles, Single Phase at 230 Volts for load below 2 KW.

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

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

(v) 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-I (a), Kutir Jyoti (metered) (0-50)	Rs/ Conn/Month	12	1.10
DS-I (a), Kutir Jyoti (metered) (50-100)	Rs/ Conn/Month	12	1.10
DS-I (a), Kutir Jyoti (Unmetered)	Rs/ Conn/Month	35	0.00
DS-I (b), metered (0-200)	Rs/ Conn/Month	20	1.25
DS-I (b), metered (above 200)	Rs/ Conn/Month	20	1.25
DS-I (b), unmetered	Rs/ Conn/Month	85	0.00
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)–I, Rural. For Rural Area not covered by area indicated for NDS–II and for connected load not exceeding 2 KW.

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 – I: - AC 50 Cycles, Single phase at 230 Volts for loads up to 2 kW

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-I, metered (<= 2 Kw) (0-100)	Rs/ Conn/Month	25	1.50
NDS-I, metered (<= 2 Kw) (above 100)	Rs/ Conn/Month	25	1.50
NDS-I, unmetered (<= 2 KW)	Rs/Kw/Month	Rs 150 up to1KW And Rs 60 for every additional KW	0.00
NDS-II	Rs/Kw/Month	Rs 150 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	110	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.

Irrigation & Agriculture Service (IAS)

Applicability:

This schedule shall apply to all consumers for use of electrical energy for Agriculture purposes including tube wells and processing of the agricultural produce, confined to Chaff-Cutter, Thresher, Cane crusher and Rice-Hauler, when operated by the agriculturist in the field or farm and does not include Rice mills, Flour mills, Oil mills, Dal mills, Rice-Hauler or expellers.

Service Category:

IAS – I – For private tube wells and private lift irrigation schemes.

IAS – II – For State Tube-wells and State lift Irrigation schemes.

Service Character:

AC 50 Cycles, Single Phase at 230 volts / 3 Phase at 400 volts

Tariff:

Consumer Category	Fixed Charges		Energy Charges
Irrigation & Agricultural (IAS)	Unit	Rate	Rate(Rs/Kwh)
IAS-I	Rs/HP/Month	0	0.55
IAS-I Unmetered	Rs/HP/Month	60	0.00
IAS-II	Rs/HP/Month	0	0.85
Agriculture-IAS-II (unmetered)	Rs/HP/Month	240	0.00

Delayed Payment Surcharge:

For Irrigation and Agriculture 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.

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.

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 - 440 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

HT Special Service (HTSS)

Applicability:

This tariff schedule shall apply to all consumers who have a contracted demand of 300 KVA and more for induction/arc Furnace. In case of induction/arc furnace consumers (applicable for existing and new consumers), the contract demand shall be based on the total capacity of the induction/arc furnace and the equipment as per manufacturer technical specification and not on the basis of measurement. This tariff schedule will not apply to casting units having induction furnace of melting capacity of 500 Kg or below.

Tariff:

Consumer Category	Demand Charges		Energy Charges
HT Special S	Unit	Rate	Rate (Rs/Kwh)
11 KV	Rs/Kva/Month	370	2.85
33 KV	Rs/Kva/Month	370	2.85
132 KV	Rs/Kva/Month	370	2.85

The billing demand shall 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.

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 HTSS consumers will be applicable as given below:

Consumer Category	Voltage Rebate
HTSS - 33 kV	3.00%
HTSS - 132 kV	5.00%
HTSS - 220 kV	5.50%
HTSS - 440 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 HTSS 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 special 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.

Railway Traction Service (RTS)

Applicability

This tariff schedule shall apply for use of railway traction only.

Service Character: AC, 50 cycles, Single phase at 25 KV or 132 KV.

Tariff:

Consumer Category	Demand Charges		Energy Charges
Traction	Unit	Rate	Rate(Rs/Kwh)
RTS	Rs/Kva/Month	205	4.85

Billing demand shall be the maximum demand recorded during the month or 75% of contract demand whichever is higher.

Maximum Demand for RTS

The demand charge shall be applied on maximum demand recorded or contract demand whichever is higher at any fifteen minutes time block for which the meter installed should have 15 minutes integration time.

Delayed Payment Surcharge:

For Railway Traction 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.

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.

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	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.

Rural Electric Co-operative (REC)

Applicability

This tariff schedule shall apply for use in Electric Co-operatives (Petitioner) for supply at 33 kV or 11kV. It also includes village Panchayats where domestic and non-domestic rural tariff is not applicable.

Service Character: AC, 50 cycles, Three phase at 33 kV or 11 kV.

Tariff:

Consumer Category	Energy Charges
REC	**Rate(Rs/Kwh)**
REC	0.77

Delayed Payment Surcharge:

For Rural Electric Cooperative service category, the Delayed Payment Surcharge will be charged 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.

Bulk Supply to Military Engineering Service (MES)

Applicability

This tariff schedule shall apply to Military Engineering Services (MES) for a mixed load in defence cantonment and related area.

Tariff:

Consumer Category	Fixed Charges		Energy Charges
MES	**Unit**	**Rate**	**Rate(Rs/Kwh)**
MES	Rs/Kva/Month	**180**	**3.50**

Delayed Payment Surcharge:

For Military Engineering 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**		
	Agriculture	10	Application should be given in standard requisition form of the Board which will be provided free of cost. Payable in cash in advance along with the intimation
	Street light	20	
	Domestic	15 (Kutir Jyoti) 20 (Others)	
	Commercial	20	
	Other LT categories	50	
	HTS	100	
	HTSS, EHTS, RTS	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**		
	Agriculture	10	Payable in cash in advance along with the intimation for revision
	Domestic	30	
	Commercial	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	**Researching of meter when seals are found broken**		
	Single phase	25	Payable with energy bill

S.No.	Purpose	Scale of Charges	Manner in which payment will be realized
	Three phase	50	
	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**

SECTION 14: TERMS AND CONDITIONS OF SUPPLY

Point of Supply

The Power supply shall normally be provided at a single point for the entire premises. In certain categories like coal mines power may be supplied at more than one point on request of consumer subject to technical feasibility. But in such cases metering and billing shall be done separately for each point.

Tariff for Temporary Connections

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

(a) 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.

(b) 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.

(c) 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.

Dishonoured Cheques

In the event of dishonored cheque for payment against a particular bill, the JSEB 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/ PHED LT	0.15
DS-HT	0.15
HTS	
11 KV/ PHED	0.25

33 KV/ PHED	0.30
132/220/400 KV	0.50
HTSS	0.50
RTS	0.25

Resale of energy

No consumer shall be allowed to resell the electricity purchased from the JSEB 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 JSEB 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 JSEB official/ in-charge of power Supply of the Area.

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

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

(e) Consumers connected at 400/ 440 volts; and

(f) 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 JSEB.

Electricity Duty

Applicable as per the notification of Government of Jharkhand

Conversion factors

The following shall be the conversion factors, as and where applicable

(g) (PF=0.85):

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

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

(j) 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.

SECTION 15: STATUS OF THE DIRECTIVES ISSUED BY THE COMMISSION IN TARIFF ORDER OF FY 2003-04

Directives as per Tariff Order FY 2003-04	JSEB's Response in the Petition of FY 2006-07	Commission's View in the Tariff Order of FY 2006-07	JSEB's Response in the Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
Metering and Kutir Jyoti scheme The Commission directed the Board to submit an action plan for complete metering and not to issue any new connection without a meter from the date of issue of Tariff Order for FY 2003-04. With regards to Kutir Jyoti (KJ) the Board was directed to undertake strict measures to check the consumption level in KJ and to bring all consumers withdrawing more power than the permissible level to the next domestic category.	The Board submitted that it has been undertaking metering of all categories of its consumers except rural domestic and agriculture consumers. The Board requested the Commission to provide an extension of two years for correct metering of rural domestic and agriculture domestic consumers. Further, the Board submitted that instructions have been issued to the field officers for quarterly checking of connected load of the consumers under Kutir Jyoti category.	The Commission is of the view that the Board should have provided an action plan for complete metering within the stipulated time frame. However, the Board has failed to do so. The current request of the Board holds no merit as already three years have passed. A significant progress could have been achieved in such a long time. Further the Commission feels that Boards inaction regarding consumer metering has caused T&D loss levels to rise further. Further, the Commission has observed that the Board has provided no details regarding the results and findings of the strict measures for controlling the sales under the KJ category. This proves that the	JSEB submits that it has been taking steps to curb the theft by replacing the non-performing/ defective meters on a regular basis. It is further in the process of replacement of defective meters actively and would replace all the defective meter	The Petitioner has not complied with the directive. The Petitioner is directed to prepare and submit the comprehensive metering plan for Kutir Jyoti connections within three months of this Order.	The Petitioner submitted that it has released connections under the Kutir Jyoti/ BPL category and are only being given with meters and so far, 4,36,106 connections have been released under the scheme. The Petitioner has also submitted that it has purchased additional 50,000 meters for replacement of defective meters. Out of the same 5,000 meters have been allotted for replacement against Kutir Jyoti connections in the first phase and more meters are being purchased to achieve complete metering.	The Petitioner is directed to submit a phase wise metering plan for metering of Kutir Jyoti connection within three months of the issue of this order and subsequently submit quarterly progress reports to the Commission.

Directives as per Tariff Order FY 2003-04	JSEB's Response in the Petition of FY 2006-07	Commission's View in the Tariff Order of FY 2006-07	JSEB's Response in the Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
		Board has no monitoring process as such.				
Performance of PTPS Substation The Commission directed the Board to undertake necessary steps to reduce SHR and increase the PLF to its optimal level and to separately account the consumption in the nearby areas of PTPS and estimate auxiliary consumption net of this level. The Commission also directed the Board to step up its supervision to reduce the coal transit losses. The Board was further directed To submit an action plan within three months for proper fuel management system to improve the efficiency of	The Board submitted that it has signed an agreement with NTPC on 30th August 2005 under partners in Excellence Program of Ministry of Power, GOI. Under this programme, NTPC has deputed its seven engineers for two years to improve the performance of PTPS. The Board has requested to the Commission to provide time till March 2007 to install meters and measure the net auxiliary consumption of PTPS. The Board submitted that the scope available to it to reduce coal transit	The Commission has observed that no step have been taken to carry out the directions of the Commission. This is evident from the fact that PLF and other operating parameters of PTPS have deteriorated further making it the most costly power for Jharkhand. For pit head generating plants transit loss should be 0.3 % as per the JSERC norms. However the Board has proposed a transit loss of 4% for PTPS. The Commission is of the view that the Board instead of identifying the causes for transit losses has been passing on its responsibilities to other entities. The	The Board submitted that it has taken up overhauling and repairing work for almost all the units of PTPS and the timeliness for commissioning of each is submitted with the proposal.	The Petitioner has not given any overhauling plan for each of its Unit, within a period of three months.	The Petitioner submitted that it has assessed the cost of R&M for various units of PTPS: Unit-I: 50 MW: Under shut down due to jamming of rotor: Cost of restoration Rs 5.3 Crs. Unit 2: 50 MW: Under shut down due to boiler explosion, Cost of restoration Rs 5 Crs Unit 3: 50 MW: Is planned to be phased out in accordance with CEA recommendation Unit 4: 50 MW: Running: Cost of restoration Rs 3 Crs. - Unit 5: Is planned to be phased out in accordance with CEA recommendation Unit 6: 100 MW: Running with one	The Commission has allowed the total investment plan as proposed by the Petitioner from carrying out R&M works for various units of PTPS. The Commission directs the Petitioner to submit the quarterly progress report in respect of R&M works carried out in various units of PTPS.

Directives as per Tariff Order FY 2003-04	JSEB's Response in the Petition of FY 2006-07	Commission's View in the Tariff Order of FY 2006-07	JSEB's Response in the Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
plant.	losses is limited. The reason for high coal transit losses lie with other entities party in the transaction, viz. Coal India and Indian Railways. The Board submitted that it intends to appoint consultants for developing the Fuel Management System.	Board request for time till March 2007 to install meters for measurement of auxiliary consumption proves a slow progress on tracking down and removing its inefficiencies .March 2007 has already elapsed the Board may provide details of progress made.			boiler: Cost of restoration Rs 64 Crs. Unit 7: 110 MW: Under shut down since 30.09.2010 due to earth fault in stator: Cost of restoration Rs 271 Crs. Unit 8: 110 MW: Under shut down since August "03. M/s Evonik is consultant. : Heavy investment is required for restoration; decision on the same is yet to be taken. Unit 9 & 10: 110 MW each: Damaged in fire incident on 10.08.06. Restoration is being done: Cost of restoration Rs 331.11 Crs. The total restoration/ R&M cost thus stands at Rs 1045.41 crs. The Petitioner has stated that it has already commenced work against Units 9 & 10 and the same are expected to be	

Directives as per Tariff Order FY 2003-04	JSEB's Response in the Petition of FY 2006-07	Commission's View in the Tariff Order of FY 2006-07	JSEB's Response in the Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
					completed by February, 2012 and October, 2011 respectively. Also, the CEA has already recommended retirement of units 3 & 5 and it will phase out these units with effect from April, 2012.	
Evacuating 100% power from TVNL Station The Commission directed the Board to undertake necessary capital and R&M expenditure to augment its transmission capacity for evacuating 100% power from TVNL station, and an action plan in this regard was to be submitted to the Commission within three months from the date of issue order for FY 2003-04.	The Board submitted that the 400 kV TTPS-PTPS line is currently under restoration and it is planning to construct the following lines: - 400 KV double circuit TTPS Ranchi line 220KV TTPS Haldia (Ranchi) double ckt transmission line 220kv double ckt TTPS Govindpur transmission line	The Commission would like to highlight that progress of the Board has been slow on this front. Such a slow progress could further jeopardize the already fragile power situation in the State.	The Board has not submitted any response in regards to this directive in the Tariff Petition of FY 2008-09.	The Petitioner is directed to give the status report within three months of this order	The Petitioner submitted that TVNL has awarded the construction of 400 kV bays at TTPS to Power Grid Corporation of India Limited (PGCIL) and with the completion of this work, the evacuation of this power at 400 KV at TTPS would start.	The Commission notes that the Petitioner submitted action plan of TVNL, while keeping silent on its own action plan for evacuation of power. The Commission directs the Petitioner to give the status report of its preparedness within a month of this Order

SECTION 16: STATUS OF THE DIRECTIVES ISSUED BY THE COMMISSION WITH TARIFF ORDER FY 2006-07

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
Sales Estimates and Projections The Commission directed the Petitioner to undertake a detailed study for load research and demand forecast in order to correctly workout its short term and long term energy requirement	The Petitioner submitted that load research and demand forecast requires huge database and information to arrive at meaningful result. Therefore, it is making all the efforts to improve its database through various IT initiatives and manual interfaces. JSEB submits that it is in the process of finalization of RFP for undertaking consumer indexing and also in the process of implementing Billing Revenue and Energy Management System (BREMS). The Petitioner submits that once the database is strong enough to support the scientific study it would appoint a consultant to undertake the load research and demand forecast.	The Commission directs the Petitioner to submit the status report within 3 months of this Order. The Commission also directs the Petitioner to submit the status report on the RFP for BREMS within three months of the issue of this order.	The Petitioner submitted that it had engaged a consultant in compliance to the Commission's directive but the findings in the report submitted by the consultant were found to be inappropriate for using for the purpose of projections of power purchase as there were gross variations in the projections made by the consultant with the actual. The Petitioner submitted that it is in the process of streamlining the accounting procedure, it has started collecting monthly sales/revenue data from the computerised billing agencies appointed for each circles. Therefore, the estimates submitted for FY 2011-12 are fairly accurate. The Petitioner has also submitted that it is in the process of appointing another consultant for putting in place a process for long-term and short-term demand forecast for enabling a planned approach to power purchase.	The Commission is displeased with the reply submitted by the Petitioner. The directive was issued in FY 2006-07 and more than four years have already passed, the Petitioner is not able to comply with the Commission's directives. The Commission also takes a serious note of the casual attitude shown by the JSEB by not getting the work done successfully. The Commission directs the Petitioner to explain in detail, within three months of the Order, why was the earlier study unsuccessful, the cost borne on the unsuccessful work and also explain why should the consumers of the state bear the cost of unsuccessful work? The Commission further directs the Petitioner to get

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
				the work done within three months of the issue of this Order and submit the compliance report to the Commission with the next Tariff Petition.
Circle level category-wise consumption The Commission directed the Petitioner to collect and submit the data on number of hours supplied per week to the HTS consumers on a quarterly basis. The Commission also directed the Petitioner that in the next Tariff Petition, the Petitioner should provide category-wise and slab-wise data on sales, number of consumers and connected load and detailed calculations of its revenue estimates with the next Tariff Petition.	The Petitioner submits that circle wise consumption for different categories and number of hours of supply to various categories has been sought but the information is very detailed and requires large amount of time and manpower for the compilation. The Petitioner states that data collected is inaccurate and inconsistent as it is the first set of data which has been received and further discussions with the field officers would lead to refinement of data. The Petitioner submitted the raw data to the commission which it states that is in the crude form and may be inconsistent.	The Commission views that since the Petition was filed last year, the Petitioner had sufficient time since then to get the required data compiled. The Commission directs the Petitioner to start submitting the data within three months of this Order and in every quarter subsequently.	The Petitioner has stated that it has already submitted the estimated provisional category-wise consumption and load for FY 2009-10 and FY 2010-11on November 30, 2010	The Commission has observed that the Petitioner has not submitted the information as per the directive. The Petitioner is directed to submit the actual data for FY 2010-11 including category and slab wise sales, load, revenue as well as number of hours supplied per week to the HTS consumers on a quarterly basis the within three months of this order and then regularly submit quarterly information to the Commission within three months of the end of each quarter.

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
	The Petitioner further submits that it is in the process of finalization of RFP for undertaking consumer indexing and also in the process of implementing Billing Revenue and Energy management services (BREMS).			
T&D Loss Estimate The Commission directed the Petitioner to formulate a task force for supervising the T&D loss in the state. The Commission also directed the Petitioner to carry out energy audit of its system and provide quarterly reports to the Commission regarding the progress of energy audit, action taken to reduce T&D loss and results achieved. The Petitioner was also directed to reduce its T&D loss by 4% every year till normative T&D loss level is reached.	The Petitioner submitted that keeping in view the huge target of rural electrification, release of KJ connection and expansion of LT network a huge loss reduction is unachievable. The Petitioner further submitted that it has created Anti Power Theft (APT) cell headed by an officer of the rank of Superintending engineer (SE) and its major role is to monitor the energy consumption patterns of various consumers taking into account the information of consumers involved in the theft from external sources. The Petitioner submitted	The Commission feels the steps taken by the Petitioner are not sufficient as no quantitative results can be seen. The Petitioner is directed to prepare a detailed plan for the reduction of T&D losses including capital investment required to achieve the same. The plan should be submitted to the Commission within six months of the issue of the order. Regarding T&D loss reduction the Commission directs the Petitioner to follow the trajectory given in Section 7 & 11 of this Order. The results of steps	The overall T&D loss level including external losses beyond the State boundary estimated by the Petitioner for the last 4years is summarized in the table below: FY 2007-08: 42.73% FY 2008-09: 42.79% FY 2009-10: 36.51% FY 2010-11 (Sept'10): 34.92% As can be seen from the table above, the T&D losses in the JSEB"s system have reduced by over 13.51% since 2005-06. This reduction is significantly better than the overall T&D loss reduction achieved at the national level during the same period.	The Commission shows its displeasure on the inability of the Petitioner to prepare a T&D loss reduction plan. In compliance to the APTEL's direction 10 in appeal no. 129 of 2007, the Commission, while issuing the Tariff Order for FY 2010-11, had directed the Petitioner to submit its own loss reduction trajectory but the Petitioner failed to respond. In these circumstances, the Commission was compelled to work out a loss reduction trajectory for the Petitioner to achieve the T&D loss level of 15% by the end of FY 2016-17. The Commission

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
	that energy audit for all voltage levels, circles and division is undertaken by the energy audit cell of the Petitioner and the report on the same would be submitted as soon as the accurate results are achieved. The Petitioner also submitted that increase in LT network would encourage theft of electricity in the rural as well as the urban areas. However, all the efforts are being made to reduce the losses. The Petitioner has also submitted that it has constituted special task force of two teams headed by an ESE. The Petitioner submitted that it expects to reach the normative levels by FY 2014-15.	taken be informed every three months		has also reiterated the same loss reduction trajectory in the 'JSERC Distribution Tariff Regulations, 2010'. The Commission now directs the Petitioner to follow the loss reduction trajectory and submit a rolling capital investment plan to ensure reduction of losses to 15% by FY 2016-17. The plan should be submitted within three months of the issue of this Order.
Metering Plan The Commission directed the Petitioner to formulate and	JSEB submits that it has been taking steps to curb	The Petitioner has not complied with the directive	In compliance to the directives issued by the Hon' ble Commission, the JSEB has established a metering plan which	The Petitioner is directed o submit a copy of the metering plan within three

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
submit a metering plan within a period of three months from the date of issue of order. The Commission also directed the Petitioner to report the number of non-performing /defective meters category-wise in the system and an action to replace all such meters with in a period of three months.	the theft by replacing the non-performing/ defective meters on a regular basis. It is further in the process of replacement of defective meters actively and would replace all the defective meter	of submitting the Metering Plan. The Petitioner is directed to prepare and submit the comprehensive metering plan along with the technical specifications of meters to be installed at various network levels with the next Tariff Petition. The Petitioner shall ensure that the Metering plan is synchronized with the T&D loss reduction plan.	includes the following elements: (A) Metering of un-metered connections: - Connections to BPL consumers under the Kutir Jyoti category under the RGGVY scheme are being released only with meters. - The JSEB has released 4,36,106 connections under the scheme so far . All connections have been released with meters. - The JSEB has also purchased 50,000 meters for replacement of defective meters. Out of the same 5,000 meters have been allotted for installation in rural areas against Kutir Jyoti connections in the first phase. - The JSEB is targeting metering of all consumers including domestic/ commercial and the Irrigation & Agricultural categories by March, 2012. (B) Replacement of defective meters: - The JSEB has approximately 80,000 defective meters in the urban areas which are planned to be replaced by December, 2011. - The JSEB has launched incentive schemes for encouraging consumers to get burnt/ defective/ stopped meters replaced. In response to the same, 3806 meters	months of the issue of this order. Thereafter, the Petitioner is required to update the Commission on the progress made on a quarterly basis.

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
			were received from consumers, which have already been replaced	
Feasibility Study for ToD tariff implementation The Commission directed JSEB to conduct a study on the feasibility (including requirement of metering infrastructure) and potential savings that will accrue from the introduction of ToD tariffs for categories of LT industrial consumers.	JSEB submitted that it would undertake such study with the motive to provide positive results in due course of time.	The Commission directs the Petitioner to conduct the study within six months of this Order.	The JSEB is in the process of appointing consultants for undertaking the study on feasibility of Time-of-Day (ToD) tariff implementation in its license area. The JSEB shall submit the report which is targeted to be completed by June, 2011	The Commission is disappointed that the Petitioner is not sticking to the timelines given by the Commission. The Commission expects to get a copy of the report by end of June, 2011 as submitted by the Petitioner.
Cost of Supply study The Commission directed the Petitioner to carry out appropriate studies to determine category wise and voltage wise T&D losses and cost of supply and submit it to the Commission within a period of six months from the date of issue of order	The Petitioner submitted that it has undertaken few sample study of feeders supplying power to only rural consumers on a test basis and the results of the study will be made available to the Commission. The Petitioner is also in the process of hiring the services of experienced consultant to undertake the study	The Commission directs the Petitioner to submit the action taken report in this regard within three months of the issue of this order.	The JSEB is in the process of appointing consultants for undertaking the study on category wise/ voltage wise Cost-of- Supply (CoS). The JSEB shall submit the report which is targeted to be completed by September, 2011.	The Commission directs the Petitioner to submit the latest position with regard to appointment of consultants to conduct cost of supply study. Further, the Commission expects the report on COS to be submitted by the end of September, 2011 as submitted by the Petitioner.

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
Performance of Self owned power plants The Commission directed the Petitioner to undertake necessary measures for increasing the PLF to its optimal level and to reduce SHR from the existing level and appropriately benchmark the working units with plants of similar background and age. The Commission directed the Petitioner to step up its supervision to reduce the transit loss. The Commission directed the Petitioner to look into the matter of silting immediately and resolve the conflicts, if any, on priority to improve generation from this plant.	The Petitioner submitted that it has taken up overhauling and repairing work for almost all the units of PTPS and the timeliness for commissioning of each is submitted with the proposal. JSEB submitted that CCL was supplying +200 mm sized coal which was lumpy and oversized mixed with stones due to which coal handling plant of PTPS used to get damaged frequently, including tearing of conveyor belt etc. During FY 2005-06, CCL arranged crushing of coal at their end and PTPS requested CCL authority for loading of 100% crushed coal of PTPS.CCL agreed and supplied crushed coal to PTPS at the crushed coal rate. Since then the transit loss has been declining and has come down to 2-2.5% with respect to 5.5% in FY 2003-04.	The Commission directs the Petitioner to submit quarterly reports on the operational parameters i.e. PLF,SHR, Auxiliary Consumption, Price of Coal and oil, GCV of Coal and oil, transit losses for the generating stations to the Commission. The Commission also directs the Petitioner to submit the action taken report on the tendering process for O&M of Getalsud Water Project within three months of the issue of this order.	In compliance to the directive given by the Hon‟ble Commission, the JSEB has assessed the cost of R&M for restoration of the various units of the PTPS are summarized below: - Unit 1: 50 MW: Under shut down due to jamming of rotor.: Cost of restoration Rs 5.3 Crs. - Unit 2: 50 MW: Under shut down due to boiler explosion. Cost of restoration Rs 5 Crs. - Unit 3: 50 MW: Is planned to be phased out in accordance with the recommendation of the CEA. - Unit 4: 50 MW: Running: Cost of restoration Rs 3 Crs. - Unit 5: Is planned to be phased out in accordance with the recommendation of the CEA. - Unit 6: 100 MW: Running with one boiler: Cost of restoration Rs 64 Crs. - Unit 7: 110 MW: Under shut down since 0.09.2010 due to earth fault in stator: Cost of restoration Rs 271 Crs. - Unit 8: 110 MW: Under shut down since August ‟03. M/s Evonik is consultant. : Cost of restoration Rs	The Commission directs the Petitioner to submit quarterly report on progress made under R&M schemes of the respective units. The Commission once again directs the Petitioner to submit the action taken report on the tendering process for O&M of Getalsud Water Project within three months of the issue of this order.

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
	JSEB submitted that there was a meeting regarding the silting problem and it was decided that a competent agency would be engaged to carry out the operation and maintenance of Getalsud Water Project and therefore, an EOI will be issued for engaging a competent agency.		256 Crs. - Unit 9 & 10: 110 MW each: Damaged in fire incident on 10.08.06. Restoration is being done.: Cost of restoration Rs 331.11 Crs. The total restoration/ R&M cost thus stands at Rs 1045.41 crs. JSEB has already commenced work against Units 9 & 10 and the same is expected to be completed by February, 2012 and October, 2011 respectively. The CEA has already recommended retirement of units 3 & 5. The JSEB is yet to take a decision on the retirement of the units in accordance to the recommendations of the CEA. In case, it is decided that these units shall be retired, the R&M expenses estimate will not be incurred by the JSEB. In view of the above, JSEB prays to the Hon"ble Commission to calculate the PLF based only on the operational units of the plant, that is, units 1, 2, 4, 6 and 7. A comparison of the efficiency levels of the PTPS along with those allowed for the Barauni (BTPS) by the Hon"ble Bihar Electricity Regulatory Commission have been	

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
			elaborated in the Chapter on True Up provided in this petition earlier. PUT ON SIKIDRI The JSEB has no control over the availability of water which is grossly dependent on rains. Waterways department make available water only after ensuring adequate drinking water for months Together.	
Power Purchase and UI Sale The Commission directed the Petitioner to first meet the need of its consumers and resort to UI sale only in case of zero load shedding and zero power outage situations. The Commission also directed the Petitioner to post the following information on its website every month: a. Month b. Energy Purchased c. Electricity bill on account of energy purchased d. Hydel and Thermal generation e. Energy sold f. Energy billed g. Revenue collected	JSEB submitted that sale through UI is out of its control and in this mechanism the exchange happens in both ways. Sometimes, JSEB draws excess power than its scheduled drawl paying for the power at the rate prevailing at the time of drawl and sometimes draws less power than its actual scheduled drawl thus earning an amount at the prevailing rate. The Petitioner submitted that updated position of unit purchased from thermal units as well as hydel units along with UI	The Commission directs the Petitioner to submit within three months of this order the status report on the operation of website and the data to be posted as per the earlier directives of the Commission. Action taken report in this regard within three months of the issue of this order.	The JSEB has fully complied with the directive given by the Hon‟ble Commission. It is submitted that the JSEB has never resorted to load shedding/ restricted any load for enhancing UI sale. Rather, UI sale is an outcome of the availability of contracted power by the generation stations and actual drawal of power by consumers. Regarding posting of information on website, JSEB‟s website is likely to be activated in the month of January, 2011 after which the required information may be uploaded.	The Commission is satisfied with the response of the Petitioner.

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
h. Energy sold under UI i Amount received under UI	sales and purchase for FY 09-10.			
Actuarial Studies The Commission directed the Petitioner to provide details of actuarial studies being undertaken by it with the next Tariff Petition, as any revision in the terminal benefits would have to be based on the same.	The Petitioner submits that that it has appointed an individual actuarial and LIC for conducting actuarial studies for JSEB. It states that it has already provided the preliminary data to LIC and has not yet received any preliminary report on the same. JSEB further states that whenever the analysis is done and first hand results are available, a brief report would be submitted to the Commission.	The Commission directs the Petitioner to follow up with the actuarial for the submission of the report and the status report is submitted to the Commission within 3 months of the date of the issue of this order.	In compliance to the directive given by the Hon"ble Commission, the JSEB had earlier appointed an independent Actuary and LIC for conducting actuarial studies for the JSEB. However, the same has resulted in no outcome so far despite persistent pursuance by the JSEB. The JSEB intends terminate the contracts awarded earlier for the work and award fresh contract to a new agency. The progress on appointment of the new Actuarian shall be reported to the Hon"ble Commission by March, 2012.	Till date the Petitioner has not submitted any information with respect to appointment of actuary for carrying out actuarial valuation. The Commission is also concerned of the unsuccessful outcome of the earlier study and directs the Petitioner to explain in detail, within one month, the reason for the failure of the study and the cost involved in the study. The Commission directs the Petitioner to appoint the actuary on a priority basis, after ascertaining its technical capability and submit its report within a period of three months from the issue of this order.
Capitalization and Asset Registers The commission directed the Petitioner to declare its	JSEB submitted that it has already declared the capital expenditure plan for FY 2008-09 along with the	The Commission directs the Petitioner to conduct study and creation of Fixed Asset Registers(FAR).	The JSEB has been following the prescribed accounting policies for capitalization of expenses of capital nature. In accordance with the same any capital expenditure against any particular work is	The Commission is satisfied with the response of the Petitioner and directs the Petitioner to submit report every half

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
capitalization policy and to provide the details regarding CWIP in the next Tariff Petition. The Commission therefore, directs the Petitioner to provide data related to fixed assets and maintain an asset register classifying assets on the basis of appendix II of, JSERC Regulations, 2004.	ARR JSEB further submitted that the asset registers are not readily available due to the bifurcation from the erstwhile Bihar and huge effort will be required to create it.	The Fixed Assets register should be prepared within the time bound manner and the Petitioner should submit the action taken report to the Commission in this regard within six months of the issue of this Order.	accounted as capital work in progress (CWIP) until the same is commissioned/ put to use. The JSEB in compliance to the directives issued by the Hon"ble Commission in its previous Tariff Order has streamlined its provisional accounts. The provisional accounts upto FY 2009-10 have already been approved by the board of the JSEB and are at different stages of progress of being audited by the CAG. The JSEB has already formulated its capitalization policy, which has been circulated to the field offices for compliance. JSEB has formed committee"s for physical verification stores and emphasis is being given to proper record keeping. The task of physical verification of stores has already been completed for some places. The Capital Works in Progress (CWIP) both opening and closing values are provided in the provisional accounts for each year and have been used for the purpose of determination of aggregate revenue requirement in the this petition.	yearly.

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
			It is submitted that the JSEB was formed after the bifurcation of the BSEB on formation of the separate State of Jharkhand and the asset registers have not been maintained at the field offices for long. The JSEB in compliance to the directives of the Hon"ble Commission has issued firm instructions to all its concerned field offices. It is to be noted that as the process is being streamlined by the JSEB, the results of the same may take some time. The JSEB shall submit status on the creation/ progress on the issue of asset registers every six months.	
Audited Accounts The Commission directed the Petitioner to submit the audited provisional accounts and asset registers for the previous years with detailed explanation and clarification. The Commission also directed the Petitioner to submit both of these along with the next Tariff Petition otherwise the Commission in view of data uncertainty will not allow any return on equity in the next Tariff	The Petitioner submits that the audit of provisional accounts is underway and the delay in finalisation is partly due to the decision on finalisation of opening balance of the balance sheet of JSEB. The Petitioner states that it has already approved provisional accounts till FY 2005-06 and submitted the same to CAG for audit.	The Commission directs the Petitioner to file the next Tariff Petition for FY 2011-12 by 1st November 2010 along with the audited accounts.	The JSEB in compliance to the directives issued by the Hon"ble Commission in its previous Tariff Order has streamlined its provisional accounts. The provisional accounts upto FY 2009-10 have already been approved by the board of the JSEB and are at different stages of progress of being audited by the CAG.	The Commission in the public interest as well as in the interest of the Petitioner has determined the ARR and Tariff Order of the Petitioner for FY 2010-11. However, for ensuing years the Commission directs the Petitioner to pursue with the CAG for timely audit of provisional accounts for all the previous years so that the final truing up can be conducted on that basis.

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
Order.	The audit of accounts by CAG is underway and would be submitted to the Commission upon approval of finalised Provisional accounts by CAG.			Progress report should be submitted to the Commission on quarterly basis.
Delayed Payment Surcharge The Commission directed the Petitioner to make all efforts to collect the DPS promptly and also maintain complete records of the same, which should be submitted along with the next Tariff Petition	The Petitioner states that the recovery of DPS becomes difficult as it is mostly disrupted. However, it is making all the efforts to collect DPS amount at the earliest and the details of the same would be provided to the Commission in due course of time	The Commission directs the Petitioner to submit half yearly reports on the collection and arrears of DPS. The Commission also directs the Petitioner to formulate measures for resolving the problem of collection of DPS and submit the report within six months of the issue of this Order.	The JSEB in compliance to the directives given by the Commission has been making concerted efforts for recovery of Delayed Payment Surcharge from consumers. However, it is submitted that a large portion of the DPS is on account of long-pending/ disputed bills of certain consumers most of which either pertain to Government installations or consumers who have gone to courts. Therefore, the overall collection against the same has remained negligible against over the years.	The Commission is displeased with the efforts of the Petitioner on the issue. The Commission again directs the Petitioner to take appropriate action on live consumers not paying DPS and also prepare a strategy for collection of DPS from disconnected consumers and submit the same to the Commission within three months of the issue of this Order.
Standard of Performance The Commission directed JSEB to implement the Standards of Performance Regulations by 1st January 2008 and submit the compliance report to the Commission thereafter. If the	The Petitioner submitted that it is in the process of strengthening the network and has also awarded work for operation of fuse call centres, Zonal Call Centres.	The Commission directs the Petitioner to implement the Standards of Performance with immediate effect, failing which the penalty as specified in the Tariff Order for FY 2006-07 will be increased from 2.5% to 3%.	In compliance to the directive given , the JSEB has implemented the Standards of Performance, Regulations issued by the Hon"ble Commission.	The Commission appreciates the progress made in this regard by the Petitioner and has decided to relax the penalty on SoP from FY 2010-11 onwards. However, the Petitioner needs to give regular

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
Petitioner fails to implement this, the energy charge for all categories may be reduced by 2.5% from that date.	The Petitioner further submits that the tenders are under process for establishing Call Centres, peripheral meters, consumer indexing etc. The Board has requested for review of the penalty for non-performance and suitable time be given for cent percent performance.			updates to the Commission as per the information sought in the JSERC Standards if Performance Regulations, 2005. The Commission Petitioner directs the Petitioner to comply with the SoP Regulations and submit information in the timelines as specified in the said regulation. The failure to do so would reinstate the Penal charges for the period of non-compliance.
Rural Consumers The Commission directed JSEB to undertake a cost of service study specifically for rural consumers, in order to determine the level of specific subsidies and support needed for incentivizing the rural.	The Petitioner states that it has already collected information on supply of rural feeders and submitting the results to the Commission. However, the cost of service study would be detailed out and submitted to the Commission in due course of time.	The Commission directs the Petitioner to submit the information on supply of rural feeders as well as action taken on Cost of Service (CoS) study within three months of the issue of this order.	The JSEB is clubbing determination of CoS for rural consumers as a separate task in the overall CoS study which is proposed to be conducted through appointment of consultants which has already been elaborated earlier.	The Commission once again directs the Petitioner to submit the information on supply of rural feeders. The Commission has already directed the Petitioner to submit the latest position with regard to appointment of consultants to conduct cost of supply study. Further, the Commission expects the report on COS to be submitted by the end

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
				of September, 2011.
Rural Electric Co-operative (Bulk Supply) The Commission directed the Petitioner to send the details of Rural Electric Co-operative category (Bulk Supply) to all potential rural consumers especially to Village Panchayats and then assess whether this category should be continued in future or not.	JSEB submitted that it does not have any consumer under this tariff category because of non-existence of Panchayats in the state and can be promoted once the Panchayat elections are over. The Petitioner opines that this category may be retained as in future such consumers may request for a connection under this category.	The Commission views that since sufficient time has passed since the Tariff Petition was filed so the Petitioner should submit a status report whether any consumer has applied under this category and also whether the Petitioner has been able to identify any potential consumers. The directive should be complied within three months of this order failing which this category will be deleted .	The JSEB has instructed its field officials to share and discuss the details of the Rural Electric Co-operative category tariff with potential rural consumers/ village panchayats. JSEB is of the view that due to high level of losses in the rural feeders/ areas across the State, consumers do not appear to be welcoming the tariff approved by the Hon"ble Commission at the approved discounts with respect to the individual connections under the DS-1/ Kutir Jyoti category. It is proposed that a higher discount on the Rural Electric Co - operative (Bulk Supply) category as proposed in the Tariff Petition will encourage consumers to shift under the new category introduced by the Hon"ble Commission. The JSEB has also proposed Government Subsidy for this tariff in accordance with the tripartite agreement entered into between the State Government, the REC and the JSEB.	The Commission directs the Petitioner to generate awareness among the consumers of the subsidized rates and government subsidy available under this category.
High Tension Service and	The Petitioner submitted the data pertaining to	The Commission views that since the Petition was filed	The JSEB in compliance to the directive given by the Hon"ble	The Petitioner has complied with the

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's View in the Tariff Order of FY 2010-11	JSEB's Response in the Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
EHTS Category The Commission directed the JSEB to provide details of number of consumers, connected /sanctioned load, number of hours of supply and revenue generated through minimum charges for this category in FY 2004-05, FY 2005-06, FY 2006-07 and FY 2007-08 (April-June 2007) for Extra High Tension Service (at 132 kV) within two months of the issue of the order. The Commission may revise the applicable minimum charge to this category thereafter.	number of consumers and load.	last year, the Petitioner had sufficient time since then to get the required data compiled. However, only the number of consumer and load has been supplied to the Commission. The Commission directs the Petitioner to submit the complete data within six months of this Order.	Commission has already submitted the requisite information in its communication dated November 30, 2010	directive.

SECTION 17: STATUS OF THE DIRECTIVES ISSUED BY THE COMMISSION IN TARIFF ORDER OF FY 2010-11

Directives as per Tariff Order of FY 2010-11	Petitioner's response in the Tariff Petition of FY 2011-12	Commission's View in the Tariff Order of FY 2011-12
Complaint Redressal Mechanism The Commission directed the Petitioner to implement the complaint redressal mechanism at the grass root level within six month of the issue of the Order and submit the compliance report to the Commission within the time frame	The JSEB has planned to establish a compliant redressal mechanism in its license area. The copy of the plan/ formulation has already been submitted to the Hon"ble Commission in the communication dated November 30, 2010. "Computerized complaints registration and moniroting system" based on toll free numbers is being started in Ranchi from January 1, 2011. The same will be replicated in other areas of the JSEB during the next six months.	The Petitioner is directed to submit the latest progress report on implementation of complaint redressal mechanism within three months from this order.
Consumer Grievance Redressal Forum (CGRF) The Commission directed the Petitioner to set-up new unit(s) of CGRF within six months of the issue of this Order.	In compliance to the directive/ order given by the Hon"ble Appellate Tribunal of Electricity and as communicated by the Hon"ble JSERC, the JSEB is in the process of establishing four (4) more VUSNF, besides one already operational at Ranchi. The JSEB intends to complete the process of creation of the additional four VUSNF"s by July, 2011.	The Petitioner is directed to submit the progress report on setting up of new VUSNF within three months of the issue of this order.
Bill Payment Mechanism The Commission directed the Petitioner to initiate the drop-box facility for bill deposition and also develop a plan for online payment of bills. The Petitioner was also directed to tie-up with various Banks for availing the facility of collection of payments through Banks. The compliance in this respect was to be reported within six months of the Order.	In compliance to the directive given by the Hon"ble Commission, the JSEB has initiated the process of installation of state-of-the-art ATP (Any Time Payment) machines based on latest technology. JSEB has already installed 6 ATPs in Ranchi at selected populated places. Installation of 4 ATPs in Jamshepur is in process. On validation of consumer response to the new ATP machines being installed, the same would be extended throughout the State. Besides the ATP based collection avenue, collection through Banks and Post Offices are already in place and the JSEB consumers can opt to make payments through any of these avenues. Drop box facilities have been introduced in Ranchi and are being extended to other parts.	The Commission is satisfied with the steps initiated by the Petitioner. However, a lot remains to be done. The Commission directs the Petitioner to update the Commission regarding the establishment of bill payment mechanism by way of periodical reports.

	The JSEB in compliance to the directives given by the Hon"ble Commission has also extended the facility of NEFT payment for HT consumers. The JSEB has developed its own website with huge server capacity to facilitate online bill payments. This is expected to be launched by February, 2011. Also, provision for collection of cheque form the consumers at the spot itself in case of spot billing.	
Billing related issues The Petitioner is directed to develop a comprehensive metering plan. The Petitioner should also ensure that it strengthens its metering, billing and collection mechanism, especially in the loss affected areas.	In order to achieve 100% metering, JSEB has purchased single phase meters and is installing them on a war footing basis. Further, tenders for other types of meters are in process. JSEB also introduced a double discount based voluntary scheme for meter replacement. In this process, thousands of meters have been installed and in 2011, the whole metering process will be completed. Taking cognizance of the directive given by the Hon"ble Commission the JSEB has initiated the process of introduction of Spot Billing, the bids received the same are in the finalization stage. It is expected that the issues in the present billing system with substantially get reduced to acceptable/ negligible levels under the new spot billing finalized for Ranchi, Jamshedpur, Dhanbad and Dumka area boards. It is being rolled out from January/ February, 2011. In addition to correct billing, spot billing will also facilitate reduction of the time consumed in the billing process, as the bills would get delivered to the consumes at the time of meter reading itself.	The Commission directs the Petitioner to submit the latest progress report on billing related issue within three months of the issue of this Tariff Order.
Timely Energisation of new connection The Commission had directed the Petitioner to take all the steps to implement the standards of performance and ensure the new connections are given on time as per the Standards of Performance Regulations, 2005.	In compliance to this directive, the JSEB has apprised its concerned field officials regarding the Clause 6 of Supply Code issued by the Hon"ble Commission. All officials have been instructed to ensure compliance against the timelines prescribed therein. During three month long camps in September - November, 2010, new connection forms were being accepted and sanctioned then and there following due process. JSEB has	The Commission directs the Petitioner to submit the latest progress report on number of applications received for new connections and number of connections energised since January 1, 2011 within three months of the issue of this Tariff Order.

	received reports from its field offices that the same is being complied with. However, as a matter of practice the JSEB has been repeatedly instructing its field officials to comply with the said regulation and also report if there is any exception along with detailed reasoning for the same.	
Camps for providing new connections in uncovered areas The Commission directed the Petitioner to ensure that it conducts survey of such areas, develops a marketing and awareness program for such areas and provide new connections through special camps. The Commission directed the Petitioner to develop an action plan for the above and submit the same to the Commission within six months of the Order.	It is submitted that the JSEB is already undertaking mass scale electrification and release of connections to rural/ BPL consumers under the RGGVY scheme which is presently under implementation. In compliance to the directive given by the Hon"ble Commission the JSEB had in the recent past organized three months camps for "Load Disclosure Scheme", which was a multipurpose camp and consumers were allowed/ encouraged to submit applications for new connections also. In view of the good response received in the camps organized, the JSEB intends to continue the process of organizing camps in identified areas on a regular basis.	The Petitioner is directed to submit the progress report on the activity on a quarterly basis.

SECTION 18: NEW DIRECTIVES

Strengthening the Complaint Redressal Mechanism

18.1 During the Course of public hearings, the Commission felt that the Petitioner needs to strengthen its Complaint Redressal Mechanism at the grass root level. One of the compliant of the consumers was that the officers were not available in the offices due to some reason or the other. In view of this, the Commission directs the Petitioner to instruct all the field officers to be available in their offices on the specified days. Such days should be displayed at the notice board in all the offices of the Petitioner for information of consumers. This would ensure that the consumers can contact them and have their grievances redressed.

18.2 Further, the Commission directs the Petitioner to organize camps in the field for the benefit of the consumers as under.

(a) Assistant Engineer - atleast once in every fifteen days

(b) Executive Engineer- atleast once in a month.

(c) Superintendent Engineer- atleast once in two months.

(d) General Manager- atleast once in three months.

18.3 In all these camps, the concerned official will receive petitions/complaints and redress the grievances in a time bound manner and as per their level of authority.

18.4 The Commission feels it desirable that the Board members visit their Board Area Offices atleast once in six months to review the various programs and schemes and also the need of resources including material in various Board Area of Offices and meet consumer as well.

Manpower planning study for PTPS Plant

18.5 The Commission feels that the generation function of the Petitioner is highly over-staffed. The Commission directs the Petitioner to conduct the manpower planning study for the generation function, keeping in view its existing and planned performance.

Uploading of the Tariff Petition on the website

18.6 The Commission has noticed that the Petitioner has uploaded the present Tariff Petition on the website of Government of Jharkhand instead of its own website. The Petitioner in future is directed to upload the tariff Petition on its own website also. It has also been noticed that the website of the Petitioner is not fully functional and also not updated. The Petitioner is directed to update its website and upload all the relevant information on it.

Interest on consumer security deposit

18.7 During the course of public hearing, lot of consumers have raised concern on the rate at which the interest on consumer security deposit is to be paid by the Petitioner. The regulations specify that interest on consumer security deposit is to be paid at the bank rate. The Commission specifies that the rate at which the interest on consumer security is to be paid will be the prevailing bank rate of RBI.

Tariff for HTSS consumers

18.8 During FY 2010-11, the Commission has specified that the tariff for consumers using induction or arc furnace should be on the basis of the specification given by the manufacturer of the furnace and not on the basis of the measurement.

18.9 During the course of the public hearing, several consumers raised this issue that the direction given in this regard is not followed by the Petitioner for the old furnaces and the plea of the Petitioner is since the Tariff Order was for FY 2010-11, this direction will be followed only for the new furnaces and for the old furnace, measurement procedure will be followed. The Commission clarifies that irrespective of the fact whether the furnace is new or existing, the tariff is to be determined as per the specification given by the manufacturer of the furnace and not on the basis of measurement.

Online filing of the application for new connection

18.10 The Commission directs the Petitioner to introduce online filing of the application for new connection and also to provide the applicant with the details like the application fees, amount of security deposit, service connection charges before releasing the connection. The Licnesee should also ensure that the entire process from the date of application to providing the connection including consumer allotment number should not take more than the time stipulated as per the JSERC (Electrcity Supply code) Regulations, 2005. The licensee is directed to also ensure that while releasing the connection, consumer/service connection number should be given to the consumer and these details should be passed on to billing section for timely issuance of the bills.

Meter reading related issue

18.11 During the Public hearing, the consumers complained that during the meter reading exercise, they are not made aware of the previous reading of the meter due to which the consumers are not able to know the units consumed by them during the billing period. The consumers stated that due to the lack of awareness they are not able to point out wrong reading cases at the time of readings and have to go through harassment of wrong billings later on. The Consumers suggested that a ‘Meter Reading Card’ be pasted near the meter of the consumers and the meter reader writes the reading on the meter reading card as well while taking the reading so that the consumer is aware of the consumption pattern on the meter every time the meter is read.

18.12 The Commission appreciates the concerns of the consumers and directs the Petitioner to consider the suggestions made by the consumers or any other alternative arrangements to ensure the consumer is made aware of the consumption at the time of reading of their meters. The Petitioner is directed to submit a action taken report within six months of the issue of this Order.

Overtime Expenses

18.13 The Commission has noticed that the Petitioner is claiming a substantial amount towards the overtime given to its employees. The Commission is of the view that the amount claimed by the Petitioner on this account is on a higher side therefore, the Commission directs the Petitioner to keep a check on the overtime expenses being claimed by the employees. The Petitioner should ensure that the overtime is given only in extreme cases and should also record the reason for keeping the employee engaged which should be signed by the supervisor.

Separate filing for each function

18.14 The Commission directs the Petitioner to file the separate ARR for generation, transmission and distribution functions from next Year as required by the Tariff Regulations, 2010. It may also be noted that business plan is required to be filed in respect of generation function as the next year will be the first year for the control period. In respect of transmission and generation function, next year will be the base year for the control period starting from FY2013-14, the Petitioner is required to submit its baseline data in accordance with the relevant regulations in respect of transmission and distribution functions.

Payment of dues to TVNL & Revision of PPA

18.15 The Commission has observed that the Petitioner has to pay huge sum of money to TVNL on account of power purchased from it. The Petitioner is directed to work out a payment mechanism for the unpaid amount and submit the same to the Commission within three months from the date of the issue of this Tariff Order.

18.16 The Commission has observed that the Power Purchase Agreement (PPA) between the Petitioner and TVNL has already expired in August 2010. The Commission in its previous Tariff Order had directed the Petitioner to renegotiate its PPA and get the same ratified by the Commission.

18.17 TVNL has submitted to the Commission that it has already sent the PPA to JSEB vide letter no. 742/10-11 dated 11th October, 2010, for its comments but even after repeated reminders, it has not received any response from JSEB.

18.18 The Commission is displeased with the events and views that it is a matter of grave concern that the Petitioner and TVNL have not executed the PPA even after almost one year of expiry of the earlier PPA.

18.19 The Commission directs the Petitioner and TVNL to execute the PPA within three months of the issue of this Tariff Order.

Data adequacy in next Tariff Petition and timelines

18.20 The Commission has observed lot of discrepancies in the Tariff petition filed by the Petitioner for FY 2011-12. The representatives of the Commission regularly communicated with the officials of the Petitioner to discuss the various issues pertaining to the petition filed by the Petitioner. The Petitioner is directed to remove various deficiencies pointed out by the Commission and at the same time should also ensure that the next Tariff Petition of FY 2012-13 should be free from such errors and omission pointed out during the course of discussion.

18.21 The Commission directs the Petitioner to come up with the next Tariff Petition for FY 2012-13 removing the various data deficiencies highlighted above along with the provisional accounts for FY 2010-11 and latest actual figures of FY 2011-12.

18.22 The Commission also directs the Petitioner to file the Business Plan and MYT Tariff Petition for the generation function for the control period FY 2012-13 onwards within the stipulated time.

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on this the 22nd day of July, 2011.

Date: 22nd July, 2011

Place: Ranchi

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

ANNEXURE-I

List of participating members of public in the public hearing

S No.	Name	Address / Organisation if any	Place of Hearing
1.	Nagesh Kumar	State President, Rashtriya Bikash Biklang Parti, Hazaribagh	Hazaribagh
2.	S.C.Mishra	Chief Engineer (Comml.) JSEB	Hazaribagh
3.	Amit Banerjee	Finance Con., JSEB	Hazaribagh
4.	Manmohan Kumar	EEE (Tech), JSEB, Hazaribagh	Hazaribagh
5.	Parveen Kumar Rajak	UDA. JSEB, Hazaribagh	Hazaribagh
6.	Amarjit Prasad	Hazaribagh	Hazaribagh
7.	Bikrama Ram	GM-cum-CE	Hazaribagh
8.	Ayush Prasad	Consultant (Deloitte)	Hazaribagh
9.	Ritesh Yadav	Consultant (Deloitte)	Hazaribagh
10.	Om Prakash	ESE, Hazaribagh	Hazaribagh
11.	K. Prasad	Dy. GM, Hazaribagh	Hazaribagh
12.	R.K.Singh	EEE/S/Hzaribagh	Hazaribagh
13.	C.D. Kuamar	EIC/JSEB	Hazaribagh
14.	R.V.Mishra	EE/S	Hazaribagh
15.	K.D.M. Singh	AEE/S/Hazaribagh	Hazaribagh
16.	Sharavan Kumar	EEE	Hazaribagh
17.	Arjun Soni	R. Express	Hazaribagh
18.	Deo Kumar Raj	Zila Parishad Sadashya, Daru Prakhand	Hazaribagh
19.	I.D. Chaudhary	EEE/S/Chatra	Hazaribagh
20.	H.P. Barnwal	AEE/S/Hazaribagh	Hazaribagh
21.	Amit	Hazaribagh	Hazaribagh
22.	V.K. Singh	TS to M (D)	Hazaribagh

23.	P.R. Ranjan	G. M. Cum C.E. Dhanbad	Hazaribagh
24.	K. N. Thakur	Member (Distribution), JSEB	Hazaribagh
25.	K.C. Goyal	D.Z.F.M.A. Dhanbad	Hazaribagh
26.	Md. Ratiutab	Putia Bazar, Dhanbad	Hazaribagh
27.	Manish Kumar	Kumbhar toli, Hazaribagh	Hazaribagh
28.	Bablu Kumar	Press, Sanmarg	Hazaribagh
29.	Saroj Kr. Jha	JSEB	Hazaribagh
30.	R.R. Nag	JSEB	Hazaribagh
31.	Jamaluddin	Press, Prabhat Khabar	Hazaribagh
32.	Dilip Verma	Press, Prabhat Khabar	Hazaribagh
33.	ShreeKrishna Mehta	Hazaribagh	Hazaribagh
34.	M.L. Vishwakarma	Hazaribagh	Hazaribagh
35.	Janardan Vishwakrma	Mangal Bazar	Hazaribagh
36.	Deepak Kumar Sharma	V.V.J. K, Hazaribag	Hazaribagh
37.	Gunwant Kumar	Hazaribagh	Hazaribagh
38.	Dr. P. Nath	Hazaribagh	Hazaribagh
39.	S.C.Pathak	K.B.Road, Hazaribag	Hazaribagh
40.	Chandra Prakash Jha	K.B.Road, Hazaribag	Hazaribagh
41.	B. Mallik	Sadhna News	Hazaribagh
42.	Raj Kumar Giri	Aryan News	Hazaribagh
43.	Pramod Kumar	India News	Hazaribagh
44.	Raneadeo Pandey	Mahuaa News	Hazaribagh
45.	Sukhdeo Nayak	H.H. Road Hazaribag	Hazaribagh
46.	Rajat Kumar Singh	D.W.& S dinisia Hazaribag	Hazaribagh
47.	Ravi	Dainik Bhaskar	Hazaribagh

48.	Jhanku Saw	Simria	Hazaribagh
49.	Ashok Nishad	Hazaribagh	Hazaribagh
50.	Partap Jain	North Chotanagpur Chamber of Commerce	Hazaribagh
51.	Rajan Jain	North Chotanagpur Chamber of Commerce	Hazaribagh
52.	Umesh Kumar	Dainik Bhaskar	Hazaribagh
53.	Krishna Gupta	Aaj, Paper	Hazaribagh
54.	Ashok Kumar	JSEB	Hazaribagh
55.	Ajay Mishra	Hindustan, Paper	Hazaribagh
56.	Sanjay Kumar Jha	Deoghar	Dumka
57.	Ashok Kumar Agrawal	SPCCI, Deoghar	Dumka
58.	Binod Kumar Sultania	SPCCI, Deoghar	Dumka
59.	Alok Kumar Mallick	SPCCI, Deoghar	Dumka
60.	Tarkeshwar Singh	SPCCI, Deoghar	Dumka
61.	Pradip Bajla	SPCCI, Deoghar	Dumka
62.	Devendra Prasad	AEE/MRT, Dumka	Dumka
63.	Ayush Prasad	Deloitte, New Delhi	Dumka
64.	K.N. Thakur	Member (D), JSEB	Dumka
65.	U.N. Roy	G.M.-Cum - C.E., Dumka	Dumka
66.	P.L. Gulgutia	Madhupur	Dumka
67.	B.M. Singh	Madhupur	Dumka
68.	R.K. Singhania	Madhupur	Dumka
69.	Ramesh Gulatia	Madhupur	Dumka
70.	S.C. Mishra	JSEB/CE (Commercial)	Dumka
71.	Ramesh Gulatia	EEE/JSEB	Dumka
72.	C.D. Kumar	E/C	Dumka

73.	Ashok Kumar Agrawal	ESE Deoghar	Dumka
74.	Binod	Deoghar	Dumka
75.	R.N. Sharma	Industry Association, Deoghar	Dumka
76.	Sanjay Singh	EEE, Dumka, JSEB	Dumka
77.	Arbind Jha	Dumka	Dumka
78.	R.P Yadav	AEE/D/R	Dumka
79.	D. Jha	E.S.E./Dumka	Dumka
80.	Raj Nath Singh	AEE/BNT	Dumka
81.	Birendra Kisku	AEE/Dumaka	Dumka
82.	G. Mulherjee	AEE/Madhupur	Dumka
83.	A. Rao	Dumka	Dumka
84.	Bnod Kumar Keshri	Bandrajodi Chowk, Dumka	Dumka
85.	Rudra Anand	Shastri Nagar, Dumka	Dumka
86.	Amzad Khan	Lakshi Kundi, Dumka	Dumka
87.	Uday Kuar Keshri	Larti Kupedi	Dumka
88.	R. S. Ram	EEE/S/Jamtara	Dumka
89.	G. P. Barnwal	AEE/S/Mihijam	Dumka
90.	Suresh Kuama	AEE/Jamtara	Dumka
91.	Sachin Rajak	Tin Bazar, Dumka	Dumka
92.	Raj Kumar Upadhyay	Tin Bazar, Dumka	Dumka
93.	Shailendra Sinha	D. Road, Dumka	Dumka
94.	Jai Prakash Jha	Nohinat, Dumka	Dumka
95.	R. R. Nag	J.S.E.B., Ranchi	Dumka
96.	Mustak Ali	Sanyuktya Sachiv, Dumka	Dumka
97.	Siyaram Ghiriya	Dumka Chember of Commerce, Dumka	Dumka

98.	Rajeash Kumar Gupta	Dainik Jagran, Dumka	Dumka
99.	Ujjwal Kumar	Repoter, Dainik Jagran, Dumka	Dumka
100.	Sushil Kumar	Dumka	Dumka
101.	Jai Prakash Jhunjhunwala	Dumka	Dumka
102.	Md. Firoj	Dumka	Dumka
103.	Satyadeo Prasad Singh	AEE/Mehijam	Dumka
104.	Md. Harun	JEE Paraiyahat	Dumka
105.	Suresh Rai	EEE/S/Godda	Dumka
106.	Pawan Bhalotia	Annapurna Rice Mill	Dumka
107.	Sunil Bhalotia	Shree Ganesh Udyag, Dumka	Dumka
108.	Manoj Agarwal	Baby Rice Mill Pvt. Ltd	Dumka
109.	Ritesh Kumar Sharma	Gandhi Maidan, Dumka	Dumka
110.	Prameshwar Jha	Dumka	Dumka
111.	Naresh Verma	Dumka	Dumka
112.	Dinesh Tiwari	Dumka	Dumka
113.	Pritam Chanchal	Dumka	Dumka
114.	Satish Kumar Mandal	New Babu Para, Dumka	Dumka
115.	Md. Farooque Azam	Dangalpara, Dumka	Dumka
116.	Ajay Kumar Mhanka	Main Road, Dumka	Dumka
117.	Pradip Mondal	Shikari Para, Dumka	Dumka
118.	Radheshyam Verma	Sri Ram Para, Dumka	Dumka
119.	Anup Kumar Sinha	Tin Bazar, Dumka	Dumka
120.	A. K. Mawandia	Adhunik Akshat Udyog Pvt. Ltd., Dumka	Dumka
121.	Biren Kumar	Masalia	Dumka
122.	Lal Babu Singh	Junior Engineer, D.S.S. Jama	Dumka

123.	Rakesh Kumar	Sadhana News	Dumka
124.	Bikash Kumar Pandey	Khijuria, Shashtri Nagar, Dumka	Dumka
125.	Manjit Upadhayay	Nehar Park, Dumka	Dumka
126.	Md. A. Akhatar	Damgal Para	Dumka
127.	Md. Ibroeul Haque	Damgal Para	Dumka
128.	Md. Taj Hussain	Damgal Para	Dumka
129.	Anil Kumar Roy	Baxi Bandh Road, Dumka	Dumka
130.	Ramdev Sahu	Kuldip Singh Road, Dumka	Dumka
131.	Chandan Kumar Jha	Bakshi Bandh Road, Dumka	Dumka
132.	Smt. Makku Soren	Ramgarh, Vill. Mohanpur, Dumka	Dumka
133.	Sashi Hansda	Ramgarh, Vill. Mohanpur, Dumka	Dumka
134.	Premnath Thakur	Resham Kathjoria, Dumka	Dumka
135.	Niranjan Dash	Kharsawan	Chaibasa
136.	Parthasarthi Sinha	Divine Group of Companies, Palgam, Chowka, Chandil	Chaibasa
137.	Sapan Kumar Jena	Xavier Nager Chaibasa	Chaibasa
138.	Prakash Chandra Sinha	Jhink Pani Road near Sidheswar Mandir, Chaibasa	Chaibasa
139.	Abhay Kumar	AEE/Raj – Kharsawan	Chaibasa
140.	Mrinal Gautam	AEE/Chakradharpur	Chaibasa
141.	Rajesh Raywar	AEE/CBSA (U)	Chaibasa
142.	R.R. prasad	AEE, JSEB	Chaibasa
143.	Ajeet Kumar	EEE, JSEB	Chaibasa
144.	Santosh Kumar	A.S.I.A.	Chaibasa
145.	P. Karunakar	G.R. Industries	Chaibasa
146.	Santosh khetan	50, Aditya Garden, Tata Kandra Road, Adityapur, Jamshedpur.	Chaibasa
147.	Sudhir Singh	A.S.I.A.	Chaibasa

148.	Indar Kumar Agarwal	A.S.I.A.	Chaibasa
149.	Om Prakash Sharma	A.S.I.A.	Chaibasa
150.	Deepak	A.S.I.A.	Chaibasa
151.	Ravindra Gupta	A.S.I.A.	Chaibasa
152.	Dasrath Upadhaya	A.S.I.A.	Chaibasa
153.	Gyan Vir Singh Viru	A.S.I.A.	Chaibasa
154.	Deepak Dhokania	A.S.I.A.	Chaibasa
155.	Ashok Bihany	A.S.I.A.	Chaibasa
156.	Vinay Kumar Singh	A.S.I.A.	Chaibasa
157.	J.P. Verma	A.S.I.A.	Chaibasa
158.	g. P. Agarwal	A.S.I.A.	Chaibasa
159.	Mansour Alam	Stylo Tailors, Chaibasa	Chaibasa
160.	Anurag Kumar	EEFCO Metals & Powers (P) Ltd.	Chaibasa
161.	Ashok Singh	A.S.I.A.	Chaibasa
162.	Sanjay Singh	Chaibasa	Chaibasa
163.	Binod Agarwal	A.S.I.A.	Chaibasa
164.	Nilkamal Vishwakarma	Chaibasa	Chaibasa
165.	P.R. Singh	Chaibasa	Chaibasa
166.	Jasmeet Singh	JMT Auto Ltd.	Chaibasa
167.	Suresh Sonthalia	Singhbhum Chamber of Commerce & Industry, Jamshedpur	Chaibasa
168.	Sanwar Sharma	Kamsa Steel (P) Ltd.	Chaibasa
169.	Mahesh Santhalia	HSPL, Singbhum	Chaibasa
170.	Dalip kumar Singh	02 north East. Ch. Area Jamshedpur.	Chaibasa
171.	Gopal Prasad	S.S.K.Sponge, Chaibasa	Chaibasa
172.	Ashok Jaiswal	Shyamlal Qura, Jamshedpur	Chaibasa

173.	Jettendra Agrwal	Gayanam Ferrow Pvt. Ltd.	Chaibasa
174.	Sachin Poddar	Gayanam Ferrow Pvt. Ltd.	Chaibasa
175.	Vinod Sovamul	SCCI, Jamshedpur	Chaibasa
176.	Raju	Bari Bazar, Chaibasa	Chaibasa
177.	P.V. Mehta	Adityapur	Chaibasa
178.	Dharmendra Mahto	Gandhi Tola Chaibasa.	Chaibasa
179.	Pawan Bansal	Gandhi Tola Chaibasa.	Chaibasa
180.	R.D. Mahto	Manoharpur	Chaibasa
181.	R.P.Mahto	Asamtakies, Chakradharpur	Chaibasa
182.	Shyam Kerai	Bokaro Siding	Chaibasa
183.	Rakhen Sampuiya	Noamudih, Bokarosaiding	Chaibasa
184.	Jairam karoa	Chaibasa	Chaibasa
185.	Manoj Kumar	Bus Stand ,Chaibasa	Chaibasa
186.	S.K.sarkar	Amlatola, chaibasa	Chaibasa
187.	Raj Kishor Gupta	Sadar Bazar chaibasa	Chaibasa
188.	Dashrath Upadhyay	ASIA, Adityapur	Chaibasa
189.	Bijay Agarwal	Gandhitola, Chaibasa	Chaibasa
190.	Sumit Karmakar	Pul hatu bara bazar , Chaibasa	Chaibasa
191.	Tarun Kumar Roy	Roy villa tunjri , Chaibasa	Chaibasa
192.	Dilip Kumar Saw	Chaibasa	Chaibasa
193.	Abhijit Patro	Tungri	Chaibasa
194.	Sudhir Khanna	M/s AkscaySteel Workshoap Aditypur, Jamshedpur.	Chaibasa
195.	Ranbir Lakra	SIG Mission Coumpond, near Girls Hostel, Chaibasa	Chaibasa
196.	Manik Kumar Paul	Chaibasa	Chaibasa
197.	Bijay Lakhan	Baharagova, Singhbhum	Chaibasa

198.	Nibai Hansda	Baharagova, Singhbhum	Chaibasa
199.	Binod Kumar Paul	Chaibasa Chembers of Commercce	Chaibasa
200.	Umesh Sao	Chaibasa	Chaibasa
201.	Vivek Hembram	Dainik Jagran	Chaibasa
202.	Triveni Awasthi	Dainik Jagran	Chaibasa
203.	A.K. Sultaniya	Chaibasa Chembers of Commercce	Chaibasa
204.	Ashokmit	Surlor Birro, Jamshedpur	Chaibasa
205.	R.K. Agrwal	Agrwal Bhavan Chaibasa	Chaibasa
206.	vilesh sheth	Mus Transmission	Chaibasa
207.	S.K.Sultania	Chaibasa	Chaibasa
208.	Subodh Kumar	Sukh Sagar Metalls P. Ltd.	Chaibasa
209.	Raju Yadaw	Sukh Sagar Metalls P. Ltd. Jamshedpur	Chaibasa
210.	Jitendra Bareik	Bareik toli, Chaibasa	Chaibasa
211.	Binod Das	Nuisdih	Chaibasa
212.	Santosh Bansal	(i) Om Minerals, P.O.-Sup.,Daltonganj (ii) M/s Natraj Minerals, Chiyanki, Daltonganj (iii) M/s Bansal Mineral Grinders, Chiyanki, Daltonganj	Medninagar
213.	Ajit Kumar	M/s Palamu cold Storage (P) Ltd., Chiyanki, Daltonganj.	Medninagar
214.	Subodh Prasad Sinha	M/s Medini Minerals, P.O. Sua., Daltonganj	Medninagar
215.	Sita Ram	JEE/Slectric Supply , Sec. No.2, Daltonganj	Medninagar
216.	B.N. Shukla	Ranchi Road Redma	Medninagar
217.	Ayush Prasad	Deloitte, DLF City, Gurgoan	Medninagar
218.	Santosh Kumar Jaiswal	Nawa Toli, Daltonganj	Medninagar
219.	Pradeep Kumar	Belwatika, Daltonganj	Medninagar
220.	Anup Agrawal	M/s Agarwal Minerals, Redma, Daltonganj	Medninagar
221.	Amit Kumar	Nawa Toli, Daltonganj	Medninagar

222.	K. N. Thakur	Member (D), JSEB	Medninagar
223.	A. Banerjee	F.C., JSEB	Medninagar
224.	S. C. Mishra	Chief Engineer (C&R), JSEB	Medninagar
225.	C. D. Kumar	Cngineer in Chief, JSEB	Medninagar
226.	S. Singh	GM Cum CE, Daltonganj	Medninagar
227.	Alok Raj Sinha	Daltonganj	Medninagar
228.	Kunal Singh	I.V.R.C.Z. Palamu	Medninagar
229.	Rajiv Kumar Singh	GVRCL, Palamu	Medninagar
230.	Mukesh Kumar Singh	ABCIL, Rehla	Medninagar
231.	S. K. Singh	ABCIL, Rehla	Medninagar
232.	N. K. Pandey	Dainik Bhaskar	Medninagar
233.	S. K. Pathak	IVRCC, Palamu	Medninagar
234.	Prem Kumar Tiwari	JSEB, Ranchi	Medninagar
235.	Rajesh Kumar Gosai	Belwatika, Daltonganj	Medninagar
236.	Ashok Sharma	Belwatika, Daltonganj	Medninagar
237.	Sanjay Singh	News 11	Medninagar
238.	Ram Varan Shukla	Daltonganj, Palmu	Medninagar
239.	Mangal Vishkarma	Medninagar	Medninagar
240.	Hira Lal	AEE	Medninagar
241.	K.D.N. Singh	AEE Garwa	Medninagar
242.	Shailendra Tiwari	Dainik Jagran Daltonganj	Medninagar
243.	Vivek	Dainik Bhaskar	Medninagar
244.	Suresh	Damaro, Daltongaj	Medninagar
245.	Ramlakhan Mehta	Damaro, Daltongaj	Medninagar
246.	Amit Kumar	Damaro, Daltongaj	Medninagar

247.	Sarju Prasad Sani	Hamidganj, Daltonganj	Medninagar
248.	Salamuddin Khan	MLA Reprejentative, Chainpur	Medninagar
249.	Esram Hussain	Town Chairman Manrega, Chainpur	Medninagar
250.	Safiuddin Ansari	Newara	Medninagar
251.	Vijay Kumar	Chairman, Jansahbhagi Kendra, Gadhwa	Medninagar
252.	Parvez Alam	Negar, Daltonganj	Medninagar
253.	Kapil Ram	Nagar Utaari, Gadhwa	Medninagar
254.	Mukesh Kumar Sinha	Nagar Utaari, Gadhwa	Medninagar
255.	Pradeep Kumar	Gadhwa	Medninagar
256.	Kaisar Jabed	Jila School Chowk	Medninagar
257.	Komal Kishor	Daltonganj	Medninagar
258.	Vijay Kumar	Rehla	Medninagar
259.	Anil	Rehla	Medninagar
260.	S.K. Bhimsaria	Rehla	Medninagar
261.	A.K. Singh	Rehla	Medninagar
262.	S.N. Sharma	Rehla	Medninagar
263.	pradeep Singh	Rehla	Medninagar
264.	Hranand Pathak	Rehla	Medninagar
265.	Ajendra Narayan	Rehla	Medninagar
266.	D.K. Singh	Rehla	Medninagar
267.	Sunil	Rehla	Medninagar
268.	P.N.	Rehla	Medninagar
269.	Krishana Ram	Rehla	Medninagar
270.	H.N. Ram	EEE/M.R.T./ Daltonganj	Medninagar
271.	Binod Kumar	Sampurn Gram Vikash Kendra, Daltonganj, Palamu	Medninagar

272.	Rajeev Ranjan	Shahpur	Medninagar
273.	Azad Khan	Bishunpur, Garhwa	Medninagar
274.	P.N. Prasad	JEE- 1 Daltonganj	Medninagar
275.	Murli Tiwari	Daltonganj	Medninagar
276.	Dikma Tiwari	Daltonganj	Medninagar
277.	Vicky	Daltonganj	Medninagar
278.	Bikash Kumar Tiwari	Daltonganj	Medninagar
279.	Raghvendra Pathak	Jore, Prakhand, Sadar	Medninagar
280.	Shrawan Tiwari	Jore, Prakhand, Sadar	Medninagar
281.	Ram Yash Mishra	Jond, Daltonganj	Medninagar
282.	Afjal Ansari	Sudna, Daltonganj	Medninagar
283.	Roshan Kumar Sharma	Belvatika	Medninagar
284.	Shailesh Chandravansi	Daltonganj	Medninagar
285.	Sunil Paswan	Daltonganj	Medninagar
286.	Anand Shankar	President, Chamber of Commerce, Palamu	Medninagar
287.	Rohit Keshri	Daltonganj	Medninagar
288.	Allauddin Shah	Pahari Mohalla, Daltonganj	Medninagar
289.	Baijainti Kubar	Barolota, Daltonganj	Medninagar
290.	P. K. Mishra	Rehla	Medninagar
291.	Ram Sewak Singh	Dhanbad	Ranchi
292.	Biswanath Singh Munda	Deshwali Tola, Bariatu, Ranchi.	Ranchi
293.	K.K. Jha	JSEB	Ranchi
294.	S. C. Mishra	Chief Engineer (C&R), JSEB	Ranchi
295.	Anita Prasad	JSEB	Ranchi
296.	Mukul	JSEB	Ranchi

297.	Sidhant Ohdar	Chetar, Ramgarh	Ranchi
298.	Ayush Prasad	Deloitte, Gurgaon, Consultant, JSEB.	Ranchi
299.	Ritesh Yadav	Deloitte, Gurgaon, Consultant, JSEB.	Ranchi
300.	K.N. Thakur	JSEB	Ranchi
301.	M.S. Mittal	Advocate, Jharkhand High Court.	Ranchi
302.	Sunil Sahu	Sr. DEE/TR-D/RNC, S.E. Rly.	Ranchi
303.	Ranjit Kumar	Human Rights	Ranchi
304.	Ajay Bhandari	Jharkhand Small Industries Association	Ranchi
305.	B.K. Tulsyan	Jharkhand Small Industries Association	Ranchi
306.	Anjay Pacheriwala	Kokar, Ranchi	Ranchi
307.	Amit Banerjee	JSEB	Ranchi
308.	Sushil Singh	Jai Prabhu jee (P) Ltd., Gobindpur.	Ranchi
309.	Birendra Roy	Ridhi-Sidhi Iron Pvt. Ltd, Nirsa, Dhanbad.	Ranchi
310.	Ranjit Kumar Tekriwal	31, Circular Road, Ranchi	Ranchi
311.	Nand Kishore Patodia	FJCCI, Chairman, Energy Sub-Committee.	Ranchi
312.	R. N. Gupta	FJCCI	Ranchi
313.	M.B. Lal, Adv.	Gensee-Adv., Association, Jharkhand High Court.	Ranchi
314.	Anandeshwar	General Secretary, C.C.L.	Ranchi
315.	S.P. Singh	State President, Laghu Udyog Bharti, Jharkhand	Ranchi
316.	N. K. Pasari	Advocate, Jharkhand High Court.	Ranchi
317.	K. D. Prasad	Chief Engineer , JSEB	Ranchi
318.	S. K. Thakur	EEE (C&R), JSEB	Ranchi
319.	Hari Krishan Budhia	Bihar Foundary & Casting Ltd.	Ranchi
320.	Kedar Nath Das	Jharkhand Tech, BIT Mesra	Ranchi
321.	Alok Khaitan	Ranchi	Ranchi

322.	Sudhir Singh	Laghu Udyog Bharti.	Ranchi
323.	Jiwan Kumar Jalan	Laghu Udyog Bharti.	Ranchi
324.	D. N. Singh	Laghu Udyog Bharti.	Ranchi
325.	Manik Bose	Bhaskar News	Ranchi
326.	U. P. Gupta	DWS & D	Ranchi
327.	S. Narayan	DWS & D	Ranchi
328.	Mukul Bhandari	AIII, Buti Road, Ranchi	Ranchi
329.	Bandhan Munda	Kanke Road, Ranchi	Ranchi
330.	Rakesh Sinha	Doranda, Ranchi	Ranchi
331.	Sanwar Sharma	Kamsa Steel (P) Ltd, Jamshedpur	Ranchi
332.	Mahesh Snthalia	Himaderi Steel (P) Ltd., Jamshedpur	Ranchi
333.	Ashok Jaiswal	Shyam Lal Gron Steel, Jamshedpur	Ranchi
334.	Anand Choudhery	Jumba Engg. (P) Ltd.	Ranchi
335.	V. P. Singh	Hind Auto (P) Ltd.	Ranchi
336.	S. K. Choudhary	Astha Ferrotec (P) Ltd.	Ranchi
337.	H. R. Jain	Chamber - M.	Ranchi
338.	Raman Singh	Rahul Udyog	Ranchi
339.	Rahat Hussain	Farz Engineering	Ranchi
340.	B. K. Narain	H.H. Colony, Ranchi	Ranchi
341.	K.K. Verma	ESE, Ranchi	Ranchi
342.	A. K. Bihany	Chandil, Jamshedpur	Ranchi
343.	Deepak Dhokania	ASIA	Ranchi
344.	Deepak Pauchania	ASIA	Ranchi
345.	Santosh Singh	Sandhu Tubes (P) Ltd., Jamshedpur	Ranchi
346.	S.R. Singh	TVNL	Ranchi

347.	Anand Lal Pasari	Pasari Street	Ranchi
348.	Ramchandra Kumar	Tupudana	Ranchi
349.	Atul Dua	ASIA	Ranchi
350.	Budh Ram Bhagat	PHED, Gumla	Ranchi
351.	Debki Nandan Paswan	Nagrik Kalyan Samiti	Ranchi
352.	Mithilesh Pandey	Divine Alloys & Power Co. Ltd.	Ranchi
353.	Saurabh Pandey	Divine Alloys & Power Co. Ltd.	Ranchi
354.	Radha Raman Sahu	Reladih	Ranchi
355.	M. Ahif	Ranchi Express	Ranchi
356.	Dipali Devi	Ullilodar	Ranchi
357.	Shiv Sankar Singh Munda	Ullilodar	Ranchi
358.	S.N. Sahu	Kanchi	Ranchi
359.	Bheem Roy Sahu	Kanchi	Ranchi
360.	Pradeep Kumar Mahto	Ulliloha	Ranchi
361.	Manoj Kejriwal	JSEB	Ranchi
362.	N. Rajak	JSEB	Ranchi
363.	R.P. Mishra	JE Bundu	Ranchi
364.	S. Akhtar	News 11	Ranchi
365.	I. N. Jha	Ranchi	Ranchi
366.	Arun Chhawchharia	CRCE (P) Ltd.	Ranchi
367.	Bikash kumar Singh	Raw metals & Chemicals, Ranchi	Ranchi
368.	Manoj Kumar Sriwashtava	Hindustan, Photoghapher	Ranchi
369.	Ritika Patel	Aryan	Ranchi
370.	Mrituanjay	Maurya	Ranchi
371.	Pratik	Opp.Hotel Yuvraj Place, Doranda, Ranchi	Ranchi

372.	Prakash	Opp.Hotel Yuvraj Place, Doranda, Ranchi	Ranchi
373.	Philip Mathur	Manglam Industries (P) Ltd.	Ranchi
374.	Pankaj Tripathy	Dainik Bhaskar	Ranchi
375.	S. Choudhary	GM. Cum Chif Eng., Ranchi	Ranchi
376.	Sudhir Kumar	M/s Akshay Steel Works Pvt. Ltd.	Ranchi
377.	N. K. Sinha	Ranchi	Ranchi
378.	Manish Mehta	Kashish News	Ranchi
379.	Pankaj Kumar	Doranda, Ranchi	Ranchi
380.	S. K. Singh	Kokar, Ranchi	Ranchi
381.	vicky Kumar	Ramgarh Cantt.	Ranchi
382.	Ashok Raj	Socaial Action Network	Ranchi
383.	Ajendra	Ashok Nagar, Ranchi	Ranchi
384.	Krishna Kant Ojha	Ashok Nagar, Ranchi	Ranchi