

Jharkhand State Electricity Regulatory Commission

(Provisional)

Tariff Order

on

Truing up of FY 2003-04 to FY 2006-07

and

Annual Revenue Requirement

for

FY 2007-08 & 2008-09

and

Suo-motu Proceedings

for

FY 2009-10 & 2010-11

and

Determination of Tariff

for

FY 2010-11

for

**Jharkhand State Electricity Board
(JSEB)**

Ranchi

April 2010

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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
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

A1: 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 Electricity Act, 2003 being brought into force, the earlier Electricity Regulatory Commission Act of 1998 stands repealed and the functions of JSERC are now defined as per Section 86 of the Act.
- 1.4 In accordance with the Act, the JSERC discharges the following functions: -
 - (a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:

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

- (b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
- (c) facilitate intra-state transmission and wheeling of electricity;
- (d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
- (e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
- (f) adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
- (g) levy fee for the purposes of this Act;
- (h) specify State Grid Code consistent with the Grid Code specified under Clause (h) of sub-section (1) of Section 79;
- (i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
- (j) fix the trading margin in the intra-state trading of electricity, if considered, necessary;
- (k) discharge such other functions as may be assigned to it under this Act.

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

- (a) promotion of competition, efficiency and economy in activities of the electricity industry;
- (b) promotion of investment in electricity industry;
- (c) reorganisation and restructuring of electricity industry in the State;
- (d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.

- 1.6 The State Commission ensures transparency while exercising its powers and discharging its functions.
- 1.7 In discharge of its functions, the State Commission is guided by the National Tariff Policy as brought out by GoI in compliance to Section 3 of the Act. The objectives of the National Tariff Policy are to:
- (a) ensure availability of electricity to consumers at reasonable and competitive rates;
 - (b) ensure financial viability of the sector and attract investments;
 - (c) promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;
 - (d) promote competition, efficiency in operations and improvement in quality of supply.

Jharkhand State Electricity Board (JSEB)

- 1.8 Jharkhand State Electricity Board (hereinafter referred to as the ‘licensee’) was constituted on March 10, 2001 under 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.
- 1.9 Apart from the distribution and transmission functions, the licensee also owns two power plants; **Patratu Thermal Power Station (PTPS)** having a capacity of 840 MW (de-rated capacity of 770 MW) and **Sikidri Hydrel 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 (MW)	CoD
Unit I	50	26.06.1966
Unit II	50	27.04.1967
Unit III	50	16.10.1968
Unit IV	50	31.10.1969
Unit V	100	31.03.1971
Unit VI	100	31.03.1972
Unit VII	110	31.08.1977
Unit VIII	110	16.07.1979
Unit IX	110	30.03.1984
Unit X	110	20.03.1986

1.10 The licensee constructs and maintains its transmission and distribution system for providing efficient services to various categories of electricity consumers in the State.

Scope of the present order

1.11 This Order relates to the truing up exercise for FY 2003-04 to FY 2006-07 as per the provisional accounts of the licensee for these years, ARR and tariff petitions filed by the licensee for approval of ARR for FY 2007-08 & 2008-09, suo-motu proceedings for FY 2009-10 & FY 2010-11 and determination of Provisional tariff for FY 2010-11.

1.12 This Order is being issued 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 and in accordance with :

- (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 'Distribution Tariff Regulations, 2004'; and
- (e) Principles laid down in the 'Generation Tariff Regulations, 2004'.

A2: PROCEDURAL HISTORY

Background

- 2.1 The Commission has issued two Tariff Orders for the licensee- in FY 2003-04 and FY 2006-07 respectively. However, on certain grounds, JSEB filed an appeal before the Hon'ble Appellate Tribunal of Electricity (APTEL) against the Tariff Order for FY 2006-07.
- 2.2 The Hon'ble APTEL vide its order dated 08.05.2008 passed in Appeal No. 129 of 2007 directed this Commission to relook the entire tariff setting exercise as per the directions contained in the said order. When the Commission, in pursuance of the above Order of APTEL, issued letter to the licensee to submit their audited accounts then the licensee filed IA No. 78 of 2009 on 25.02.2009 before the Hon'ble APTEL praying therein to issue clarification for implementation of the order dated 8.5.2008 to the effect that the State Commission can proceed with the certified unaudited accounts for FY 2003-04 to FY 2006-07 and thereafter undertake fresh truing up and revision based on audited accounts of the licensee as and when the report of CAG of India is available.
- 2.3 On that petition, the Hon'ble APTEL passed an order on 23.09.2009 to the effect that it will be open for the Commission to take action against the licensee as may be available in law for compliance with the rules and regulations.
- 2.4 In the mean time, the licensee filed ARR for the FY 2007-08 and FY 2008-09 in April'2008 and Tariff Petition for FY 2008-09 in March'2009. Pursuant to the order dated 8.5.2008 in Appeal No. 129 of 2007 and order dated 23.9.2009 in I.A. No. 78 of 2009 passed by the Hon'ble APTEL and in view of non-filing of fresh ARR and Tariff Petitions along with the audited accounts by the licensee despite several letters and reminders, the Commission decided to proceed suo-motu for determination of distribution tariff of the licensee for FY 2010-11. Thus, a suo-motu case no. 1 of 2010 was registered and the Commission issued a notice on 29.01.2010 directing the licensee to submit show cause and to explain within 15 days as to why the distribution tariff of the licensee for FY 2010-11 be not determined in accordance with the provisions of the Electricity Act, 2003 and regulations made there-under. In response to the said notice, the licensee filed its show-cause stating therein that the Commission may decide the tariff for FY 2008-09 on approval of ARR for FY 2007-08 and FY 2008-09 and prayed for further time of nine months to file tariff petition after compilation and audit of annual accounts for FY 2009-10.
- 2.5 The Commission vide its order dated 15.2.2010 rejected the prayer of the licensee for the simple reason that despite directions given in the earlier Tariff Orders followed by several letters and reminders, the licensee has failed to submit audited accounts and fresh ARR & tariff petition for FY 2010-11 in time.

- 2.6 However, before passing the Order, the Commission granted an opportunity of personal hearing to the licensee and posted the matter on 20.2.2010. During the hearing held on 20.2.2010, it was submitted that since the licensee has already filed ARR for FY 2007-08 and FY 2008-09 and the tariff petition for FY 2008-09 along with the provisional annual accounts up to FY 2006-07, the Commission may proceed to determine the provisional tariff for FY 2010-11, suo-motu, on the basis of the materials/information already made available to the Commission.
- 2.7 Considering the above and to ensure the compliance with the Orders passed by the APTEL in the aforesaid appeal and IAs the Commission proceeded to determine this provisional tariff of the licensee for FY 2010-11, suo-motu, as well as to update the tariff, on the basis of the materials/information available with the Commission and directed the licensee to publish public notice inviting objections/suggestions/comments on the ARR for FY 2007-08 and FY 2008-09 and the Tariff Petition for FY 2008-09.

Meeting of State Advisory Committee

- 2.8 The meeting of the State Advisory Committee (SAC) was held on March 20, 2010 wherein the current situation of electricity sector in Jharkhand was discussed. The Annual Revenue Requirement and Tariff Petition filed by the licensee for FY 2007-08 and FY 2009-10 was also discussed. The SAC was of the view that the licensee is having excessive T&D losses and suggested various steps for reduction of T&D loss including insulating power cables, taking proper theft control measures and by simplifying the procedure of giving new connections and also to encourage people to take new connections. The SAC was also of the view that power regulatory measures must be implemented by the licensee and steps be taken to improve the quality of supply and services.

Inviting Public Response

- 2.9 As per the Order dated 10.3.2010 passed in Suo-Motu Case no. 1 of 2010, the Commission directed the licensee to make available the copies of the ARR and tariff petition to the general public and to issue public notice for inviting objections/comments/suggestions. The public notice was subsequently published by the licensee in various newspapers, as detailed hereunder:

Table 2: List of newspapers publishing public notice

Newspaper	Date
Hindustan Times (English)	23.2.10
Prabhat Khabar (Hindi)	23.2.10
Hindustan Dainik (Hindi)	23.2.10

- 2.10 A period of fifteen (15) days was provided to the public for submitting the objections/comments/suggestions. The Commission subsequently also uploaded this information on its official website www.jserc.org and published advertisements in various newspapers for conducting the public hearings. The newspapers wherein the advertisement for public hearing were published by the Commission are detailed hereunder:

Table 3: List of newspapers where public notice was published

Newspaper	Date
Prabhat Khabar	9.03.10
Hindustan	9.03.10
Aaj	9.03.10
Dainik Jagran	9.03.10
Ranchi Express	9.03.10
Hindustan Times	9.03.10
The Pioneer	9.03.10
Farooqui Tanzeem	9.03.10
Quami Tanzeem	9.03.10
Sanmarg	9.03.10

Submission of objections and conduct of public hearings

- 2.11 The public hearings were held on various locations in the licensed area of the licensee between 12th March to 23rd March 2010, as detailed under.

Table 4: Location and date of public hearing

Location	Date
Deoghar	12.03.10
Dhanbad	04.03.10
Medninagar	16.03.10
Ranchi	21.03.10
Jamshedpur	23.03.10

- 2.12 In order to invite maximum response from the public of the area where the hearing was scheduled, public notice was issued one day earlier and on the date of the hearing as well in the local newspaper. Even the press was briefed one day earlier of the hearing. Thus, the coverage was wide and the response was tremendous.
- 2.13 Numerous objections/comments/suggestions on the ARR petition for FY 2007-08 & 2008-09 and tariff revision proposal for FY 2008-09, were received. The objections/comments/suggestion of the public as well as the licensee's responses thereon is detailed in the Section 6 of this Order.

2.14 In all, the Commission gave the licensee sufficient opportunities to present its case before coming out with this Tariff Oder.

A3: JURISDICTION OF THE COMMISSION

3.1 On publication of the notice by the licensee regarding ARR & tariff determination for FY 2007-08 & FY 2008-09, several petitions were filed before the Commission raising jurisdictional issues. One of the main objections was whether the Commission, under section 64(1) of the Electricity Act, can start the proceedings without an application filed by the licensee.

3.2 It is pertinent to mention that after hearing to all the parties concerned, the Commission passed a detailed order dated 10.3.2010 in suo motu Case No.01 of 2010 wherein it was held that the Commission has powers to start suo-motu proceeding for tariff determination under the Electricity Act, 2003 read with National Tariff Policy. The relevant Para of the order passed in Case No.01 of 2010 dated 10.03.2010 is reproduced below:

“From the above, it is abundantly clear that this Commission has jurisdiction to proceed, suo-motu, for determination of tariff and regulatory scrutiny, if the licensee does not file it in time. The action of the Commission is perfectly in accordance with the provisions of the Electricity Act 2003 and the Regulations framed there under. The Commission has also initiated this proceeding so that the order of the Hon’ble Tribunal can be complied with. Hence the argument of the petitioners/interveners that this Commission does not have the jurisdiction to proceed, suo-motu, in the facts and circumstances of this case, is hereby rejected”

3.3 Copy of the above Order is annexed as Annexure-I to this order.

3.4 During course of public hearing at Ranchi on 21.03.2010 one of the objector also pointed out that the Commission is not properly constituted and not authorised to issue Tariff Order as presently there is only one person i.e. the Chairperson in the Commission and the post of two members are presently lying vacant.

3.5 Similar issue was raised earlier which went up to Hon’ble Jharkhand High Court, Ranchi in W.P (PIL) No. 693 of 2004 wherein it was held that

“It, therefore, appears to us that as far as the State Commission is concerned, it will be enough if the chairman is named, though it may be open to the State Government concerned to have a State Commission consisting of three members, including the chairperson. Therefore, merely because only the Chairperson was notified by the State of Jharkhand, it could not be said that the State Regulatory Commission under the Regulatory Commissions Act was not properly constituted or that the tariff recommended by it is void or unenforceable”.

3.6 Copy of the above Order dated 15.3.2004 is annexed as Annexure II to this Order.

3.7 In view of the above, it stands clarified that the Commission is duly constituted as per the law and competent to determine tariff suo-motu.

A4: COMPLIANCE OF THE HON'BLE APPELLATE TRIBUNAL'S DIRECTIVES

4.1 The compliance of Order dated 8.5.2008 passed by Hon'ble APTEL in appeal no. 129 of 2007 and I.As are tabulated hereunder:

Direction No.	Direction by Hon'ble APTEL/ Relevant Para of the Judgement	Compliance by Commission
(1)	<p>Non-consideration of Annexure-B.</p> <p><i>“15....., It is necessary for the Commission to have a re-look into the entire tariff setting exercise based on the ground realities as indicated by the appellant.”</i></p>	<p>The Commission observes that the provisional accounts of FY 2006-07 of the licensee still shows cash in transit of Rs. 5871.59 Cr</p> <p>However, in compliance to the directions of the APTEL, the Commission has considered the Annexure-B (letter dated 30.7.2007) submitted by the licensee and all the consequential benefits have been provisionally allowed in the various Sections of this Order. As and when the licensee submits audited accounts reflecting the actual cash, the Commission will conduct the final true up.</p>
(2)	<p>Interest and Finance Charges</p> <p><i>“20.Having decided the issue of the Cash in Transit, the Commission is required to re-work the interest and finance charges in view of the ground reality”</i></p>	<p>The Commission provisionally allows the entire interest and finance charges, as submitted by the licensee vide its provisional annual accounts, for the period from FY03-04 to FY 06-07, as detailed in Section 7 of this Order.</p>
(3)	<p>Power Purchase Cost and Transmission Charges</p> <p><i>“27. We do not find any abnormality in the appellant's approach adopted by it to plead its case as a rival party to DVC. It does not mean that it should forego its rightful claim for its tariff determination. We note that learned counsel for the respondent Commission has stated that as appeal No. 273 of 2006 has been disposed of by this Tribunal the appellant Board is required to file fresh ARR along with audited accounts and the Commission shall review the cost of power purchase</i></p>	<p>The Commission provisionally allows the entire power purchase cost as submitted by the licensee vide its provisional annual accounts for the period from FY 2003-04 to FY 2006-07 with the exception of deemed power purchase for which no basis has been given by the licensee, as detailed in Section 7 of this Order. However, this item can also be considered when the final audited accounts are submitted by the licensee</p> <p>Similarly, entire transmission charges including payment to Power Grid Corporation of India,</p>

	<p><i>and other charges.</i></p> <p><i>28. The Commission should also allow the transmission charges paid by JSEB to Powergrid Corporation of India as also the Income Tax and the water cess. As JSEB, in the absence of sufficient funds could not have enjoyed prepayment discounts in case of Tala and Chukha, we direct that the full rate of power purchased be allowed to JSEB.”</i></p>	<p>Income Tax and water-cess, as submitted by the licensee vide its provisional annual accounts have been allowed in the provisional truing- up exercise for FY 2003-04 to FY 2006-07, as detailed in Sections 7 of this Order.</p>
(4)	<p>Generation cost of Patratu Thermal Power Station (PTPS)</p> <p><i>“32. This Tribunal in case of Gujarat State Electricity Corporation Ltd. Vs Gujarat Electricity Regulatory Commission & Others mentioned in the aforesaid para has recognized that consideration needs to be given to old generating units which have deteriorated over the years and accordingly direct that the Commission takes into cognizance our order dated November 23, 2006 in appeal No. 129 of 2006.”</i></p>	<p>In view of the Hon’ble APTEL’s directions, the Commission has allowed the relaxed norms of operational parameters applicable for PTPS after taking into cognizance the Hon’ble APTEL decision in order dated November 23, 2006 in appeal No. 129 of 2006.</p>
(5)	<p>Revenue Gap of Rs.77.27 Cr and Discrimination.</p> <p><i>“35. We find no justification in treating the amount given in the nature of a resource gap funding by the Government to be considered as a subsidy. As a hundred per cent owned entity of the Government of Jharkhand, if JSEB has been provided with funding to bridge the resource gap, it cannot be construed as a subsidy. The tariff determination exercise should not take cognizance of any such contingency funding by the Government and the tariff should be determined independent of this unless it has been given in the form of a subsidy.”</i></p>	<p>In compliance to the directions of the Hon’ble APTEL, the Commission has not considered any resource gap while projecting the ARR for FY 2009-10 and FY 2010-11.</p> <p>The licensee in its ARR petition for FY 2007-08 & FY 2008-09 and tariff revision proposal for FY 2008-09 has submitted that the resource gap of Rs. 77.00 Cr and Rs.80.00 Cr may be used for partly meeting the revenue gap for the FY2007-08 and FY 2008-09, respectively. This has also been reiterated by the licensee vide their letter dated 30.03.2010.</p> <p>In view of the above and also in view of the fact that the licensee has actually received the amount of resource gap from the State Government, the Commission has treated this item accordingly.</p>

<p>(6)</p>	<p>Disallowance of Employees Cost</p> <p><i>“37. The Commission, during the hearing, has informed that JSEB has raised demand of Rs. 386.80 crores from BSEB on the basis of order of the Hon’ble Supreme Court and that therefore, this issue raised in the appeal is not tenable. We direct the Commission that it reconsiders the demands of the appellant with regard to terminal benefits of the employees so that JSEB does not default in its obligations required by Accounting Standard-15 as any failure by the employer to comply with AS-15 attracts severe punishment.”</i></p>	<p>In compliance to the Hon’ble APTEL direction, the Commission has allowed the actual employee’s cost as submitted by the licensee for FY 2003-04 to 2006-07.</p> <p>The Commission also allowed an amount of Rs. 100.00 Cr for pension corpus in FY 2008-09 as submitted by the licensee for the year, and as detailed in Section 9 of this Order.</p>
<p>(7)</p>	<p>Other Disallowances by the Commission</p> <p><i>“40. In our opinion the Commission is required to review all the issues raised above by the appellant.”</i></p>	<p>The Commission has reviewed all the issues raised by the appellant (i.e. the licensee) and dealt with these issues as follows:</p> <p>a) Provision for bad and doubtful debts sought by JSEB at 2.5% of revenue: The ‘Distribution Tariff Regulations, 2004’ does not allow for any provision of bad and doubtful debts and hence the Commission has not allowed any provision for bad and doubtful debts.</p> <p>b) Minimum monthly consumption charges as proposed by the JSEB: Since fixed charges are already applicable to various categories of consumers, there is no reason for introducing/continuing with MMC Charges. Hence, the Commission has not allowed any MMC charges in any category.</p> <p>c) Reconnection charges to JSEB: The licensee has neither justified the increase in any of the miscellaneous charges including reconnection charges nor quantified its effect on the ARR. Therefore, the Commission has directed the licensee in Section 16 of this Order to justify the increase in miscellaneous charges and to also quantify its effect on the non-tariff income (NTI) with a separate petition or along with subsequent ARR. The Commission will accordingly review the same.</p> <p>d) Minimum guarantee charges as proposed by JSEB: The licensee has neither justified the increase in any of the miscellaneous charges</p>

		<p>including minimum guarantee charges nor quantified its effect on the ARR. Therefore, the Commission has directed the licensee in Section 16 of this Order to justify the increase in miscellaneous charges and to also quantify its effect on the non-tariff income (NTI) with a separate petition or along with subsequent ARR. The Commission will accordingly review the same. Till such time, the Commission retains all the miscellaneous charges as approved in the Tariff Order of FY 2006-07 (depicted in Section 17 of this Order).</p> <p>e) Rate of depreciation allowed to JSEB (i.e. 5.11%) : The Commission has allowed the depreciation expense as per the provisional accounts submitted by the licensee and only depreciation on assets created out of consumer contribution, grants & subsidies has been disallowed.</p> <p>f) Fuse call rate fixed at Rs. 15 per call as against a highly conservative estimate of Rs. 50 per call proposed by JSEB: The licensee has neither justified the increase in any of the miscellaneous charges including fuse call rates and also did not quantify its effect on the ARR. Therefore, the Commission has directed the licensee in Section 16 of this Order to justify the increase in miscellaneous charges and to also quantify its effect on the non-tariff income (NTI) with a separate petition or along with subsequent ARR. The Commission will accordingly review the same.</p>
(8)	<p>True up for the FYs 2003-04 to FY 2005-06.</p> <p><i>“45. This Tribunal has laid down in appeal No. 269 of 2006, Poddar Alloys vs UERC that “Normally, truing up exercise is undertaken on the basis of available data and information. Second and subsequent truing up can be taken up when audited accounts figures are available……”.</i></p> <p><i>“46. In view of our observations we direct the Commission to take up exercise of provisional truing up if audited data is not available”</i></p>	<p>In compliance to the Hon’ble APTEL directions, the Commission has undertaken the provisional truing-up exercise of the licensee for FY 2003-04 to FY 2006-07.</p>
(9)	<p>Cost regarding terminal benefits</p>	<p>Hon’ble APTEL accepted the submission of the</p>

		Commission
(10)	<p>Excessive T&D Losses and inefficiencies of JSEB</p> <p><i>“50. Prevalent inefficiencies in the Board, excessive Transmission and Distribution losses are a matter of grave concern and are extremely detrimental to the interest of the consumers. We deprecate the current affairs of the Board and direct that immediate steps will be taken to improve the working of the Board. 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.”</i></p>	<p>In compliance to the Hon’ble APTEL’s direction, the Commission has set the time bound targets for reduction of T&D losses and norms for improvement of Power Stations and increasing the overall efficiency of the licensee as detailed in Section 7 and Section 11 of this Order.</p>

A5: SUMMARY OF THE ARR & TARIFF PETITION FILED BY THE LICENSEE FOR FY 2007-08 & FY 2008-09

- 5.1 The detailed submission made by the licensee in respect of its annual revenue requirement for FY 2007-08 & FY 2008-09 and tariff petition for FY 2008-09 has been discussed in the subsequent sections of this Order.
- 5.2 The Summary of the ARR as submitted by the licensee for FY 2007-08 is detailed hereunder:

Table 5: Proposed Annual Revenue Requirement for FY 2007-08 (Rs. Cr)

Parameters	Amount
Costs	
Fuel	95.85
Power Purchase & UI Charges	1705.51
Employee	295.99
Repairs & Maintenance	57.93
Admin & General	51.05
Interest	737.21
Depreciation	105.84
Provision for Bad & Doubtful Debts	14.05
Total Costs	3063
Add: Reasonable Return	78.50
Less: Non tariff Income	167.03
Annual Revenue Requirement	2975
ARR, Revenue at existing tariff, Revenue gap	
ARR	2975
Covered by	
Revenue at existing tariff	1405.17
Resource gap from GoJ	77.27
Revenue at existing tariff + GoJ grant/ Resource gap funding	1482
Revenue gap	1492

5.3 The Summary of the ARR as submitted by the licensee for FY 2008-09 is summarised below:

Table 6: Annual Revenue Requirement for FY 2008-09 (Rs. Cr)

Parameters	Amount
Costs	
Fuel	173.50
Power Purchase & UI Charges	1840.29
Employee	386.05
Repairs & Maintenance	65.72
Admin & General	86.63
Interest	1021.12
Depreciation	140.28
Provision for Bad & Doubtful Debts	15.22
Total Costs	3729
Add: Reasonable Return	99.31
Less: Non tariff Income	177.21
Annual Revenue requirement	3651
ARR, Revenue at existing tariff, Revenue gap	3651
ARR	
Covered by	
Revenue at existing tariff	1522.45
Resource gap from GoJ	80
Revenue at existing tariff + GoJ grant/ Resource gap funding	1602
Revenue gap	2048

5.4 The licensee has proposed the following treatment of revenue gap for FY 2007-08 and FY 2008-09

Table 7: Proposed Treatment of Revenue Gap (Rs. Cr)

Location	FY 2007-08	FY 2008-09
ARR	2975	3651
Revenue @ Existing Tariff	1405	1522
Subsidy/Resource gap	77	80
Revenue Gap/(Surplus)	1492	2048
Coverage of Revenue Gap*		
Additional Revenue@ Proposed Tariff	-	451
Regulatory Asset	1492	1597
Revenue Gap	-	-

*The licensee has proposed that the Resource Gap received for FY 2007-08 & FY 2008-09 may be considered as coverage of revenue gap for fixation of tariff. The copy of the letter of the licensee is annexed as Annexure-III to this order.

5.5 In its tariff petition for FY 2008-09, the licensee has also submitted a proposal for hike in tariff from FY 2008-09 onwards. The tariff schedule as proposed in the petition is detailed hereunder:

Table 8: Proposed Tariff Schedule

Consumer category	Fixed Charge		Energy Charge			Minimum Monthly Charge		
	Existing	Proposed	Slabs	Existing	Proposed	Unit/ Voltage	Existing	Proposed
Domestic Service Tariff								
DS-I (a), Kutir Jyoti (Metered)	0	Rs.20 per Connection	0-30 Units	Rs.1/kWh	Rs.1/kWh		0	NA
			> 30 Units	Rs.1/kWh	Rs.2/kWh			
DS-I (a), Kutir Jyoti (Un-metered)	Rs.27 per Connection	Rs. 50 per Connection		0	0		NA	NA
DS-I (b), <=2 kW (Metered)	0	Rs.50 per Connection	0-100 Units	Rs.1/kWh	Rs.1.50/kWh		0	40 Units for 1 st kW and 20 units for each additional kW
			101-200 Units	Rs.1/kWh	Rs.2.50/kWh			
			>200 Units	Rs.1/kWh	Rs.3.00/kWh			
DS-I (b), <=2 kW (Un-Metered)	Rs.65 per Connection	Rs.125 per Connection		0	0		0	0
DS II	Rs.20 per Connection	Rs.100 per Connection	0-100 Units	Rs.1.35/kWh	Rs.2.00/kWh		0	50 units for 1 st kW and 25 units for each additional kW
			101-200 Units	Rs.1.35/kWh	Rs.3.00/kWh			
			> 200 Units	Rs.1.70/kWh	Rs.3.00/kWh			
DS III	Rs.40 per Connection	Rs.150 per Connection	0-100 Units	Rs.1.70/kWh	Rs.2.00/kWh		0	50 units for 1 st kW and 25 units for each additional kW
			101-300 Units	Rs.1.70/kWh	Rs.3.00/kWh			
			> 300 Units	Rs.1.70/kWh	Rs.3.00/kWh			
DS HT	Rs 30/kVA	Rs 50/kVA		Rs.1.50/kWh	Rs.2.40/kWh	Units/kVA	0	60
Religious Institutions Tariff								
Religious Institutions	Rs.20 per Connection	Rs.90 per Connection	0-100 Units	Rs.1.35/kWh	Rs.2.25/kWh		0	50 units for 1 st kW and 25 units for each additional kW
			101-200 Units	Rs.1.35/kWh	Rs.2.70/kWh			
			201-300 Units	Rs.1.35/kWh	Rs.2.70/kWh			
			> 300 Units	Rs.1.35/kWh	Rs.3.00/kWh			
Non Domestic Service								
NDS I (a) Metered		Rs.50 per Connection			Rs.2.00/kWh			

Consumer category	Fixed Charge		Energy Charge			Minimum Monthly Charge		
	Existing	Proposed	Slabs	Existing	Proposed	Unit/Voltage	Existing	Proposed
NDS I (a) Unmetered		Rs.250 per Connection			0			
NDS (b) Metered	0	Rs.70 per Connection		Rs.1.25/kWh	Rs.2.50/kWh		0	50 units for 1 st kW and 25 units for additional kW
NDS (b) Metered	Rs.110/kWh	Rs.350/kWh		0	0		0	0
	Rs.50/kW for each additional KW	Rs.100/kW for each additional KW		0	0		0	0
NDS II (a) (2 kW-30 kW)	Rs 100/kWh	Rs 200/kWh		Rs.3.60/kWh	Rs.4.25/kWh		0	50 units for 1 st kW and 25 units for additional kW
NDS II (b)* (Above 30 kW-75 kW)	Rs 100/kWh	Rs 200/kWh		Rs.3.60/kWh	Rs.4.25/kWh		0	50 units for 1 st kW and 25 units for additional kW
NDS III- Advertisement and Hoardings		Rs. 2000 /Connection			Rs.8.50/kWh	Rs/kW		3500
NDS IV- Multiplexes & Shopping complexes								
LT (load above 30 kW up to 75 kW)		Rs 255/kW			Rs.8.50/kWh	Rs/kW		1000
HT (Above contract demand of 100 kVA)		Rs 300/kW			Rs.8.50/kWh	Rs/kVA		1000
Low Tension Industrial Service Tariff								
LTIS I (up to 15 HP)	Rs 60/HP	Rs 75/HP		Rs.3.50/kWh	Rs.3.00/kWh	Units/HP	0	0
LTIS II (Above 15 HP to 39 HP)	Rs 60/HP	Rs 90/HP		Rs.3.50/kWh	Rs.3.50/kWh	Units/HP	0	70
LTIS III* (Above 39 to 107HP)	Rs 60/HP	Rs 90/HP		Rs.3.50/kWh	Rs.3.50/kWh	Units/HP	0	70
Street Light Service								
Street Light Service- SS1 Metered	Rs 20/Connection	Rs 30/KW		Rs.3.50/kWh	Rs.3.50/kWh			
	Rs 100 per 100 Watt Lamp	Rs 2/Watt		0	0			
SS2- Unmetered	Rs 25 per additional 50 Watt	Rs 2/Watt		0	0			
Irrigation and agricultural services								
IAS I Metered	0	Rs 60/HP		Rs. 0.50/kWh	Rs. 0.60/kWh			
IAS I Un-Metered	Rs 50/HP	Rs 120/HP		0	0			

Consumer category	Fixed Charge		Energy Charge			Minimum Monthly Charge		
	Existing	Proposed	Slabs	Existing	Proposed	Unit/Voltage	Existing	Proposed
IAS II Metered	0	Rs 100/HP		Rs. 0.75/kWh	Rs. 2.00/kWh			
IAS II Un-Metered	Rs 200/HP	Rs 600/HP		0	0			
PHED/PWW- Public Health and Engineering department/Public water works								
PHED/PWW LT	Rs 60/HP	Rs 100/HP		Rs 3.50/kWh	Rs 3.85/kWh	Units/HP	0	80
PHED/PWW HT	Rs140/kV A	Rs 250/kVA		Rs 4/kWh	Rs 4.80/kWh	Rs/kVA	250	450
Rural Electric Cooperative (Bulk Supply)								
REC- Bulk Supply	0	0		Rs 0.70/kWh	Rs 1.40/kWh			
Military Engineering Service								
MES	Rs 150/kVA	Rs 180/kWh		Rs 2.50/kWh	Rs 3.00/kWh			
High Tension service								
HTS	Rs 140/kVA	Rs 225/kVA		Rs 4.00/kWh	Rs 4.35/kWh	Unit- Rs/kVA Voltage Level- 11 kV	250	900
						Unit- Rs/kVA Voltage Level- 33 kV	250	1000
						Unit- Rs/kVA Voltage Level- 132 kV	400	1500
						Unit- Rs/kVA Voltage Level 220 kV	0	1500
						Unit- Rs/kVA Voltage Level 440 kV	0	1500
High Tension Special Service								
HTSS	Rs 300/kVA	Rs 350/kVA		Rs 2.50/kWh	Rs 2.50/kWh	Rs/kVA	400	1050
Railway Traction Service								
RTS	Rs 140/kVA	Rs 180/kVA		Rs 4.30/kWh	Rs 4.50/kWh	Rs/kVA	400	900

A6: PUBLIC CONSULTATION PROCESS-ISSUES RAISED

- 6.1 The tariff petition evoked reaction from several quarters. 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 licensee. There were 228 members of the public who took part in the public hearing process. The list of the attendees is attached as Annexure-IV to this order.
- 6.2 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 persons, regarding the ARR and tariff petition.
- 6.3 The comments and suggestions raised by the participants along with replies given to the suggestions/comments by the licensee and views of the Commission thereon are discussed in the following sections.

Suo-motu proceedings & jurisdiction of the Commission

Public Comments/Suggestions

- 6.4 A number of consumers have raised objections on the maintainability of the suo-motu proceedings initiated by the Commission and have challenged the authority and jurisdiction of the Commission to undertake the exercise of determination of the tariff of the licensee for FY 2010-11 even without filing an application as per Section 64(1) of the Act for the said purpose & have prayed the Commission to drop the proceedings.

Licensee's response

- 6.5 The licensee has submitted that Section 62 of the Electricity Act, 2003 empowers the Hon'ble Commission to determine the tariff for supply of electricity by a generating company to a distribution licensee, transmission of electricity, wheeling of electricity and retail sale of electricity in accordance with the provisions of the Act. Section 61 of the Electricity Act, 2003 specifies that the Hon'ble Commission shall specify the terms and conditions for the determination of tariff and which would be guided by different principles including the guidelines issued under the National Electricity Policy and Tariff Policy. The Tariff Policy issued by the MoP in compliance with Section 3 of the Electricity Act, 2003, clearly specifies that the Commission should initiate the tariff determination and regulatory scrutiny on suo-motu basis in case the licensee does not initiate filings in time.
- 6.6 The licensee further submitted that the Punjab State Electricity Regulatory Commission had also initiated suo-motu proceedings (Petition No. 7 of 2007) for determination of Annual Revenue Requirement and Tariff Petition for the Financial Year 2007-08 and issued an order in the matter on 17th September, 2007.

- 6.7 Based on the above, the licensee has submitted that the Hon'ble Commission is fully empowered to fix the rate of sale of energy provisionally, which may be trued-up as soon as the audited accounts are received from CAG. It is, therefore, prayed that the Hon'ble Commission may determine the provisional tariff for FY 2010-11 which may be trued up as per audited accounts.

Views of the Commission

- 6.8 The Commission has given its views on this subject in the Section 3 of this Tariff Order.

Non submission of audited accounts and ARR by licensee

Public Comments/Suggestions

- 6.9 It has been objected that licensee has not been able to submit its annual audited accounts as well as the latest ARR to the Hon'ble Commission and in absence of the audited figures and the latest data of the ARR; the Commission cannot determine the Tariff for FY 2010-11.

Licensee's response

- 6.10 The State of Jharkhand was formed with effect from 15.11.2000 with bifurcation of the State of Bihar. Jharkhand State Electricity Board (JSEB) was constituted on 16.03.2001 and started functioning w.e.f. 01.04.2001. However, the assets and liabilities between the two State Electricity Boards i.e. Bihar State Electricity Board (BSEB) and Jharkhand State Electricity Board (JSEB) remain incomplete due to several disputes. The same is yet to be finalized and the matter is laying subjudice before Hon'ble Supreme Court.
- 6.11 In the meanwhile, due to non-finalization of accounts, the licensee started functioning on Provisional Accounts. It may be noted that JSEB also filed tariff petition for FY 2006-07 based on the provisional data and provisional annual accounts and accordingly provisional Tariff Order was finalized by this Hon'ble Commission effective from 01.09.2007.
- 6.12 However, due to certain reasons JSEB filed an appeal before the Hon'ble Appellate Tribunal of Electricity against the said order of Hon'ble Commission. The Hon'ble Appellate Tribunal of Electricity vide its order dated 08.05.2008 directed Hon'ble Commission to fix the tariff rate as per direction contained in the said order. Subsequently JSEB filed IA petition no. 78/2009 on 25.02.2009 before the Hon'ble Appellate for clarifying that whether only audited annual accounts should be submitted before the Hon'ble Commission for fixation of tariff upon which the Hon'ble Appellate Tribunal of Electricity passed an order on 23.09.2009 that it will be open for the Hon'ble Commission to take action against the appellant as may be available in law for compliance with the rules and regulations.

- 6.13 In the mean time the licensee has filed ARR for the FY 2007-08 and FY 2008-09 and tariff petition for FY 2008-09 before this Hon'ble Commission on April'2008 & March'2009 respectively. In compliance of Hon'ble Appellate Tribunal's order dated 23.09.2009 the Hon'ble Commission issued a notice on 29.01.2010 directing JSEB to submit show cause as to why not the tariff order 2010-11 be fixed suo motu, as the Board has failed to submit the audited Annual Accounts & directed JSEB to submit the response within 15 days which was complied with by JSEB. As per direction of Hon'ble Commission the notice for ARR for FY 2007-08 & 2008-09 and Tariff Petition FY 2008-09, was published in the news papers.
- 6.14 JSEB/licensee also submitted that audit of annual accounts is also dependent on the audit process of CAG and takes time to complete. JSEB/Board already has approved provisional Annual Accounts till FY 2005-06 and has submitted the same to CAG for Audit. The audit of accounts by CAG is underway and would be submitted to the Hon'ble Commission upon approval of finalized audited annual accounts by CAG. Meanwhile all provisional accounts till FY 2006-07 have been made available as required by the Hon'ble Commission which can be taken as a base for provisional determination of ARR and Tariff and the same may be trued-up as soon as the audited accounts are received from CAG.

Views of the Commission

- 6.15 The Commission has initiated the ARR and tariff determination process in absence of the audited annual accounts in order to comply with the Order of the Hon'ble APTEL passed in Appeal no. 129 of 2007. Further, in order to discharge the duty cast under the provision of the Act, the Commission has to process the ARR petition for FY 2007-08 and FY 2008-09 along with the tariff revision petition for FY 2008-09 and also proceed for suo-motu proceeding to update the tariff based on the material/information available with the Commission so that the revision in tariff is reflected prospectively and not retrospectively.

Revision of Tariff

Public Comments/Suggestions

- 6.16 The consumers have objected to the tariff proposal of JSEB which had sought the tariff revision for FY 2008-09. It has been argued that any retrospective revision of tariff shall have an adverse affect on the consumers, specially the industrial consumers for whom it shall be impossible to absorb the additional cost burden of the higher electricity rates for the past period, as they have already sold the product/service to the consumer at a price based on the cost factors including electricity tariff prevalent at that time. Therefore, tariff revision, if any, shall be with prospective effect only.

Licensee's response

- 6.17 JSEB had filed its ARR for FY 2007-08 and FY 2008-09 in April 2008 and the Tariff Revision Petition for FY 2008-09 in March 2009. The Hon'ble Commission has directed JSEB to file the annual audited accounts and fresh ARR with the Tariff petition for FY 2010-11. However, since the finalization of annual accounts of JSEB are still under process and the same shall be provided to the Hon'ble Commission immediately after completion. JSEB submit to consider the above-mentioned ARR for FY 2007-08 and FY 2008-09, Tariff Revision Petition for FY 2008-09 along with the provisional accounts up to FY 2006-07 already being filed to the Hon'ble Commission. The Hon'ble Commission has decided to proceed to determine the provisional tariff for FY 2010-11, suo-motu, on the basis of abovementioned materials/information already made available by JSEB to comply with the order of Hon'ble Appellate Tribunal of Electricity, New Delhi.
- 6.18 Accordingly, JSEB has been directed to publish notice for inviting objections/suggestions/comments of public on the ARR for FY 2007-08 and FY 2008-09 and the Tariff Petition for FY 2008-09. Evidently, the suo-motu exercise of the Hon'ble Commission is to determine the provisional Tariff for FY 2010-11 and the abovementioned ARR's and Tariff Petition filed by JSEB is only being treated as information made available to the Hon'ble Commission, the question JSEB's proposal of retrospective revision of tariff does not arise. Moreover, it has also been emphasized by the Hon'ble Commission in all of its Public Hearings that any Tariff Revision shall only be prospective; therefore JSEB deems the issue has been addressed and has no further comments to offer.

Views of the Commission

- 6.19 The Commission states that the changes in tariff, if required, will be with prospective effect only.

Proposed hike in Tariff

Public Comments/Suggestions

- 6.20 It has been contended by numerous consumers in the hearing as well as in their written submissions that the tariff rates proposed by JSEB in its tariff revision petition for FY 2008-09 are too steep and shall not be implemented as they intends to cover the inefficient operations of JSEB. The proposed tariff rates are enormous and are nowhere comparable to the neighbouring States.

Licensee's response

- 6.21 The current tariff structure and rates had been approved vide the Tariff Order FY 2003-04 by the Hon'ble Commission and has not been revised even after a gap of 6 years. Considering the inflationary cost increase in all commodities there has not been any tariff increase even to compensate the inflation cost in last 6 years.

6.22 The Tariff Revision Petition of JSEB contained a revision of tariff to an extent possible in most of the categories only to account for the inflationary increase in input costs. The proposal had been an endeavour for alignment with the national tariff policy and in correspondence to the tariffs approved by the Hon'ble Commission for other licensees in the state of Jharkhand. It may be noted that to avoid any tariff shock to its consumers, JSEB proposed a partial recovery of the huge revenue gap of FY 2008-09 only. The estimated additional revenue from tariff revision proposal was sufficient to cover only 22% of the total revenue gap envisaged for FY 2008-09 and not sufficient to cover the entire gap for FY 2008-09 alone, not to mention the uncovered revenue gaps of past FYs. Even at the proposed Tariff Rates, JSEB shall be barely able to cover its average power purchase costs only and the other establishment costs shall remain uncovered.

6.23 The guiding principles of the tariff proposal included:

- (a) Marginal increase in the low paying capacity consumers and design of appropriate tariff structure for discouraging unwarranted consumption by specific category/slab of consumers.
- (b) Better alignment for recovery of fixed costs through Fixed / Demand Charges.
- (c) Tariff proposed to be at least not below the average power purchase cost to JSEB.
- (d) Tariff structure to address the issue of peak and off peak power and to flatten the demand curve round the clock.
- (e) Movement of Tariff rates towards Cost of Supply.

6.24 The licensee has also submitted that it had been evident from the Tariff Revision proposal document that the existing tariff as well as proposed tariff of JSEB has been among the lowest in all major categories in comparison with other electricity utilities including that of neighbouring States.

Views of the Commission

6.25 The Commission has dealt with the issue of tariff proposal and other issues in the Sections 14 to 17 of this Order.

Terms and conditions of supply

Public Comments/Suggestions

6.26 Some of the objections are pertaining to the document of 'General Terms and Conditions of Supply' as submitted by JSEB. It has been mentioned that since Electricity Supply Code Regulations, 2005 are already in force in Jharkhand which are applicable to all distribution licensees; there is no need at all to issue fresh terms and conditions of supply. Moreover, JSEB cannot have its own Supply Code and it is the prerogative of the Hon'ble Commission to issue/modify its supply code.

JSEB's Response

6.27 There is no denial by JSEB to the fact that the Hon'ble Commission is entitled to determine the Conditions of Supply by a distribution licensee to its consumers in the State by way of Supply Code Regulations. However, it is the humble submission of JSEB that the Supply Code Regulations, 2005 issued by the Hon'ble Commission do not address many of the conditions and practical situations which are necessary for supply to the consumers. The absence of specific terms in the Supply Code leads to confusion and disputes between JSEB and its consumers on several counts resulting in litigation.

6.28 The Licensee also submits that the submission of General Terms and Conditions of Supply by JSEB to the Hon'ble Commission is only an attempt by JSEB to put these terms and conditions in black & white, so as to minimize the possibility of any ambiguity leading to any dispute. JSEB requests the Hon'ble Commission to consider the said document and accordingly issue comprehensive Terms and Conditions of Supply to remove any further difficulty and confusion in this regard.

Views of the Commission

6.29 The Commission feels that the objections of the members of the public are genuine and the licensee has not pointed out any specific terms and conditions which are not mentioned in the Supply Code. As and when the licensee brings to the notice of the Commission any special situation/condition which warrants issue of specific terms and condition, the Commission will consider the same. Moreover, the tariff order do not contain the terms and conditions for supply as these apply to all the licensees in the State of Jharkhand whereas this Tariff Order applies only to JSEB.

High energy sales growth

Public Comments/Suggestions

6.30 The projected sale of 4802 MU in FY 2008-09 has been questioned in the absence of actual data. It is requested that in case of Kutir Jyoti connections, only normalized growth shall be assumed.

JSEB's Response

- 6.31 JSEB has already submitted the provisional figures of consumer category-wise sale to the Hon'ble Commission, which shows the sale at 4649 MU. The Hon'ble Commission may consider the provisional figures in comparison with projections in the ARR of FY 2008-09. It may be seen that difference is mainly on account of consumption in industrial HT and railway category, which supports the fact that the decrease in T&D loss reduction has been slow on account of decline in HT-LT consumption ratio.

Views of the Commission

- 6.32 The Commission agrees with the views of the objectors that the projection made by the licensee are on the higher side as also substantiated by the actual category-wise sales figures submitted by the licensee, which are much less than the sales figures originally projected by the licensee.

High T&D Losses

Public Comments/Suggestions

- 6.33 Consumers have objected to the continuous reporting of high T&D losses by JSEB to the tune of more than 40%, which are unsustainable.

Licensee's response

- 6.34 The Licensee has stated that it agrees that there has not been desired improvement on the front of reduction of T&D Losses of its system. However, JSEB has been consistently trying to reduce the T&D losses in spite of the huge expansion of LT network and electrification of rural areas adds up to increase in T&D losses. The increase in LT network and rural electrification provides scope for higher losses both technical as well as commercial. In the past periods, desirable results could not be achieved on the front of reduction of T&D Losses. Lack of funds, continuous deteriorating HT-LT consumption ratio and administrative bottlenecks in respect of constitution of special courts were among the few reasons.
- 6.35 The Licensee also submitted that it understands the importance of the issue and its impact, has been giving utmost attention towards reduction of T&D losses. JSEB has initiated IT based monitoring of its Bulk HT consumers. Remote Monitoring Centre has been established where data from the Remote Meters is received and analysed on real time basis. Based on the inputs provided by this analysis, inspections and raids are conducted which are proving to be quite successful. JSEB has also created an Anti-Power Theft Cell for conducting raids.

6.36 The licensee further submitted that the process of constitution of special courts for hearing of Energy theft cases has been initiated by the State Government, which shall prove to be a great deterrent measure for persons engaged in the malpractices of energy theft. The results of the corrective measures undertaken are encouraging and JSEB has been able to achieve a remarkable reduction in T&D Losses in FY 2009-10. However, JSEB submit to the Hon'ble Commission that, keeping in view the huge target of rural electrification, release of KJ connection and expansion of LT network, a practical loss reduction trajectory is re-casted for JSEB.

View's of the Commission

6.37 The Commission fully agrees with the views of the consumers and feels that the licensee has failed to show much improvement in the T&D loss reduction. The Commission has also given T&D loss reduction target to the licensee in the previous tariff orders but the licensee has failed to comply with the directives. The Commission has given fresh time bound directives to the licensee in the directives section of this order. The failure to comply with the Order will invite strict penalty for the licensee.

6.38 Meanwhile, the Commission has decided that the cost of inefficiency of JSEB cannot be passed on to the consumers. The treatment meted out for inefficient cost of operation of JSEB is elaborated in Section 11 of this Tariff Order.

Thermal generation of PTPS

Public Comments/Suggestions

6.39 Several objections have been raised on the continuous lack of any improvement in any of the performance parameters of PTPS. It has been suggested that the Commission shall consider the appropriate performance standards as per norms being laid by it.

Licensee's response

6.40 Patratu TPS is a very old thermal power plant owned by JSEB and 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 Hon'ble Commission. JSEB submits that the Hon'ble Commission may fix a relaxed norm in view of the vintage of the plant and also the 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.

6.41 The licensee also submitted 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.

View of the Commissions

6.42 The Commission fully agrees with the views of the consumers and feels that the licensee has failed to achieve desired improvement in the performance of PTPS. Meanwhile, in compliance to the Order of the Appellate Tribunal, the Commission has given time bound targets to the licensee to reach the normative levels as set out in Section 7 and Section 11 of this Tariff Order.

Hydel generation of SHPS

Public Comments/Suggestions

6.43 Data inconsistency and non-utilisation of station to take care of the peak load requirement in the area has been questioned.

Licensee's response

6.44 JSEB submits that net generation reported for FY 2006-07 in Table 2-6 of ARR for FY 2008-09 had been erroneously reported at 151 MU. The correct figure is 207 MU which is reported in Table 2-8.

6.45 It is also submitted that this error has not in any way affected the ARR of FY 2008-09. Regarding the inability of JSEB to utilize the SHPS for catering the peak load requirement, it is submitted that SHPS is a multipurpose project, which caters to the irrigation needs and drinking water requirement of the Ranchi city. SHPS was envisaged to cater the Peak Load requirement of the State in the evening. However, due to acute shortage of rainfall and continuous increasing water requirement of city of Ranchi irrigation and drinking water requirement has taken over as the prime importance and the power generation has become the by-product. Accordingly, JSEB submits that generation from SHPS shall be allowed as per provisional figures reported in the ARR.

View's of the Commission

6.46 The Commission has considered the actual generation of SHPS from the Power Grid Corporation of India Limited (PGCIL) annual report for FY 2008-09, according to which the gross generation from SHPS is reported as 237 MU.

Power Purchase

Public Comments/Suggestions

- 6.47 Considering the available external power purchase sources, it has been argued that JSEB had sufficient power available at its disposal and distress power purchase at higher rates should be disallowed.

Licensee's response

- 6.48 JSEB submitted that it has been facing huge power shortage during peak hours and had to resort to buy power at very higher rates from the short term energy market to meet its supply obligations. Moreover, the merit order schedule cannot be strictly made applicable in case of JSEB. Tala & Chukha are international projects and hence the power purchase obligation is bound by contractual terms. The power from DVC points of supply are constrained from the connectivity to network and cannot follow a Merit Order dispatch schedule due to which JSEB has been forced to purchase power from DVC which is among the costliest power sources across country.
- 6.49 The licensee has also submitted that the National Tariff Policy also identifies the importance and legitimacy of recovery of any power purchase cost done by the distribution licensee vide Section 8.2.1 sub-section (1) which emphasize the need to consider all the power purchase costs as justifiable unless either the merit order principle has been violated or power has been purchased at unreasonable rates. The reduction of Aggregate Technical & Commercial (ATC) losses needs to be brought about but not by denying revenues required for power purchase for 24 hours supply and necessary and reasonable O&M and investment for system up-gradation. Therefore, JSEB submits that in view of the above consideration the power purchase units and cost be approved as actual on the basis of latest information being made available to the Hon'ble Commission.

View's of the Commission

- 6.50 The Commission agrees with the views of the consumer with respect to the high rate of power purchased by the licensee. The Commission has noticed that the licensee has been purchasing power even at a rate more than Rs. 8/unit during FY 2007-08 and FY 2008-09, which is highly unreasonable and needs to be regulated. The Commission has given directives on this issue in the directives section of this Order.

Interest and financing Charges

Public Comments/Suggestions

- 6.51 It has been argued that since JSEB has failed to provide its annual audited 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.

Licensee's response

- 6.52 JSEB submitted that the Interest and Finance Charges being submitted in the ARR are as per the actual interest burden of the JSEB. The main components which are the reason of higher interest burden are: - Interest burden of the Erstwhile BSEB Loans, interest burden of loans for expansion of transmission and distribution network, interest on loans availed for power purchase, utilising overdraft and letter of credit (LC) facilities for meeting power purchase obligations which is unavoidable due to the fact that the present revenue of JSEB is inadequate to meets its power purchase bills.
- 6.53 The interest on working capital and Interest on security deposit have been estimated in lines with the Tariff Regulations of the Hon'ble Commission.

View's of Commission

- 6.54 The Commission has conducted the exercise of ARR & Tariff determination on the basis of the provisional accounts available for FY 2003-04 to FY 2006-07. There is no doubt that many discrepancies have been observed in the loans and other balance sheet items of the licensee's accounts in the past. However, the Commission is legally bound to comply with the Hon'ble APTEL's Order to provisionally true-up on the basis of the available data. Meanwhile, the treatment of the IFC proposed by the licensee for FY 2007-08 & FY 2008-09 has been discussed later in this Order.

Operation & Maintenance Expenses

Public Comments/Suggestions

- 6.55 The expenses on account of terminal benefits have been objected by the consumers as they are considered as exorbitantly high. A&M Expenses under the head IT initiatives/Networking/Computerization in FY 2008-09 have been objected on the ground that these expenses are capital in nature.

Licensee's response

- 6.56 The comparative high figure of terminal benefits is mainly attributable to the creation of GPF and Pension Corpus Fund. Though, denied in the last Tariff Order by the Hon'ble Commission, JSEB has included this in its employee costs due to the fact that other SERCs have allowed creation of Pension Corpus Fund from the ARR submissions spread across few years.

6.57 JSEB has also referred to the Tariff Order of Chhattisgarh State Electricity Regulatory Commission for FY 2007-08 in this regard. The same may be allowed by the Hon'ble Commission also. Regarding A&G Expenses mentioned under the IT initiatives/Networking/Computerization in FY 2008-09, it is clarified that these expenses are not capital in nature and JSEB shall have to incur these costs annually mainly for creation of Billing, Revenue & Energy Management System (BREMS) and operation of Zonal/Fuse Call Centres to address consumer grievances

Views of the Commission

6.58 The Commission takes note of the concerns of the objectors. However, the Commission is of the view that the justifiable and legitimate cost should also be allowed to the licensee for its smooth and efficient functioning. Therefore, the Commission has considered the request of the licensee to provide for the pension corpus and also allowed a certain amount towards IT initiatives/Networking/Computerization in FY 2008-09.

Provision for Bad Debts

Public Comments/Suggestions

6.59 Objections have been raised on inclusion of provision for bad debts by JSEB in its ARR as there is no provision for bad debts as per clause 10 of the 'Distribution Tariff Regulations, 2004 and any inefficiency on part of the licensee should not be loaded to the consumers.

Licensee's response

6.60 JSEB hereby submits that provision for bad debts is a normal practice followed universally and is being recognised as deductible expense even by Income Tax Authorities. Moreover, most of the Tariff Regulations of other SERCs allows provision for bad debts as an item of ARR computation. JSEB requests the Hon'ble Commission to allow provision for bad debts to the extent of 1.00% of the total revenue, which shall be finally trued up based upon the bad debts written actually written off in the audited annual accounts.

Views of the Commission

6.61 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 licensee.

HTSS category Induction/arc Furnace

Public Comments/Suggestions

6.62 Objections have been raised towards higher fixed charges than normal in the HTS category as well as determination of load based on tonnage.

Licensee's response

6.63 JSEB submits that considering the fact that the existing tariff of HTSS category is already higher than HTS category, it has proposed only nominal increase in fixed/demand charges and no increase in energy charges. Regarding determination of load based on tonnage capacity the same system had been finalized with consensus of all the stakeholders and is in practice even before the formation of State of Jharkhand. JSEB has not proposed any change in the present system.

Views of the Commission

6.64 The Commission has dealt with issues related to tariff revision and other tariff related issue in the Section 14 to 17 of this order.

6.65 Meanwhile, the Commission directs the licensee that in case of induction/arc furnace consumers, the contract demand shall be considered on the basis of total capacity of the induction/arc furnace and the equipment as per manufacturer technical specification and not on the basis of measurement.

Consumer category-wise tariff proposal

Public Comments/Suggestions

6.66 Objections have been raised towards revision of fixed/demand charges, energy charges, increase in/introduction of minimum monthly charges, ToD Tariff, changes in voltage rebate, load factor rebate, power factor rebate/penalty, delayed payment surcharge, etc

Licensee's response

6.67 JSEB submits that its Tariff Revision proposal has detailed the reasoning for every aspect of the proposed tariff for all the consumer categories. This being a suo-motu exercise by the Hon'ble Commission for determination of Tariff, JSEB refrains from any further comment in this regard at this stage.

View's of the Commission

6.68 The Commission has dealt with such tariff related issues in the Section 14 to 17 of this order.

6.69 The Commission further states that there are some other issues which are not in the purview of this tariff order and requests the consumers to make a separate submission to the licensee or the Commission, as the case may be.

Modification in applicability and character of service

Public Comments/Suggestions

6.70 The National Industrial Corporation (NIC) has requested the Commission to make amendments to the applicability of the LTIS category, in line with the notification no. 223 dated 13.08.2002 of Energy Department, Government of Jharkhand.

Licensee's response

6.71 No specific response has been provided by the licensee in this regard.

View's of the Commission

6.72 The Commission has revised the applicability of the LTIS category line with the notification no. 223 dated 13.08.2002 of Energy Department, Government of Jharkhand. The revised applicability of the LTIS category is given in the Tariff schedule in Section 17.

A7: PROVISIONAL TRUE UP OF FY 2003-04, FY 2004-05, FY 2005-06 AND FY 2006-07 AS PER PROVISIONAL ANNUAL ACCOUNTS OF THE RESPECTIVE YEARS

- 7.1 In compliance of the Hon'ble APTEL's Direction no. 8 in the Order dated 8.5.2008 held in Appeal no. 129/2007 and IA No.78 of 2009, the Commission decided to conduct the provisional truing up for FY 2003-04 to FY 2005-06 as well as for FY 2006-07.
- 7.2 As part of the truing up exercise, the Commission requisitioned the provisional annual accounts for FY 2003-04, FY 2004-05, FY 2005-06 & FY 2006-07 from the licensee and has based the truing up exercise for various years on the following basis:
- (a) **FY 2003-04:** On the basis of (a) Hon'ble APTEL Order;(b) decisions & directives of the Commission in Tariff order for FY 2003-04; and (c) provisional accounts for FY 2003-04.
 - (b) **FY 2004-05:** On the basis of (a) Hon'ble APTEL Order; and (b) provisional annual accounts for FY 2004-05.
 - (c) **FY 2005-06:** On the basis of (a)Hon'ble APTEL Order; (b) the provisional accounts for FY 2005-06; (c) the 'Generation Tariff Regulations, 2004'; and (d) 'Distribution Tariff Regulations, 2004.'
 - (d) **FY 2006-07:** On the basis of (a) the Hon'ble APTEL Order; (b) decisions & directives of the Commission in Tariff Order for FY 2006-07; (c) the provisional accounts for FY 2006-07; (d) the 'Generation Tariff Regulations, 2004'; and (e) 'Distribution Tariff Regulations, 2004.'
- 7.3 However, as stated above it is a provisional truing-up exercise and the Commission will carry out the final true-up exercise once the audited annual accounts for the respective years are submitted by the licensee.
- 7.4 The component-wise description of licensee's submission and Commission's analysis on the same is given below.

Energy Sales

Licensee's submission

- 7.5 The licensee had proposed the energy sales of 3164 MU in the tariff petition of FY 2003-04. However, the actual sale submitted as per the provisional annual accounts of that year is 2863 MU.

- 7.6 The actual sale of power as per provisional annual accounts of FY 2004-05 & FY 2005-06 is submitted as 3154 MU and 3447 MU (including inter-state sales) respectively.
- 7.7 In the tariff petition of FY 2006-07, the licensee had proposed the sales of 3821 MU and the sales as per provisional annual accounts for that year is submitted as 4359 MU (including inter-state sales).

Commission's analysis

- 7.8 The Commission has approved the energy sales on the basis of the provisional accounts submitted for FY 2003-04 to FY 2006-07, as shown under

Table 9 : Approved Energy Sales (in MU)

Categories	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Domestic	660	920	895	1167
Commercial (NDS)	139	142	156	187
Street Lighting	39	42	80	84
Irrigation	39	58	80	68
Public water works	60	62	44	65
Industrial LT	103	102	97	117
Industrial HT	1434	1405	1524	1613
Railways	389	423	444	471
MES				35
Outside State Sales			125	551
Total	2863	3154	3447	4359

Transmission & Distribution (T&D) losses

Licensee's submission

- 7.9 The licensee had proposed the T&D losses of 38% in its tariff petition for FY 2003-04 whereas the actual T&D losses, as per the provisional annual accounts for FY 2003-04, stands at 48.28%.
- 7.10 The actual T&D losses as per provisional annual accounts of FY 2004-05 & FY 2005-06 are 48.48% and 47.62% respectively.
- 7.11 The licensee had proposed the T&D losses of 38% in the tariff petition for FY 2006-07. However, the actual T&D losses as per the provisional annual accounts of FY 2006-07 stands at 42.86%.

Commission's analysis

- 7.12 As is evident from the actual T&D losses incurred by the licensee, the T&D losses are far exceeding the norms set by the Commission. This is despite the fact that the licensee is having a favourable consumer mix as compared to many other States in India. The Commission is of the view that such a high T&D loss level due to licensee's inefficiency cannot be passed on to the consumers.
- 7.13 The Hon'ble APTEL in its Direction no.10 of appeal no.129/2007, has also expressed concern on the excessive transmission and distribution (T&D) losses of the licensee and has directed the Commission to lay 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.
- 7.14 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 licensee. Further, through the Tariff Order for FY 2003-04, the Commission had directed the licensee to strictly monitor and implement the T&D loss reduction programme.
- 7.15 The Commission does not find any reason to change the target T&D loss level given to the licensee and therefore approves the T&D loss level of 42.66% for the purpose of truing up for FY 2003-04.
- 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. The Commission does not find any reason to change the target given to the licensee and therefore approves the T&D loss level of 36.66% for the purpose of truing up for FY 2006-07.
- 7.17 The licensee had not filed the T&D losses for FY 2004-05 & FY 2005-06. The Commission approves the T&D losses for FY 2004-05 & FY 2006-07 at 40.66% and 38.66% respectively, which is on the basis of the T&D loss target for FY 2003-04 and FY 2006-07.
- 7.18 The table below summarises the T&D loss levels approved by the Commission from FY 2003-04 to FY 2006-07:

Table 10 : Approved T&D Losses for FY 2003-04 to FY 2006-07

FY	As proposed by licensee in Tariff petitions	As approved by JSERC in Tariff Order	T&D Loss as per Prov. accounts	As approved in Prov 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%

- 7.19 The Commission had directed the licensee to work out a logical trajectory to reduce its T&D losses and submit the same to the Commission for consideration. However, the licensee has not filed the T&D loss trajectory till the date of this order. However, in compliance with the Hon'ble APTEL's Direction no.10, the Commission has set a time bound T&D loss reduction trajectory for licensee such that the licensee achieves the benchmark T&D loss level of 15% by the end of FY 2016-17.
- 7.20 The trajectory till FY 2010-11 is in line with the trajectory set by the Commission vide its tariff order for FY 2006-07.

Table 11 : Approved T&D Losses Trajectory

Year	%age
FY 2007-08	32.66%
FY 2008-09	28.66%
FY 2009-10	24.66%
FY 2010-11	20.66%
FY 2011-12	19.66%
FY 2012-13	18.66%
FY 2013-14	17.66%
FY 2014-15	16.66%
FY 2015-16	15.66%
FY 2016-17	15.00%

Energy Availability

Licensee's submission

- 7.21 The energy available from outside sources and own generation as per the provisional accounts of FY 2003-04 to FY 2006-07 is detailed hereunder:

Table 12: Source-wise Power Purchase and Net Generation from FY03-04 to FY06-07 (in MU)

Sources	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
NTPC	636	1022.7	1644.1	1333.7
DVC	1889.1	2322.8	2497.2	2683.83
NHPC-Ranjit	2	20.2	43.2	24.92
Deemed Power Purchase	298	244.3	0	0
TVNL	1131.5	1092.5	1308.6	2375.52
WBSEB	27.5	52	33.7	39.11
VVNL	23.1	13.2	0	0

UI	431.1	449.1	187.9	0
PGCIL-ERLDC+GRIDCO	41.9	6.1	157.5	0
PTC		173.1	0	0
Thermal Generation (PTPS)	885.02	576.79	657.44	529.08
Hydel Generation (SHPS)	138.57	148.34	50.57	207.36
Total	5503.80	6120.98	6580.15	7193.52

Commission's analysis

- 7.22 The Commission has scrutinised the data for actual power purchase from outside sources and through own generation (both thermal and hydel) as submitted by the licensee vide its provisional annual accounts for the period from FY 2003-04 to FY 2006-07. The Commission provisionally allows the figures of net purchase and net generation as proposed by licensee with the exception of deemed power purchase during FY2003-04 and FY 2004-05 for which no basis has been given by the licensee.
- 7.23 The approved power purchase from outside sources and net generation for FY 2003-04 to FY 2006-07, as provisionally approved by the Commission is summarized in the table given below:

Table 13: Approved source-wise power purchase and net generation (MU)

Sources	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
NTPC	636	1023	1644	1334
DVC	1889	2323	2497	2684
NHPC-Ranjit	2	20	43	25
TVNL	1132	1093	1309	2376
WBSEB	27	52	34	39
VVNL	23	13	-	-
UI	431	449	188	-
PGCIL-ERLDC+GRIDCO	42	6	158	-
PTC	-	173	0	-
Thermal Generation (PTPS)	885	577	657	529
Hydel Generation (SHPS)	139	148	51	207
Total	5206	5877	6580	7194

Computation of Variable Cost determinants

Power purchase cost

Licensee's submission

- 7.24 The licensee had proposed power purchase cost of Rs 938 Cr in the tariff petition of FY 2003-04 while the power purchase cost as per the provisional annual accounts of that year is Rs.1096.14 Cr
- 7.25 The power purchase cost as per the provisional accounts of FY 2004-05 & FY 2005-06 amounts to Rs.1374.47 Cr and Rs.1435.16 Cr respectively.
- 7.26 The power purchase cost as submitted by the licensee in the tariff petition of FY 2006-07 was Rs. 1335.29 Cr However, as per the provisional annual accounts for FY 2006-07 the power purchase cost amounts to Rs. 1711.52 Cr.

Commission's analysis

- 7.27 The Commission provisionally allows the entire power purchase cost as submitted by the licensee vide its provisional annual accounts for the period from FY 2003-04 to FY 2006-07 with the exception of deemed power purchase for which no basis is given by the licensee. However, this item can also be considered when the final audited accounts are submitted by the licensee.
- 7.28 In compliance to Direction no. 3 in the Order of Hon'ble APTEL in Appeal no.129/2007, the Commission has also considered the actual power purchase cost incurred by the licensee including power purchase from DVC and transmission charges paid by the licensee to PGCIL, subject to review on submission of audited accounts.
- 7.29 The summary of the power purchase cost proposed by the licensee and provisionally approved by the Commission is tabulated hereunder:

Table 14 : Summary of approved Power Purchase cost (Rs. Cr)

	Power Purchase cost proposed by licensee in Tariff petitions	Power Purchase cost approved by JSERC in Tariff Order	Power Purchase Cost as per Prov. Accounts	Power Purchase Cost Approved in Prov. True up by JSERC
FY 2003-04	938.60	758.48	1096.14	993.81
FY 2004-05	-	-	1374.47	1275.25
FY 2005-06	-	-	1435.16	1435.16
FY 2006-07	1335.28	1142.98	1711.52	1711.52

Own generation- PTPS

Licensee's submission

- 7.30 The licensee had proposed the generation cost of Rs 162.21 Cr for thermal and hydel generation in the tariff petition of FY 2003-04 while the generation cost as per the provisional annual accounts of that year is Rs.151.21 Cr
- 7.31 The generation cost as per the provisional accounts of FY 2004-05 & FY 2005-06 amounts to Rs.111.6 Cr and Rs.119.47 Cr respectively.
- 7.32 The generation cost as submitted by the licensee in the tariff petition of FY 2006-07 was Rs.114.32 Cr , while as per the provisional annual accounts for FY 2006-07 the generation cost amounts to Rs. 87.99 Cr

Commission's analysis

- 7.33 In view of the Hon'ble APTEL's directions, the Commission has allowed the relaxed norms of operational parameters applicable for PTPS after taking into cognizance the Hon'ble APTEL decision in order dated November 23, 2006 in appeal No. 129 of 2006. The operational parameters approved by the Commission for PTPS are based on the revised trajectory set by the Commission in view of the recommendation of CEA for such thermal plants.
- 7.34 The following table summarises the relaxed operational parameters for PTPS as approved by the Commission for FY2003-04 to FY 2010-11:

Table 15: Approved Operational Parameters for PTPS

	PLF	Auxiliary Consumption	Transit loss of coal	Specific Oil Consumption	SHR
FY 2003-04	27%	14.55%	5.54%	24.13	3948
FY 2004-05	28%	13.55%	4.50%	23.13	3850
FY 2005-06	29%	12.55%	3.25%	22.13	3750
FY 2006-07	30%	11.55%	2.25%	21.13	3650
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

- 7.35 The summary of the operational parameters and the corresponding generation cost for PTPS as per the provisional annual accounts and as provisionally approved by the Commission from FY 2003-04 to FY 2006-07 are shown in the table given below:

Table 16: Plant parameters & Fuel cost determinants and Approved Generation from PTPS

THERMAL GENERATION	Units	FY04		FY05		FY06		FY 07	
		Actual	True-up	Actual	True-up	Actual	True-up	Actual	True-up
Assumptions:									
Installed Capacity	MW	840	840	840	840	840	840	840	840
De-rated Capacity (Usable)	MW	770	770	770	770	770	770	770	770
Availability Factor	%								
Plant Load Factor	%	15.81%	27.00%	11.02%	28%	12.55%	29%	9.12%	30%
Auxiliary consumption	%	17.03%	14.55%	22.40%	13.55%	22.32%	12.55%	13.96%	11.55%
SHR	Kcal/Kwh	3947.52	3947.52	3878.4	3850	3993.6	3750	4248	3650
CV of coal	Kcal/Kg	4112	4112	4040	4040	4160	4160	4185	4185
CV of oil	Kcal/L	10500	10500	10500	10500	10500	10500	10500	10500
Coal Transit loss	%	5.54%	5.54%	5.04%	4.50%	3.45%	3.25%	2.25%	2.25%
Price of coal- Landed cost incl. transit loss	Rs/T	785.70	785.70	857.28	852.41	907.04	905.16	907	907.00
Price of Oil (LDO & FO)	Rs/Kl	15144	15144	17299	17299	16893	16893	24469	24469
Specific Coal Consumption	Kg/Kwh	0.96	0.96	0.96	0.95	0.96	0.90	0.96	0.87
Sp. Oil consumption	ml/Kwh	40.21	24.13	34.66	23.13	32.27	22.13	22.15	21.13
Projection:									
Gross generation	MU	1067	1821	743	1889	846	1956	615	2024
Auxiliary consumption	MU	182	265	167	256	189	245	86	234
Net generation	MU	885	1556	577	1633	657	1711	529	1790
Coal Consumption	MT	1024307	1748356	714090	1799833	811914	1763319	590323	1764873
Oil consumption	Kl	42888	43945	25764	43684	27310	43288	13620	42757
Coal Cost	Rs Cr	80.48	137.37	61.22	153.42	73.64	159.61	53.54	160.07
Oil cost	Rs Cr	64.95	66.55	44.57	75.57	46.14	73.13	33.33	104.62
Total fuel cost	Rs Cr	145.43	203.92	105.79	228.99	119.78	232.74	86.87	264.70
Other expenses related to generation	Rs/U	0.07	0.04	-	-	-	-	0.027	-
Other expenses related to generation (Rs Cr)	Rs Cr	5.78	5.78	-	-	-	-	1.63	-
Total Variable Cost	Rs Cr	151.21	209.70	105.79	228.99	119.78	232.74	88.50	264.70
Per unit fuel cost (on Gross generation)	Rs./Kwh	1.42	1.15	1.42	1.21	1.42	1.19	1.44	1.31
Per unit fuel cost (on Net generation)	Rs./Kwh	1.71	1.35	1.83	1.40	1.82	1.36	1.67	1.48

7.36 On the basis of actual generation for FY 2003-04 to FY 2007-08, the Commission has determined and approved the fuel cost of Rs. 119.26 Cr, Rs.80.89 Cr, Rs. 89.45 Cr and Rs. 78.24 Cr for FY 2003-04, FY 2004-05, FY 2005-06 and FY 2006-07 respectively on the basis of per unit fuel cost determined for respective years as detailed in the table given above.

Inefficient cost of PTPS

7.37 The Commission had computed the inefficient cost of PTPS as Rs.104.57 Cr in the Tariff Order for FY 2006-07. However, in view of the provisional annual accounts of FY 2006-07 and the setting of revised operational norms, the inefficient cost for PTPS works out to Rs. 104.70 Cr for FY 2006-07. The Commission reiterates that the above has been done particularly to prevent inefficiencies of the licensee to be passed on to the consumers, who are already facing hardship due to poor quality of supply and poor availability of power.

Own generation- SHPS

7.38 The summary of the operational parameters and the corresponding generation cost for SHPS as per the provisional annual accounts submitted by the licensee and as approved by the Commission for FY 2003-04 to FY 2006-07 is tabulated hereunder:

Table 17: Approved generation from SHPS

HYDEL GENERATION	Units	FY 2003-04			FY 2004-05		FY 2005-06		FY 2006-07	
		Approved	Actual	True-up	Actual	True-up	Actual	True-up	Actual	True-up
Capacity	MW	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00
Gross Generation	MU	116.20	138.77	138.77	148.54	148.54	50.77	50.77	207.60	207.60
Aux. Consumption	MU	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.24	0.24
Net Generation	MU	116.00	138.57	138.57	148.34	148.34	50.57	50.57	207.36	207.36

Computation of Fixed Cost determinants

Employee Cost

Licensee's submission

7.39 The licensee had proposed an employee cost of Rs. 237.31 Cr in the tariff petition for FY 2003-04 while the actual employee cost as per the provisional annual accounts amounts to Rs 128.00 Cr.

7.40 As per provisional accounts of FY 2004-05 & FY 2005-06, the employee cost amounts to Rs 137.26 Cr & Rs. 144.75 Cr respectively.

7.41 The licensee had proposed the employee costs of Rs.272.98 Cr in the petition of FY 2006-07 while as per the provisional accounts of FY 2006-07, the employee cost amounts to Rs.149.65 Cr.

Commission's analysis

- 7.42 In compliance to the Hon'ble APTEL Direction no.6 in Order dated 8.5.2008 passed in appeal no. 129/2007, the Commission has allowed the actual employee cost as submitted by the licensee for FY 2003-04 to 2006-07, as per the provisional annual accounts of the respective years.
- 7.43 The summary of the employee cost proposed by the licensee and as provisionally approved by the Commission is summarized in the table given below:

Table 18 : Summary of approved employee cost (Rs. Cr)

	As proposed by licensee in Tariff petitions	As approved by JSERC in Tariff Order	As per Prov. Accounts	As approved in Prov True up by JSERC
FY 2003-04	237.31	166.84	128.00	128.00
FY 2004-05	-	-	137.26	137.26
FY 2005-06	-	-	144.75	144.75
FY 2006-07	272.98	193.38	149.65	149.65

Administration & General Expenses

Licensee's submission

- 7.44 The licensee had proposed administrative and general (A&G) expenses of Rs. 36.67 Cr in the tariff petition for FY 2003-04, while the actual A&G expenses as per the provisional annual accounts for FY 2003-04 amounts to Rs. 23.82 Cr.
- 7.45 For FY 2004-05 & FY 2005-06, as per the provisional annual accounts the actual A&G expenses amounts to Rs. 28.46 Cr and Rs. 30.44 Cr respectively.
- 7.46 In the tariff petition of FY 2006-07, the licensee had proposed the A&G expenses of Rs.45.03 Cr and as per the provisional accounts of FY 2006-07, the actual expenses are Rs.31.77Cr

Commission's analysis

- 7.47 The Commission approves the actual A&G expenses submitted by the licensee for FY 2003-04 and 2004-05.
- 7.48 Thereafter, from FY 2005-06 onwards, the A&G expenses for FY 2005-06 & FY 2006-07 has been approved by applying an escalation factor of 6% p.a., contained in the 'Generation Tariff Regulations, 2004' over the actual A&G expenses for FY 2004-05, based on the provisional annual accounts.

7.49 The summary of the A&G expenses proposed by the licensee and as provisionally approved by the Commission is summarised in the table below:

Table 19 : Summary of approved A&G cost (Rs. Cr)

	As proposed by licensee in Tariff petitions	As approved by JSERC in Tariff Order	As per Prov. Accounts	As approved in Prov True up by JSERC
FY 2003-04	36.67	30.27	23.82	23.82
FY 2004-05	-	-	28.46	28.46
FY 2005-06	-	-	30.44	30.16
FY 2006-07	45.03	35.98	31.77	31.97

Repair & Maintenance (R&M) Expenses

Licensee's submission

7.50 The licensee had proposed the repair and maintenance (R&M) expenses of Rs. 48.57 Cr in the Tariff petition for FY 2003-04, while the R&M expenses as per the provisional annual accounts for FY 2003-04 amounts to Rs. 29.66 Cr.

7.51 As per provisional accounts of FY 2004-05 & FY 2005-06, the R&M expenses amounts to Rs. 26.34 Cr & Rs. 31.24 Cr respectively.

7.52 The licensee has proposed the R&M expenses of Rs. 55.14 Cr in the petition of FY 2006-07 while as per the provisional accounts of FY 2006-07, the R&M expenses amounts to Rs.36.33 Cr.

Commission's analysis

7.53 The Commission has approved the actual R&M expenses as submitted by the licensee for FY 2003-04 and FY 2004-05.

7.54 From FY 2005-06 onwards, in accordance with the 'Distribution Tariff Regulations, 2004', the Commission has approved the R&M expenses on the basis of fixed percentage of GFA, which is computed as 1.83%, on the basis of provisional annual accounts for FY 2004-05.

7.55 Accordingly, the summary of the R&M expense proposed by the licensee and provisionally approved by the Commission is shown in the table below:

Table 20 : Summary of approved R&M cost (Rs. Cr)

	As proposed by licensee in Tariff petitions	As approved by JSERC in Tariff Order	As per Prov. Accounts	As approved in Prov True up by JSERC
FY 2003-04	48.57	48.57	29.66	29.66
FY 2004-05	-	-	26.34	26.34
FY 2005-06	-	-	31.24	28.30
FY 2006-07	55.14	51.64	36.33	30.41

Depreciation

Licensee's submission

- 7.56 The licensee had proposed depreciation charge of Rs. 72.98 Cr in the tariff petition for FY 2003-04 while the actual depreciation charge, as per the provisional annual accounts, amounts to Rs.67.20 Cr.
- 7.57 For FY 2004-05 & FY 2005-06, the actual depreciation charge amounts to Rs.70.46 Cr and Rs.73.25 Cr respectively as per the provisional accounts for those years.
- 7.58 In the tariff petition of FY 2006-07, the licensee had proposed the depreciation charge of Rs.97.98 Cr while as per the provisional accounts of FY 2006-07, the depreciation charge amounts to Rs 79.74 Cr

Commission's analysis

- 7.59 The Commission provisionally approved the actual depreciation charge submitted by the licensee for the respective years as per the provisional accounts. However, the depreciation charge on account of assets created out of the contributions, grant & subsidies towards cost of capital assets has been deducted from the depreciation charges.
- 7.60 The summary of the depreciation charge proposed by the licensee and provisionally approved by the Commission is shown in the table below

Table 21 : Summary of Approved Depreciation Charge (Rs. Cr)

	As proposed by licensee in Tariff petitions	As approved by JSERC in Tariff Order	As per Prov. Accounts	As approved in Prov True up by JSERC
FY 2003-04	72.98	59.90	67.20	57.84
FY 2004-05	-	-	70.46	50.03
FY 2005-06	-	-	73.25	49.95
FY 2006-07	97.98	70.73	79.74	45.69

Provision for bad debts

Licensee's submission

- 7.61 The licensee had proposed a sum of Rs.186 Cr towards bad & doubtful debts in the tariff petition for FY 2003-04 while there was no provision for bad and doubtful debts as per provisional annual accounts for FY 2003-04 as submitted by the licensee.
- 7.62 As per provisional annual accounts submitted by the licensee for FY 2004-05, the licensee made a provision for bad and doubtful amounting to Rs. 63.05 Cr.
- 7.63 In the tariff petition of FY 2006-07, the licensee had proposed the bad and doubtful debt of Rs. 32.46 Cr while as per the provisional annual accounts for FY 2006-07 the licensee provided Rs.150.88 Cr towards bad & doubtful debts.

Commission's analysis

- 7.64 In view of the provisional annual accounts for FY 2003-04, the Commission has not allowed any amounts towards bad & doubtful debts.
- 7.65 For subsequent years, as 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.

Interest on working capital

Licensee's submission

- 7.66 The licensee had proposed interest on working capital of Rs 6.29 Cr in the tariff petition for FY 2003-04 and as per the provisional annual accounts of the same year, the interest on working capital amounts to Rs. 0.003 Cr
- 7.67 The interest on working capital as per the provisional annual accounts for FY 2004-05 & FY 2005-06 is Rs.0.24 Cr & Rs. 2.08 Cr respectively.
- 7.68 The licensee had proposed interest on working capital of Rs. 12.93 Cr in the tariff petition of FY 2006-07 while as per the provisional accounts interest on working capital amounts to Rs. 0.64 Cr

Commission's analysis

- 7.69 The Commission provisionally approved the interest on working capital as per the provisional accounts of the respective years, as summarised in the table given below:.

Table 22: Summary of approved Interest Working Capital (Rs. Cr)

	As proposed by licensee in Tariff petitions	As approved by JSERC in Tariff Order	As per Prov. Accounts	As approved in Prov. True up by JSERC
FY 2003-04	6.29	6.29	0.003	0.003
FY 2004-05	-	-	0.24	0.24
FY 2005-06	-	-	2.08	2.08
FY 2006-07	12.93	6.35	0.64	0.64

Interest & financing charges

Licensee's submission

- 7.70 The licensee had proposed a sum of Rs.152.41 Cr towards Interest & Finance Charges in the tariff petition for FY 2003-04 and the provisional annual accounts of the same year submitted by the licensee reflect an amount of Rs.365.77 Cr as net IFC.
- 7.71 For FY 2004-05 & FY 2005-06, the net interest & financing charges amounts to Rs.418.43 and Rs.486.88 Cr respectively, as per the provisional accounts for the respective years.
- 7.72 In the tariff petition of FY 2006-07, the licensee had proposed the interest and financing charges of Rs. 551.61 Cr and as per the provisional annual accounts for FY2006-07 the net interest & finance charges amounts to Rs. 653.05 Cr

Commission's analysis

- 7.73 Hon'ble APTEL vide Direction no. 2, directed the Commission to rework interest & finance charges in view of the ground realities.
- 7.74 In compliance of the above, the Commission provisionally allows the entire interest and finance charges, as submitted by the licensee vide its provisional annual accounts, for the period from FY 2003-04 to FY 2006-07, as summarised in the following table:.

Table 23: Approved Interest & Finance Charges (Rs. Cr)

	As proposed by licensee in Tariff petitions	As approved by JSERC in Tariff Order	As per Prov. Accounts	As approved in Prov True up by JSERC
FY 2003-04	152.41	27.69	365.77	365.77
FY 2004-05	-	-	418.43	418.43
FY 2005-06	-	-	486.88	486.88
FY 2006-07	551.61	0.00	653.05	653.05

Return on Equity (RoE)

Licensee's submission

7.75 The licensee has proposed a statutory return of Rs. 13.82 Cr during FY 2003-04.

7.76 For FY 2006-07, the licensee has claimed a RoE of Rs. 16.75 Cr.

Commission's analysis

7.77 The normative equity of 30% is estimated by taking the gross fixed assets less consumer contribution. The return on equity is calculated @ 14% on the normative equity.

7.78 Accordingly, the Commission provisionally approved a RoE of Rs. 46.13 Cr and Rs.47.62 Cr for FY 2005-06 and FY 2006-07 respectively.

Non-Tariff Income (NTI)

Licensee's submission

7.79 The licensee had proposed a sum of Rs.321.83 Cr towards NTI in the tariff petition for FY 2003-04 and the provisional annual accounts of the same year submitted by the licensee reflects an amount of Rs.419 Cr towards NTI.

7.80 For FY 2004-05 & FY 2005-06, as per the provisional accounts submitted for those years, the NTI amounts to Rs. 514.59 and Rs. 575.22 Cr respectively.

7.81 In the tariff petition of FY 2006-07, the licensee had proposed the NTI of Rs. 63.73 Cr while as per the provisional annual accounts, an amount of Rs. 556.18 Cr is depicted as NTI for that year.

Commission's analysis

7.82 The Commission provisionally approved the non-tariff income as per the provisional accounts of the respective years.

Table 24: Approved Non Tariff Income (Rs. Cr)

	As proposed by licensee in Tariff petitions	As approved by JSERC in Tariff Order	As per Prov. Accounts	As approved in Prov True up by JSERC
FY 2003-04	321.83	336.04	419.00	419.00
FY 2004-05	-	-	514.59	514.59
FY 2005-06	-	-	575.22	575.22
FY 2006-07	63.73	273.26	556.18	556.18

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

7.83 The Commission computes Rs. 507.1 Cr as disincentive for non achievement of T&D loss reduction target from FY 2003-04 to FY 2006-07, as detailed in Section 11 of this Order.

Revenue from Existing Tariff

7.84 The Commission has approved the revenue at existing tariffs (as pronounced in the Tariff Order for FY 2003-04) as per the provisional annual accounts of the licensee.

Summary of the ARR on truing up of FY 2003-04 to FY 2006-07

7.85 In view of the above analysis, the annual revenue requirement along with the revenues at existing tariffs (as pronounced in the Tariff Order for FY 2003-04) and revenue gap for FY 2003-04 to FY 2006-07 is summarized hereunder:

Table 25 Summary of Annual Revenue Requirement (Rs. Cr)

ARR	FY 2003-04		FY 2004-05		FY 2005-06		FY 2006-07	
	Submitted by JSEB	Approved by Commission						
Power Purchase	1096.14	993.81	1374.47	1275.25	1435.16	1435.16	1711.52	1711.52
Generation Cost	151.21	119.26	111.60	80.89	119.47	89.45	87.99	78.24
Repair & Maintenance	29.66	29.66	26.34	26.34	31.24	28.30	36.33	30.41
Employees Cost	128.00	128.00	137.26	137.26	144.75	144.75	149.65	149.65
Admin & General Expenses	23.82	23.82	28.46	28.46	30.44	30.16	31.77	31.97
Depreciation	67.20	57.84	70.46	50.03	73.25	49.95	79.74	45.69
Interest and Finance charges	365.77	365.77	418.43	418.43	486.88	486.88	653.05	653.05
Prior Period Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bad Debts Provision	0.00	0.00	63.05	0	0.00	0	150.88	0.00
Interest on Working Capital	0.003	0.00	0.24	0.24	2.08	2.08	0.64	0.64
Less: Inefficient cost of PTPS								104.70
Less: Disincentive on T&D Losses		50.56		139.01		234.86		82.67
Total Expenditure	1861.80	1667.60	2230.29	1877.88	2323.27	2031.87	2901.56	2513.80
Statutory Return/RoE	0.00	0.00	0.00	0.00	0.00	46.13	0.00	47.62
Revenue Required	1861.80	1667.60	2230.29	1877.88	2323.27	2078.00	2901.56	2561.42
Temporary Contingency	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Revenue Requirement	1861.80	1667.60	2230.29	1877.88	2323.27	2078.00	2901.56	2561.42

Less: Miscellaneous Receipts	419.00	419.00	514.59	514.59	575.22	575.22	556.18	556.18
Net Revenue Required	1442.79	1248.59	1715.70	1363.29	1748.05	1502.78	2345.39	2005.24
Revenue at Current Tariff	1077.38	1077.38	1108.51	1108.51	1187.08	1187.08	1405.21	1405.21
Grants-In-Aid of debt service	75.00	75.00	104.25	104.25	363.48	363.48	210.00	210.00
Subsidy for R.E loss	109.56	109.56	114.85	114.85	0.00	0.00	0.00	0.00
Revenue Gap	180.85	-13.35	388.09	35.68	197.49	-47.78	730.18	390.03

7.86 The cumulative revenue gap as approved by the Commission for FY 2003-04 to FY 2006-07 amounts to Rs. 364.59 Cr, as against the revenue gap of Rs.1496.91 Cr depicted in the provisional annual accounts of the licensee.

A8: COMMISSION'S ANALYSIS OF THE ARR AND TARIFF PETITION FOR FY 2007-08

8.1 The Commission has scrutinized the petition filed by JSEB for FY 2007-08. The Component-wise details of the licensee's submission with the Commission's analysis thereof and approvals applicable for FY 2007-08 have been discussed in this section.

Energy Sales

Licensee's submission

8.2 The licensee submitted the details of number of consumers and energy sales for FY 2007-08. The following table summarises the category-wise projected number of consumer during FY 2007-08, as submitted by the licensee:

Table 26 : Number of Consumers

Category	FY 2007-08 (Proj.)
Domestic	1033744
Commercial	82584
Public Lighting	750
Irrigation	13218
Industrial LT	8937
Industrial HT	1153
Railway	14
MES	8
Total	1140409

8.3 The licensee has proposed an energy sales 4170 MU for FY 2007-08 to different categories of consumers which is based on a three year CAGR, with the exception of public lighting where normalised growth rate is considered as three year CAGR was depicting an abnormally high figure.

8.4 The licensee has considered the energy sales for FY 2001-02 to FY 2005-06 as per provisional annual accounts, and for FY 2006-07, as per the provisional revenue statement.

8.5 The consumer category-wise projection for sale of energy during FY 2007-08 as submitted by the licensee is detailed in the table given below:

Table 27: Projected Energy Sales (MU)

Category	FY 01-02 (Prov.)	FY 02-03 (Prov.)	FY 03-04 (Prov.)	FY 04-05 (Prov.)	FY 05-06 (Prov.)	FY 06-07 (Prov.)	FY 2007-08 (Proj.)
Domestic	487	575	660	920	895	1158	1290
Commercial	123	130	139	142	156	186	211.63
Public Lighting	27	23	39	42	80	84	88.55
Irrigation	41	34	39	58	80	68	73.47
Public Water Works	55	53	60	62	44	65	65.79
Industrial LT	121	102	103	102	97	116	123
Industrial HT	1582	1377	1434	1405	1524	1669	1820
Railway	305	353	389	423	444	471	497
Total	2740	2648	2845	3153	3321	3816	4170

Commission's analysis

- 8.6 The Commission has scrutinized the commercial information in relation to the number of consumers and consumer category-wise sales of energy, as projected by the licensee for FY 2007-08. Since the tariff determination exercise is being carried out during the end of FY 2009-10, the Commission has requisitioned the actual/latest commercial information for FY 2007-08 from the licensee.
- 8.7 On the basis of the latest commercial information submitted by the licensee, the Commission has approved energy sales of 4240.70 MU for FY 2007-08. However, it does not include the inter-state sales of energy as it was not provided by the licensee.
- 8.8 The table given below summarises the approved category-wise energy sales:

Table 28: Approved energy sales for FY 2007-08 (MU)

Category	Units (MU)
Domestic	1375.03
Commercial	209.52
Public Lighting	70.22
Irrigation	69.19
Public Water Works	70.55
Industrial LT	123.25
Industrial HT	1772.52
Railway	511.44
MES	39.00
Total	4240.72

- 8.9 The Commission has treated the inter-state sale to be part of the difference in availability resulting from variation in actual T&D loss levels and approved T&D loss levels and accordingly considered it as part of the cost of inefficiency to be borne by the licensee as detailed in Section 11 of this Order.

Transmission & Distribution (T&D) Losses

Licensee's submission

- 8.10 The licensee has estimated an overall T&D loss level of 43.35% for FY 2007-08. The licensee stated that it is trying to reduce the T&D losses but the huge expansion of LT network and electrification of rural areas offsets the reduction in T&D losses in the balance areas.
- 8.11 The licensee has estimated the T&D loss based on projected sales figures and provisional self generation and power purchase estimates. The provisional estimates of generation are based on provisional data till March 2008 and power purchase figures are estimated based on the actual power purchase till February 2008. For few source March figures have also been included.
- 8.12 The licensee has submitted that it has taken the following steps for reduction of T&D loss level and achievement of efficiency gains:
- (a) Construction of new 33/11 kV P/S/S, augmentation of 33/11 kV P/S/S, re-conductoring, and use of HVDS (High Voltage Distribution System).
 - (b) Replacement of defective/burnt meter.
 - (c) Use of high accuracy meter
 - (d) Tele-metering of 96% H.T consumers and completed metering of three phase LT consumers having load 30 kV/40 HP and above under process.
 - (e) Provision of self locking in metering unit and CT box of LTCT meter.
 - (f) Use of polycarbonate and holographic sales.
 - (g) Use of armoured cable in metering.
 - (h) Raids against theft of electricity.
 - (i) Constitution of special courts for quick disposal of theft cases is under consideration of the government.
 - (j) Franchisee system introduced in some rural areas having high T&D Loss
- 8.13 The table below summarises the T&D losses as proposed by the licensee for FY 2007-08.

Table 29 Proposed T&D losses for FY 2007-08

Description	FY 2007-08
Total energy sales (MU)	4170
Overall T&D loss %	43.35%
Overall T&D Loss (MU)	3191

Commission's analysis

- 8.14 The Commission takes note of the steps taken by the licensee to reduce the T&D losses. However, no significant improvement is shown by the licensee in reduction of T&D losses.
- 8.15 The T&D loss level as proposed by the licensee are still on a very higher side and the same cannot be approved by the Commission. The licensee needs to take concrete measures to reduce the T&D losses so that the normative levels are achieved over time. The Commission in its last tariff order for FY 2006-07 had directed the licensee to reduce its T&D loss by 4% every year till the normative level is achieved.
- 8.16 In view of the same and also in compliance of the Direction no. 10 in the Order of the Hon'ble APTEL in appeal no. 129 of 2007; the Commission has set a time bound trajectory for reduction in T&D losses, as mentioned in the Section 7.19 of this Order.
- 8.17 Accordingly, the Commission had approved an overall T&D loss target of 32.66% for FY 2007-08, which represents a reduction of 4% over the approved T&D loss level of 36.66% set during FY 2006-07.
- 8.18 The Commission in the last tariff order had also directed the licensee 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 losses and results achieved. However, the licensee has not submitted any report on the same. The Commission takes very strong note of this and has issued fresh directives in this regard in the directives section of this Order.
- 8.19 The table below summarises the transmission & distribution losses approved by the Commission:

Table 30 : Approved T&D Losses for FY2007-08

Description	FY 2007-08
Total energy sales (MU)	4240.72
Overall T&D loss %	32.66%
Overall T&D Loss (MU)	2056.75

Energy Requirement

Licensee's submission

- 8.20 The licensee submitted that its power requirement is met partially through own power generation and balance through procurement of power from external sources.
- 8.21 The licensee has proposed the energy requirement of 7361 MU for FY 2007-08. The projection of energy requirement is based on projected energy sales of 4170 MU being grossed up by the proposed T&D losses of 43.35%. The total energy requirement as proposed by the licensee is given as under:

Table 31 : Proposed Energy Requirement for FY 2007-08

Energy Balance	FY 2007-08 (MU)
Total energy sales	4170
Overall T&D loss %	43.35%
Overall T&D loss	3191
Total Energy requirement	7361

Commission's analysis

- 8.22 The energy requirement approved by the Commission is based on the approved sales projections of 4240.72 MU and approved T&D loss of 32.66%. The total energy requirement worked out to 6297.47 MU, as summarised hereunder:

Table 32 : Approved Energy Requirement for FY 2007-08

Energy Balance	FY 2007-08 (MU)
Total energy sales	4240.72
Overall T&D loss %	32.66%
Overall T&D loss	2056.75
Total Energy requirement	6297.47

Own Generation- PTPS

Licensee's submission

- 8.23 The licensee stated that while the PTPS has 10 generating Units, 6 units are almost 35 yrs old and have outlived their life while Units 7-10 which were installed during 1977-86 have also become reasonably old. Due to aging of the plants, capacities of Unit 1-8 are de-rated and hence the overall capacity stands reduced to 770 MW as against the original installed capacity of 840 MW.

8.24 Based on the above consideration, the licensee has proposed the following operational parameters and generating cost for PTPS:

Table 33: Proposed energy generation from PTPS for FY 2007-08

Parameters	Units	FY 2007-08 (Prov.)
Installed Capacity	MW	840
De-rated Capacity (Usable)	MW	770
Availability factor	%	58%
Plant Load Factor	%	10.33%
Auxiliary consumption	%	14.30%
Station Heat Rate	Kcal/kWh	4392
Calorific value of coal	Kcal/kg	4400
Calorific value of Oil	Kcal/l	10500
Coal transit loss	%	2%
Price of coal- Landed Cost (incl. transit loss)	Rs/Tonne	910
Price of Oil (LDO & FO)	Rs/Kl	28812
Specific Coal Consumption	Kg/kWh	0.96
Specific oil consumption	ml/kWh	15.95
Projection		0
Gross generation	MU	696.72
Auxiliary consumption	MU	99.87
Net Generation	MU	596.85
Coal Consumption	MT	668917
Oil Consumption	KL	11112
Coal cost	Rs Cr	60.87
Oil Cost	Rs Cr	32.02
Total Fuel Cost	Rs Cr	92.89
Other expenses related to generation	Rs/U	0.031
Other expenses related to generation (Rs Cr)	Rs Cr	2.16
Total Variable Cost	Rs Cr	95.05
Per unit fuel cost (on Gross generation)		1.36
Per unit fuel cost (on Net generation)		1.59

Commission's analysis

8.25 The Commission has approved the per unit fuel cost on the basis of the trajectory specified for the various operational parameters of PTPS as detailed in Section 11 of this order and also in accordance with the 'Generation Tariff Regulations,2004'. The other parameters, such as, calorific value of coal, calorific value of oil, price of fuel (coal & oil) have been approved at the same as that proposed by the licensee.

8.26 Accordingly, the Commission has estimated the per unit fuel cost of Rs.1.32/kWh as against Rs.1.59/Kwh proposed by the licensee.

8.27 The table below summarises the parameters considered for the calculation of variable cost of PTPS for FY 2007-08.

Table 34: Approved energy generation from PTPS for FY 2007-08

Parameters	Units	FY 2007-08
Installed Capacity	MW	840
De-rated Capacity (Usable)	MW	770
Availability factor	%	58%
Plant Load Factor	%	32%
Auxiliary consumption	%	10.55%
Station Heat Rate	Kcal/kWh	3550
Calorific value of coal	Kcal/kg	4400
Calorific value of Oil	Kcal/l	10500
Coal transit loss	%	1.25%
Price of coal- Landed Cost (incl. transit loss)	Rs/Tonne	910
Price of Oil (LDO & FO)	Rs/Kl	28812
Specific Coal Consumption	Kg/kWh	0.807
Specific oil consumption	ml/kWh	15.95
Projections		
Gross generation	MU	2158.46
Auxiliary consumption	MU	226.64
Net Generation	MU	1931.83
Coal Consumption	MT	1680335.66
Oil Consumption	KL	34427.51
Notional Coal cost	Rs Cr	152.91
Notional Oil Cost	Rs Cr	99.193
Total Fuel Cost-notional	Rs Cr	252.103
Other expenses related to generation	Rs/U	0.031
Other expenses related to generation (Rs Cr)	Rs Cr	2.16
Total Variable Cost-Notional	Rs Cr	254.26
Per unit oil cost	Rs/Kwh	0.51
Per unit coal cost	Rs/Kwh	0.79
Per unit fuel cost (on Gross generation)	Rs/Kwh	1.18
Per unit fuel cost (on Net generation)	Rs/Kwh	1.316

8.28 The actual generation data for FY 2007-08 was not made available by the licensee. Therefore, the Commission has taken the actual gross generation of PTPS from the

PGCIL's Annual report for FY 2007-08 which is 698 MU and an auxiliary consumption of 14% (which was the actual auxiliary consumption of PTPS for FY 2006-07) to arrive at a net generation of 600.28 MU.

- 8.29 Accordingly, the Commission has determined and approved the fuel cost of Rs. 79.01 Cr for FY 2007-08, on the basis of the per unit fuel cost of 1.316 Rs/Kwh
- 8.30 The Commission has discussed the detailed estimation of fixed cost of PTPS in the subsequent paragraphs, according to which the total fixed cost for PTPS works out to Rs.140.11 Cr for FY 2007-08.
- 8.31 Continuing the approach as adopted in the Tariff Order for FY 2006-07, the Commission projects an amount of Rs.96.57 Cr towards inefficient fixed cost of PTPS for FY 2007-08, on the basis of estimated net generation of 600.28 MU, as detailed in Section 11 of this Order.
- 8.32 The Commission reiterates that the above has been done particularly to prevent inefficiencies of the licensee to be passed on to the consumers, who are already facing hardship due to poor quality of supply and poor availability of power.
- 8.33 The total cost of energy generation from PTPS, including both fixed and variable cost amounts to Rs.122.54 Cr @ Rs.2.04/unit for FY 2007-08, as summarised in the table given below:

Table 35: Approved energy generation cost from PTPS

Particulars	Unit	FY2007-08
Per unit Fuel cost	Rs./kWh	1.32
Per unit Fixed cost	Rs./kWh	0.72
Total cost per unit	Rs./kWh	2.04
Total Fuel Cost	Rs. Cr	79.01
Total Fixed Cost	Rs. Cr	43.54
Total Cost	Rs. Cr	122.54

Inefficient cost of PTPS

- 8.34 The Commission has computed the inefficient cost of PTPS for FY 2007-08 at Rs.96.57 Cr, as detailed in Section 11 of this Order.

Own Generation- SHPS

Licensee's submission

- 8.35 The licensee also owns SHPS which has an installed capacity of 130 MW. It states that SHPS is a multi-purpose project which caters to the irrigation needs & drinking water requirement of Ranchi city. The drinking water requirement of state has increased from 50 Acre feet to more than 150 Acre feet which has restricted the plant to be operated at full capacity.
- 8.36 The licensee has also submitted that the reservoir faces a problem of silting which effects the operation of the plant to its capacity. There was a meeting with the irrigation department in which it was decided that a competent agency would be engaged to carry out the operation and maintenance of the Getalsud Water Project.
- 8.37 The licensee has submitted the following details related to generation of SHPS :

Table 36 : Proposed Generation of SHPS

Description	Units	FY 2007-08 (Prov.)
Capacity	MW	130
Gross Generation	MU	214
Auxiliary Consumption	MU	0.24
Net Hydel generation	MU	214
Cost related to Hydel Generation	Rs. Cr	0.80
Cost per Unit (on Net generation)	Rs/Kwh	0.04

Commission's analysis

- 8.38 The Commission has scrutinized the data submitted by the licensee for SHPS and has approved the proposed generation at 214 MU. Since the cost of hydel stations is fixed in nature, the Commission approved an amount of 5.99 Cr towards fixed cost of SHPS.

Power Purchase availability and cost

Licensee's submission

- 8.39 The licensee has submitted that the balance power requirement is met from external sources viz., from TVNL, various central generating stations (CGS) - NTPC& NHPC, DVC, traders etc.

- 8.40 The power purchase for FY 2007-08 is based on actual data up to February 2008 and estimated for the month of March. The table below provides the source-wise gross power purchase during FY 2007-08:

Table 37 Proposed power purchase for FY 2007-08

Gross Power Purchase	Units MU	Cost (Rs. Cr)
Sources		
NTPC		
Farakka	545	93
Kahalgaon	78	14
Talcher	434	55
NTPC-Total	1057	162
NHPC		
Rangit	43	7
NHPC- Total	43	7
Other Sources		
DVC	2967	949
DVC STOA	264	74
Chukha	196	30
TVNL	1573	299
WBSEB	46	20
Tala PTC	369	68
Net UI	92	52
PTC STOA	19	19
PGCIL		26
ERLDC		0.39
Other Sources-Total	5527	1537
Gross Power Purchase	6627	1706

- 8.41 The licensee has considered inter-state transmission losses of 3.61% on gross power purchased. The inter-state transmission loss level of 3.61% is used to arrive at the net power purchase which is available for sale to consumers.
- 8.42 The cost of power purchase is then estimated based on the actual cost incurred compiled from the bills of the power purchase from various sources. Supplementary bills against prior years power purchase have not been included.

8.43 The licensee submitted that it has faced a huge power deficit since the month of October'07 and continues to face severe power crunch till date. There is a huge power crisis during the peak hours because of which it has to buy power at high rates from the short term power markets to meet its supply obligation. It further states that the short term power has also become costlier as CERC has revised the UI charges and rates have gone as high as Rs. 9.85 per unit.

Commission's analysis

8.44 The Commission has considered the power purchase requirement of the licensee based on the actual data including March 2008, as submitted by the licensee. Accordingly, the Commission approves a total power purchase of 6665.95 MU at an average per unit cost of Rs. 2.33 for FY 2007-08.

8.45 The summary of approved source-wise power purchase for the licensee for FY 2007-08 is summarised in the table given below:

Table 38: Approved Power Purchase Cost for FY 2007-08

Source	Net Purchase Units (MU)	Average Rate (Rs/Kwh)	Cost (Rs. Cr)
NTPC			
Farakka	549.69	1.76	96.71
Kahalgaon	78.63	1.80	14.18
Talcher	438.09	1.25	54.78
NTPC-Total	1066.41	1.55	165.7
NHPC			
Rangit	43.27	1.73	7.50
Teesta	4.38	1.62	0.71
NHPC- Total	47.7	1.72	8.21
Other Sources			
DVC	2969.81	2.80	832.86
DVC STOA	261.4	2.78	72.80
Chukha	196.07	1.52	29.77
TVNL	1599.81	1.93	308.91
WBSEB	46.18	4.31	19.89
Tala PTC	366.92	1.83	67.12
Short term power/ PTC	26.96	7.84	21.15
Sub Total	5467.17	2.47	1352.51
Net UI	84.7		
PGCIL			25.75
ERLDC			0.39
Total Power Purchase	6665.95	2.33	1552.53

Employee Cost

Licensee's submission

- 8.46 The licensee has considered the actual payout for estimating the employee cost of JSEB. In addition to this, the licensee has also contributed Rs 83 Cr against pension and provident fund corpus which has also been included in the employee cost.
- 8.47 The licensee has also considered the employee capitalisation @ 12% of the total employee cost.
- 8.48 The board has disaggregated the employee cost for Generation, Transmission and Distribution on the basis of number of employees. The total employee cost is disaggregated as under:

Table 39 : Proposed disaggregated employee costs for FY 2007-08 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Salary	34.11	10.84	73.81	118.76
Overtime	1.49	0.47	3.23	5.19
DA	13.75	4.37	29.76	47.88
Other Allowance	2.15	0.68	4.66	7.49
Bonus	0.03	0.01	0.07	0.11
Sub-Total	51.53	16.00	112.00	179.53
Medical reimbursement	0.21	0.07	0.46	0.74
Leave Encashment	1.72	0.55	3.73	6.00
Payment under workmen compensation	0.02	0.01	0.05	0.08
Total other staff cost	2.00	1.00	4.00	7.00
Staff Welfare expenses	0.22	0.07	0.48	0.77
GPF/CPF	12.96	4.12	28.04	45.12
Gratuity & GSS	6.07	1.93	13.15	21.15
Pension corpus & GPF Trust	23.85	7.58	51.61	83.04
Terminal benefits	43.00	14.00	93.00	150.00
Provision for 6th pay revision	-	-	-	0.00
Less: Employee expenses capitalised	11.59	3.68	25.09	40.36
Total Employee Costs	85.00	27.00	184.00	296.00

Commission's analysis

- 8.49 The Commission approves the gross employee cost of Rs. 180.08 Cr for FY 2007-08 by considering an escalation factor of 6% over the approved employee cost of FY 2006-07, in accordance with the 'Generation Tariff Regulations, 2004'.

- 8.50 The Commission has also considered the capitalisation of employee expenses amounting to Rs.21.45 Cr at the rate of 12%, as proposed by the licensee.
- 8.51 The components of employee cost have been functionally disaggregated in the same ratio as was approved by the Commission in the Tariff Order of FY 2006-07. Other allowances and staff welfare allowances are disaggregated in the ratio of net employee cost approved by the Commission in the previous tariff order:

Table 40 : Approved disaggregated employee costs (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Salary	34.80	10.43	57.12	102.35
Overtime	1.31	0.39	2.14	3.84
DA	11.45	3.43	18.73	33.61
Other Allowance	2.33	0.69	3.81	6.83
Bonus	0.00	0.00	0.01	0.01
Sub-Total	49.89	14.94	81.81	146.64
Medical reimbursement	0.31	0.09	0.51	0.91
Leave Travel Assistance	0.06	0.00	0.12	0.18
Leave Encashment	1.82	0.54	2.97	5.32
Payment under workmen compensation	0.08	0.02	0.13	0.24
Total other staff cost	2.26	0.66	3.73	6.65
Staff Welfare expenses	0.23	0.07	0.38	0.68
Terminal benefits	8.89	2.66	14.54	26.10
Total Employee Costs	61.28	18.33	100.47	180.08
Less: Expenses Capitalised	7.15	1.79	12.51	21.45
Net Employee Cost	54.13	16.54	87.96	158.63

Administrative & General Expenses

Licensee's submission

- 8.52 The licensee has submitted the Administrative & General (A&G) expenses of Rs.51 Cr based on the actual payout.
- 8.53 The licensee stated that it has to pay rent for offices across the state including the rent of the headquarter building. It is also paying insurance cost against the insurance of PTPS and will also be insuring the transmission and central stores across the state. The A&G cost has been disaggregated based on the number of employees.

Commission's analysis

8.54 The Commission observes that there is a discrepancy in the data forwarded by the licensee, as the total of proposed A&G expenses amounts to Rs.41.25 Cr only, as against Rs.51 Cr proposed by the licensee, as detailed hereunder. The Commission condemns the callous attitude of licensee in preparing the ARR

Table 41 : Proposed disaggregated A&G Costs for FY 2007-08 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Rent	0.73	0.23	1.58	2.54
Insurance	0.06	0.02	0.13	0.21
Telephone, fax, Mobile	0.43	0.14	0.93	1.50
Legal charges	0.43	0.14	0.93	1.50
Audit charges	0.37	0.12	0.79	1.27
Consultancy charges/tech fees	0.57	0.18	1.24	2.00
Conveyance charges	1.26	0.40	2.73	4.40
Fees & Subscription	0.03	0.01	0.07	0.11
Books & periodicals	0.06	0.02	0.12	0.20
Printing & stationery	0.57	0.18	1.24	2.00
Advertisement	0.57	0.18	1.24	2.00
Electricity & water Charges	0.87	0.28	1.89	3.05
Entertainment	0.14	0.05	0.31	0.50
Freight & other purchase related expenses	0.58	0.18	1.25	2.00
Miscellaneous expenses (incl. computerized billing)	5.17	1.64	11.19	18.00
Total A&G Costs	11.84	3.77	25.64	41.25

8.55 The Commission approves the A&G expenses of Rs.33.68 Cr on the basis of norms of the 'Generation Tariff Regulations, 2004', by applying an escalation factor of 6% p.a. over the approved A&G expenses for FY 2006-07.

8.56 Disaggregation of A&G expenses is done in the same ratio as was done by the Commission in the Tariff Order of FY 2006-07.

Table 42 : Approved disaggregated A&G Costs for FY 2007-08 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Rent, Rates & Taxes	0.17	0.05	0.29	0.51
Insurance	0.10	0.03	0.16	0.29
Total	0.27	0.08	0.45	0.80
Telephone, fax, Mobile	0.32	0.10	0.54	0.96
Legal charges	0.24	0.07	0.39	0.71
Audit charges	0.41	0.12	0.67	1.20

Consultancy charges	0.48	0.14	0.79	1.42
Technical Fees	0.02	0.01	0.03	0.05
Other professional charges	0.01	0.00	0.01	0.02
Conveyance charges	1.50	0.45	2.49	4.44
Total	2.98	0.88	4.93	8.79
Other Expenses				
Fees & Subscription	0.11	0.05	0.21	0.37
Books & periodicals	0.02	0.01	0.03	0.05
Printing & stationery	0.16	0.05	0.27	0.48
Advertisement	0.23	0.07	0.37	0.67
Water Charges	0.08	0.03	0.14	0.25
Electricity Charges	1.22	0.37	2.02	3.61
Entertainment Charges	0.03	0.01	0.06	0.10
Misc. expenses	5.75	1.76	9.58	17.08
Total of other expenses	7.60	2.33	12.67	22.60
Freight	0.09	0.03	0.16	0.28
Other purchase and related expenses	0.40	0.12	0.67	1.20
Total freight & other related expenses	0.50	0.15	0.83	1.48
Total A&G Costs	11.35	3.45	18.88	33.68

Gross Fixed Assets (GFA)

Licensee's submission

8.57 The licensee has submitted the capital investment plan for FY 2007-08 as follows :

Table 43 : Proposed Capital Investment for FY 2007-08 (Rs. Cr)

Description	Amount
Generation	64
Transmission	158
Distribution	
<i>RGGVY</i>	438
<i>APDRP</i>	22
<i>Annual Development Programme</i>	65
<i>RE State Plan</i>	10
<i>MNP</i>	2
<i>Construction of 52 PSS</i>	1
Distribution (sub-total)	538
Total Capex	760

8.58 The capitalization schedule proposed by the licensee is shown as under

Table 44: Assumption for capitalisation to Assets

Capitalisation schedule	Year 1	Year 2	Year 3
Generation	70%	30%	0%
Transmission	25%	50%	25%
Distribution	50%	50%	0%

8.59 Based on the above assumption, the licensee has computed the GFA for FY 2007-08 for each function as under:

Table 45: Gross Fixed Assets for FY 2007-08 (Rs. Cr)

Gross Fixed Assets	Generation	Transmission	Distribution	Total
GFA-Opening balance	805	193	955	1953
Net additions during the year	51	95	353	499
GFA-Closing balance	856	288	1309	2452

Commission's analysis

8.60 The Commission has considered the GFA of the licensee on the basis of the provisional accounts submitted for FY 2006-07. The Schedule 20 of provisional annual accounts of FY 2006-07 also provides the function wise break up of fixed assets and depreciation. The Gross and Net Block for FY 2006-07 is summarised as under:

Table 46: Gross Fixed Assets for FY 2006-07

Description	Generation	Transmission	Distribution	Total
Gross Block/ Fixed Assets	693.35	235.96	844.04	1773.35
Less: Accumulated Depreciation	471.87	103.71	443.75	1019.33
Net block/Fixed Assets	221.47	132.25	400.29	754.01
Less: Consumer Contribution	0	0	89.07	89.07
Net block/ fixed assets excl. Consumer Contribution	221.47	132.25	310.58	664.31

8.61 The Commission has observed that the licensee has been submitting an ambitious capital investment plan and capitalization schedule in previous years whereas the actual capital expenditure has been much lower than the proposed plan, at around 47%. Accordingly, the Commission restricts the capital investment plan at 50% of the proposed capital investment plan, as detailed hereunder:

Table 47: Approved Capital Investment Plan for FY 2007-08 (Rs. Cr)

Gross Fixed Assets	Generation	Transmission	Distribution	Total
Capital investment Plan	38.97	97.44	243.59	380.00
Addition considered for FY 2007-08*	30.75	72.0	180.0	282.8

*includes capitalisation of WIP of previous years

- 8.62 The additions of FY 2007-08 have been considered on the basis of the following capitalization schedule, which is based on the licensee's trend of capitalisation observed in the previous years.

Table 48: Approved Capex and Assumption for capitalisation to Assets

Capitalisation schedule	Year 1	Year 2	Year 3	Year 4
Generation	30%	20%	20%	20%
Transmission	25%	30%	30%	15%
Distribution	25%	25%	25%	25%

- 8.63 Since the capital expenditure is essential from the point of view of the load growth and loss reduction, the Commission shall true up the capital investment of the licensee on the basis of the audited figures as and when the same are made available by the licensee.
- 8.64 Based on the above, the approved GFA and NFA for FY 2007-08 is summarised as under:

Table 49: Approved Gross Fixed Assets for FY 2007-08

Description	Generation	Transmission	Distribution	Total
Opening Gross Block	693.35	235.96	844.04	1773.35
Net Additions for the year	30.75	72.0	180.0	282.8
Gross Block at the end of year	724.09	307.97	1024.05	2056.11
Less: Accumulated Depreciation	496.63	118.50	456.71	1071.83
Net block/Fixed Assets	227.47	189.47	567.34	984.28
Less: Consumer Contribution	0	0	98.20	98.20
Net block/fixed assets excl. Consumer Contribution	227.47	189.47	469.14	886.07

Repair & Maintenance Expenses

Licensee's submission

- 8.65 The licensee has projected the repair & maintenance (R&M) expenses of Rs. 58 Cr for FY 2007-08. It has calculated R&M expenses as a percentage of opening GFA.

- 8.66 The licensee has taken into account the actual payout for FY 2006-07 & FY 2007-08 and estimated the average rate of R&M expenses as a percentage of GFA to be 2.88% and 2.97% respectively.
- 8.67 The following table summarises the R&M expenses for FY 2007-08, as proposed by the licensee:

Table 50 : Proposed R&M Expenses (Rs. Cr)

R&M Expenses	FY 2006-07 (Prov.)	FY 2007-08 (Prov.)
Opening GFA	1663	1953
Total R&M Costs	48	58
R&M as a % of opening GFA	2.88%	2.97%

- 8.68 The licensee has disaggregated the R&M costs based on the opening balance of GFA for each function- generation, transmission and distribution. The licensee states that it has given special consideration to the plant & machinery (P&M) cost as major cost was involved in the R&M of PTPS.

Table 51 : Proposed Repair & maintenance costs (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Plant & Machinery	8.75	2.10	10.39	21.24
Building	1.85	0.44	2.20	4.50
Civil Works	0.72	0.17	0.86	1.75
Hydraulic	0.27	0.06	0.32	0.65
Lines, cable & network	11.72	2.81	13.91	28.44
Vehicles	0.26	0.06	0.30	0.62
Furniture & Fixtures	0.12	0.03	0.15	0.30
Office equipments	0.18	0.04	0.21	0.43
Total R&M Costs	24	6	28	58

Commission's analysis

- 8.69 The Commission notes that the licensee has projected a very higher expenditure under the head R&M expenses , without any corresponding improvement in operational parameters
- 8.70 Therefore, the Commission approves the R&M expenses as a percentage of opening GFA for FY 2007-08 by applying a percentage of 1.83%.
- 8.71 Accordingly, the Commission has approved the repair & maintenance (R&M) expenses of Rs.32.44 Cr for FY 2007-08, summarised in the table given hereunder:

Table 52 : Approved R&M Expenses for FY 2007-08 (Rs. Cr)

Description	Amount
Gross Bock as on 31.03.2004	1439.77
R&M Cost as per Annual Accounts of FY 2004-05	26.34

R&M Cost as a percentage of opening GFA	1.83%
Opening GFA for FY 2007-08	1773.35
R&M expenses approved for FY 2007-08	32.44

- 8.72 The disaggregation of the total R&M cost into generation, transmission and distribution function is done in the same proportion as that proposed by the licensee for FY 2007-08. The R&M expenses as approved by the Commission are detailed in the following table:

Table 53 : Approved disaggregated R&M Expenses (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Plant & Machinery	4.90	1.18	5.82	11.90
Building	1.04	0.25	1.23	2.51
Civil Works	0.40	0.10	0.48	0.98
Hydraulic	0.15	0.03	0.18	0.36
Lines, cable & network	6.56	1.57	7.79	15.93
Vehicles	0.15	0.03	0.17	0.35
Furniture & Fixtures	0.07	0.02	0.08	0.17
Office equipments	0.10	0.02	0.12	0.24
Total R&M Costs	13.37	3.20	15.87	32.44

Bad & doubtful debts

Licensee's submission

- 8.73 The licensee has proposed bad and doubtful debt as 1% of the total revenue. It states that there is always a certain percentage of revenue which remains uncollected from the consumer.
- 8.74 The estimated provision for bad & doubtful debt is as proposed by the licensee is tabulated hereunder:

Table 54 Bad & Doubtful debt for FY 2007-08 (Rs. Cr)

Particulars	FY 2007-08
Revenue from sale of power	1405
Provision for bad & doubtful debts	14
Provision for B&D debts as % of revenue	1%

Commission's analysis

8.75 As per 'Distribution Tariff Regulations, 2004' no amount is 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. Therefore, the Commission does not approve any amount against bad & doubtful debts.

Depreciation

Licensee's submission

- 8.76 The licensee has proposed the aggregated depreciation of Rs. 106 Cr for FY 2007-08.
- 8.77 The licensee has considered the average depreciation rates from FY 2003-04 to FY 2005-06 which are worked out as 2.53%, 6.54% & 7.62% for Generation, Transmission & Distribution respectively. The following table summarises the depreciation charges as proposed by the licensee for FY 2007-08:

Table 55: Proposed Depreciation expenses for FY 2007-08 (Rs. Cr)

	Generation	Transmission	Distribution	Total
GFA-Opening balance	805	193	955	1953
Net additions during the year	51	95	353	499
GFA-Closing Balance	856	288	1309	2452
Depreciation for the year	20	13	73	106
Depreciation rate %	2.53%	6.54%	7.62%	5.42%

Commission's analysis

- 8.78 The 'Distribution Tariff Regulations, 2004' and 'Generation Tariff Regulations, 2004' specify that depreciation shall be calculated annually as per SLM at the rates of depreciation prescribed in the schedule attached to the said Regulations in Appendix-II. Further, it is provided that capital base for the purpose of depreciation shall be the historical cost of the asset with the residual life of the asset being 10% of its approved original cost.
- 8.79 However, in view of the licensee inability to classify its assets in accordance with Appendix II of the respective Regulations, the Commission has for the time being considered the classification as per the Tariff Order for FY 2006-07.
- 8.80 The depreciation rate is computed on the basis of the rates specified in the "distribution Tariff Regulations, 2004' and 'Generation Tariff Regulations, 2004'.

8.81 However, depreciation on assets created out of consumer contribution, grants etc has been deducted from the gross depreciation of the distribution function, to arrive at the net depreciation charge for distribution function.

8.82 The calculation of depreciation charges for generation function is detailed in the table given below:

Table 56: Approved Depreciation Charges for Generation function for FY 2007-08 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	2.28	0.10	0%	-
P&M	253.33	11.23	3.60%	9.12
Buildings	53.56	2.38	3.60%	1.93
Civil Works	20.85	0.92	1.80%	0.38
Hydraulics	7.82	0.35	1.80%	0.14
Lines, Cables, Network	339.31	15.05	3.60%	12.22
Vehicles	7.53	0.33	6.00%	0.45
Furniture & Fixture	3.47	0.15	6.00%	0.21
Office Equipments	5.21	0.23	6.00%	0.31
Total	693.35	30.75		24.75

8.83 The calculation of depreciation charges for transmission function is detailed in the table given below:

Table 57: Approved Depreciation Charges for Transmission function for FY 2007-08 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	0.77	0.23	0.00%	-
P&M	86.50	26.40	7.84%	6.78
Buildings	18.12	5.53	3.02%	0.55
Civil Works	7.00	2.14	1.80%	0.13
Hydraulics	2.47	0.75	1.80%	0.04
Lines, Cables, Network	115.74	35.32	5.27%	6.10
Vehicles	2.47	0.75	33.40%	0.83
Furniture & Fixture	1.24	0.38	12.77%	0.16
Office Equipments	1.65	0.50	12.77%	0.21
Total	235.96	72.01		14.79

8.84 The calculation of depreciation charges for distribution function is detailed in the table given below:

Table 58: Approved Depreciation Charges for Distribution function for FY 2007-08 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	2.77	0.59	0%	-
P&M	308.43	65.78	7.84%	24.18
Buildings	65.31	13.93	3.02%	1.97
Civil Works	25.53	5.44	1.80%	0.46
Hydraulics	9.50	2.03	1.80%	0.17
Lines, Cables, Network	412.92	88.06	5.27%	21.76
Vehicles	8.91	1.90	6.00%	0.53
Furniture & Fixture	4.45	1.33	6.00%	0.27
Office Equipments	6.23	1.30	6.00%	0.37
Total	841.27	179.42	0.38	49.72
Less Dep. for consumer cont, Grants etc				36.76
Net Depreciation				12.95

8.85 As per the above calculations, the Commission approves the total depreciation charge (generation, transmission and distribution) of Rs. 52.50 Cr for FY 2007-08.

Interest on Working Capital

Licensee's submission

8.86 The licensee has calculated interest on working capital for each function separately by drawing the references from the Tariff Order of Tata Steel for FY 2005-06 and TVNL for FY 2007-08 approved by the Commission.

8.87 The working capital for generation proposed by the licensee is summarised as under:

Table 59: Working capital estimation for Generation for FY 2007-08 (in Rs. Cr)

Particulars	Amount
O&M Expenses	10
Maintenance spares 1% of GFA	8
Receivables equivalent to 60 days	50
Cost of Fuel (Primary & Secondary)	16
Total working Capital	84
Rate of interest	12.25%
Interest on working capital	10

8.88 The working capital for transmission proposed by the licensee is summarised as under:

Table 60: Working capital estimation for Transmission (in Rs. Cr)

Particulars	FY 2007-08 Amount
O&M Expenses	3
Maintenance spares 1% of GFA	2
Receivables equivalent to 60 days	14
Total working Capital	19
Rate of interest	12.25%
Interest on working capital	2

8.89 The working capital for distribution proposed by the licensee is summarised as under:

Table 61: Working capital estimation for Distribution for FY 2007-08 (in Rs. Cr)

Particulars	FY 2007-08
O&M Expenses	20
Maintenance spares 1% of GFA	10
Receivables equivalent to 60 days	496
Less; Security Deposits	158
Total working Capital	367
Rate of interest	12.25%
Interest on working capital	45

Commission's analysis

8.90 The Commission has considered the interest on working capital as per the norms specified for computation of working capital requirements in the "Generation Tariff Regulations, 2004" and 'Distribution Tariff Regulations, 2004'.

8.91 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.

- 8.92 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.

Table 62: Approved IWC for Generation function for FY 2007-08 (Rs. Cr)

Particulars	Approved by JSERC
Cost of Coal for 1½ month	5.94
Secondary Fuel Oil for 1 month	2.57
Operation & Maintenance expenses for 1 month	18.73
Maintenance expenses @ 1% of Plant & Equipment	20.56
Total Working Capital	47.80
Interest on Working Capital @ 12.25%	5.86

- 8.93 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 licensee, the shortfall is 1% of the total revenue, hence the interest on working capital has been computed accordingly.

- 8.94 The prevailing short term prime lending rate of SBI, which is 12.25%, is considered as the interest rate for calculating the interest on working capital for FY 2007-08.

- 8.95 The Computation of Working capital for the Distribution function is shown in the table below:

Table 63: Approved IWC for Distribution function for FY2007-08 (Rs. Cr)

Particulars	FY 2007-08
Bad & Doubtful debt as a % of revenue	1%
Revenue at existing tariff	1431.40
Bad & Doubtful debt (in Rs. Cr)	14.31
Interest on Working Capital	1.75

- 8.96 The Commission accordingly approved an interest on working capital (IWC) of Rs.7.61 Cr for the licensee for FY 2007-08.

Interest and Other Finance Charges

Licensee's submission

- 8.97 The licensee has proposed interest and other finance charges of Rs.737 Cr. Interest cost is functionally separated between generation, transmission and distribution.

- 8.98 The table given below summarises the break-up of the amount projected by the licensee, as interest and finance charges

Table 64: Proposed Interest and Finance Charges for FY 2007-08 (Rs. Cr)

Interest Cost	Generation	Transmission	Distribution	Total
Commercial Loans				
Generation Loans	17	-	-	17
Transmission Loans	-	29	-	29
Distribution Loans	-	-	32	32
Building loans	0.10	0.03	0.15	0.29
APDRP	-	-	12	12
ADP	-	-	2	2
MNP	-	-	19	19
RGGVY	-	-	2	2
RE State Plan	-	-	4	4
Power Purchase	-	-	38	38
Others (for power purchase)	-	-	184	184
CPA/CPA DVC/CPA NHPC/ CPA Suspense	-	-	110	110
Interest on commercial loans-total	17	29	403	448
State govt. loans (erstwhile BSEB)				
Interest on erstwhile BSEB Loans	-	-	194	194
Interest on erstwhile BSEB Loans-Total			194	194
Working Capital				
Interest on working capital	10	2	45	58
Interest on working capital-Total	10	2	45	58
Gross Interest	27	31	642	700
Other interest and Finance charges				
Interest on consumer security deposit	-	-	10	10
Finance charges	1	0	49	51
Other interest & Finance charges-Total	1	0	59	60
Interest Capitalized				
Less: Interest capitalized	1	5	16	23
Interest Capitalized-Total	1	5	16	23
Net interest & Financing Costs-Total	27	26	684	737

Commission's analysis

- 8.99 In the Tariff Order of FY 2006-07, the Commission had not approved any amount against the interest and financing charges as it was of the view that licensee has huge amount of cash-in-hand and at bank and, thus, there is no need for licensee to resort to high cost of borrowings as it can meet its fund requirement from the available funds.
- 8.100 However, in compliance to the Hon'ble APTEL's Order vide Appeal no 129 of 2007, the Commission has now decided to provisionally allow the interest and finance charges as proposed by the licensee for the loans taken in previous years, except for loans taken for the purpose of power purchase, which being in the nature of working capital loans are already covered under IWC.

- 8.101 The Commission has considered the debt components of the additional capitalisation for the year at 70%, which is in accordance to the ‘Distribution Tariff Regulations, 2004’ and ‘Generation Tariff Regulations, 2004’. The Interest rate has been considered at 13%.
- 8.102 The Interest on working capital has already been calculated separately in the earlier section and does not form part of the calculation of interest and finance charges. Accordingly, the Commission approves the Interest and finance charges of Rs.438.66 Cr for FY 2007-08.

Return on Equity (RoE)

Licensee’s submission

- 8.103 The licensee has calculated RoE on the equity base of Rs.561 Cr at the rate of 14%, which amounts to Rs.78 Cr, as shown under

Table 65 : Proposed Disaggregated Return on Equity for FY 2007-08 (Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Gross Fixed Assets	805	193	955	1953
Less: Consumer Contribution	0	0	84	84
GFA less consumer contribution	805	193	871	1869
Normative equity 30% of GFA	242	58	261	561
Return: 14% of Normative Equity	34	8	37	78

Commission’s analysis

- 8.104 In accordance with the Regulations, the normative equity of 30% is estimated by taking the gross fixed assets less consumer contribution. The return on normative equity is approved by applying a rate of 14% , as proposed by the licensee, amounting to Rs.42.68 Cr.
- 8.105 The following table summarises the approved disaggregated return on equity for FY 2007-08:

Table 66: Approved disaggregated ROE for FY 2007-08 (Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Gross Fixed Assets	693.35	235.96	844.04	1773.35
Less: Consumer Contribution, grants and subsidy towards cost of capital assets			757.22	757.22
GFA less consumer contribution	693.35	235.96	86.81	1016.12
Normative equity 30% of GFA	208.00	70.79	26.04	304.84
Return: 14% of Normative Equity	29.12	9.91	3.65	42.68

Non Tariff Income (NTI)

Licensee's submission

8.106 The licensee has proposed a total of Rs.302 Cr, as NTI from sources such as delayed payment surcharge, income from fixed deposits, income from rebates and income from incentives. The proposed disaggregated non-tariff income have been summarised in the table below:

Table 67: Proposed Non tariff income for FY 2007-08 (Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Realizable D.P.S	-	-	30	30
Income from Investment (F.D)	-	-	8	8
Interest on advance to Supplier/ Contractor	0.03	0.03	0	0
Income from rebates	-	-	129	129
Income from Trading	0.04	0.04	0	0
Income from staff welfare activities	0.04	0.01	0	0
Total Non-Tariff Income	0.11	0.08	167	167

Commission's analysis

8.107 The Commission has approved the NTI of Rs. 128.26 Cr, which includes net UI receivable by the licensee for FY 2007-08. The component-wise break-up of approved NTI is summarised in the table given below:

Table 68: Approved NTI for FY 2007-08 (Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Realisable D.P.S @ 10% of D.P.S	0.00	0.00	30.20	30.20
Sale of water	3.18	0.00	0.00	3.18
Meter rent	0.00	0.16	3.14	3.31
Sale of tender paper	0.22	0.05	0.27	0.54
Income from Investment (F.D)	0.00	0.00	8.00	8.00
Income on advance to supplier/Contractor	0.03	0.03	0.00	0.06
Income from rebates	0.00	0.00	129.00	129.00
Income from trading	0.04	0.04	0.00	0.08
Income from staff welfare activities	0.04	0.01	0.00	0.05
UI Payable	0.00	0.00	89.92	89.92
UI Receivable	0.00	0.00	42.88	42.88
Net UI receivable/payable	0.00	0.00	-46.14	-46.14
Total Non tariff income	3.51	0.29	124.47	128.28

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

8.108 As detailed in Section 11 of this Order, the Commission has calculated Rs.275.41 Cr as disincentive cost for non achievement of T&D loss reduction target by the licensee as per the T&D loss reduction trajectory approved by the Commission.

Penalty for non-compliance of the Standards of Performance (SoP)

8.109 In the Tariff order for FY2006-07, the Commission has directed the licensee to implement the Standards of Performance Regulations by 1st January 2008 and submit the compliance report to the Commission thereafter, failing which the energy charge for all categories will be reduced by 2.5% from 1st January 2008.

8.110 Till date the licensee has not submitted the compliance report for SoP, therefore, the Commission imposes the penalty of 2.5% of the energy charges w.e.f. from 1st January 2008 and accordingly an amount of Rs.7.01 Cr. has been deducted from the ARR of the licensee for FY 2007-08.

Revenue from Existing Tariff

Licensee's submission

8.111 The licensee has submitted the consumer category-wise revenue from existing tariffs for FY 2007-08. On the basis of the projected number of consumers and sales for each category of consumer, the licensee has worked out the revenues from existing tariff amounting to Rs.1405.17 Cr.

Commission's analysis

8.112 On the basis of approved sales to various categories of consumers, the Commission determines the revenue from sale of power amounting to Rs.1431.40 Cr, as against Rs.1405.17 Cr proposed by the licensee, at the existing tariff (made applicable by Tariff order for FY 2003-04), as detailed hereunder:

Table 69: Approved Revenue from existing tariffs for FY 2007-08 (Rs. Cr)

Consumer Category	Units Sold (MU)	Rate*	Revenue
Domestic	1375.03	1.37	188.15
Commercial	209.52	4.09	85.67
Public Lighting	70.22	1.25	8.75
Irrigation	69.19	0.73	5.07
Industrial LT	123.25	4.93	60.71
HTS (inc PWW)	1281.08	4.63	593.45
HTSS	562	5.50	224.77
Railway	511.44	4.97	254.1
MES	39.00	2.76	10.75
Total	4240.72		1431.40

* Rates includes applicable energy and fixed charges and MMC

Resource gap from GoJ

Licensee's submission

8.113 The licensee has submitted in the Tariff Revision Petition in March 2009 that the resource gap of Rs.77.27 Cr for FY 2007-08 may also be deducted while arriving at the net revenue requirement.

Commission's analysis

8.114 The Hon'ble APTEL's in its Direction no.5 pronounced in Order dated 8.5.2008 on appeal no.129/2007 has stated that the resource gap should not form part of the Tariff determination process. Accordingly the Commission has not considered any revenue gap for the years when there is no resource gap received by the licensee from Govt of Jharkhand.

8.115 Meanwhile, the licensee has proposed to the Commission in the tariff revision proposal for FY 2008-09, submitted in March 2009, to consider the resource gap from the State Government as part of the coverage of revenue gap for tariff determination process. Accordingly, the Commission has considered the resource gap of Rs.77.27 Cr, while arriving at the net revenue requirement of the licensee for FY 2007-08.

Summary of the ARR for FY 2007-08

8.116 In view of the above, the functionally disaggregated ARR for generation function as proposed by the licensee and approved by the Commission for FY 2007-08 is summarised in the tables below:

Table 70: Summary of the ARR for Generation Function for FY 2007-08 (Rs. Cr)

Annual Revenue Requirement	As proposed by the petitioner for FY 2007-08	As Approved by JSERC FY 2007-08
Fuel	95.85	79.01
Employee	85.00	54.13
Repair & Maintenance	23.60	13.37
Admin & General	15.00	11.35
Interest & Financing Charges	17.00	11.03
Interest on working capital	10.00	5.86
Depreciation	20.00	24.75
Less: Inefficient cost of PTPS	-	96.57
Total Costs	266.45	102.92
Add: Reasonable return	34.00	29.12
less: Non tariff income	0.11	3.51
ARR	300.34	128.53

8.117 The functionally disaggregated ARR for Transmission function as proposed by the licensee and approved by the Commission for FY 2007-08 is summarised in the table given below:

Table 71: Summary of the ARR for Transmission Function for FY 2007-08 (Rs. Cr)

Description	As proposed by the Petitioner FY 2007-08	As approved by the JSERC FY 2007-08
Employee	27.00	16.54
Repair & Maintenance	5.80	3.20
Admin & General	5.00	3.45
Interest & financing charges	24.00	15.49
Interest on working capital	2.00	-
Depreciation	13.00	14.79
Total Cost	76.80	53.47
Add: Reasonable return	8.00	9.91
less: Non tariff income	0.08	0.29
ARR	84.72	63.09

8.118 The functionally disaggregated ARR for distribution function as proposed by the licensee and approved by the Commission for FY 2007-08 is summarised in the table given below:

Table 72: Summary of the ARR for Distribution function for FY 2007-08 (Rs. Cr)

Description	As proposed by the Petitioner FY 2007-08	As approved by the JSERC FY 2007-08
Power Purchase	1705.51	1552.53
Employee	184.00	87.96
Repair & Maintenance	27.93	15.87
Admin & General	31.50	18.88
Interest and financing charges	639.21	412.13
Interest on working capital	45.00	1.75
Depreciation	73.00	12.95
Provision for bad & doubtful debts	14.05	0.00
Less: Disincentive for T&D Loss	-	275.41
Less: Penalty on SoP	-	7.01
Total Costs	2720.20	1819.66
Add: Reasonable return	37.00	3.65
less: Non tariff income	167.00	124.47
ARR	2590.20	1698.83

Summary of Consolidated ARR of JSEB

8.119 The table below summarises the consolidated ARR approved by the Commission for FY 2007-08:

Table 73 : Approved ARR for FY 2007-08 (Rs. Cr)

Description	As proposed by the Petitioner FY 2007-08	As approved by JSERC FY 2007-08
Power Purchase Cost	1705.51	1552.53
Fuel Cost	95.85	79.01
R&M Cost	57.33	32.44
Employee's Cost	296.00	158.63
A&G Cost	51.50	33.68
Depreciation	106.00	52.50
Bad Debts Provision	14.05	0.00
Interest & Financing Charges	680.21	438.66
Interest on Working Capital	57.00	7.61
Less: Inefficient Cost of PTPS	-	96.57
Less: Disincentive for non-achievement of T&D Loss targets		275.41
Less Penalty on SoP		7.01
Total Expenditure	3063.45	1976.05
Statutory Return	79.00	42.68
Gross Revenue Requirement	3142.45	2018.72
Less: Other Income	167.19	128.28
Net Revenue required	2975.26	1890.45
Revenue at existing tariff	1405.00	1431.40
Resource gap from GoJ	77.27	77.27
Revenue Gap	1660.18	381.77

8.120 Thus, the approved gap of Rs.381.77Cr against the proposed gap of Rs.1660.18 Cr has been considered by the Commission while finalising the tariff, as detailed in Section 12 of this order.

A9: COMMISSION'S ANALYSIS OF THE ARR AND TARIFF PETITION FOR FY 2008-09

9.1 The Commission has scrutinized the petition filed by JSEB for FY 2008-09. The component-wise details of the licensee's submission with the Commission's analysis thereof and approvals applicable for FY 2008-09 have been discussed in this section.

Energy Sales

Licensee's submission

9.2 The licensee submitted the details of number of consumers and energy sales for FY 2008-09. The following table summarises the category-wise projected no. of consumer during FY 2008-09.

Table 74 : Proposed number of Consumers for FY 2008-09

Category	FY 2008-09
Domestic	1500562
Commercial	87535
Public Lighting	766
Irrigation	13856
Industrial LT	9456
Industrial HT	1218
Railway	15
MES	9
Total	1613417

9.3 The licensee has proposed 4802 MU of energy sales for FY 2008-09. The licensee has used 3 year CAGR to forecast energy sales to consumers for FY 2008-09. However, the CAGR for public lighting was coming out to be abnormally high therefore; the licensee has considered a normalised growth rate to forecast energy sales to public lighting consumers.

9.4 The category-wise consumption for the above mentioned consumers is detailed in the table below:

Table 75: Proposed Energy Sales for FY 2008-09 (MU)

Category	Units
Domestic	1680
Commercial	242
Public Lighting	93
Irrigation	80
Public Water Works	67
Industrial LT	131
Industrial HT	1984
Railway	524
Total	4802

Commission's analysis

- 9.5 The Commission has scrutinized the commercial information in relation to the number of consumers and category-wise units sold, as projected by licensee for FY 2007-08. Since the tariff determination exercise is being carried out at the end of FY 2009-10, the Commission had requisitioned the actual/latest commercial information for FY 2008-09 from the licensee.
- 9.6 On the basis of the latest/actual commercial information made available by the licensee, the Commission has approved the sales of 4649.11 MU for FY 2008-09. This does not include the inter-state sales as the same has not been provided by the licensee.
- 9.7 The table given below summarises the approved category wise energy sales:

Table 76: Approved Energy Sales (MU) for FY 2008-09

Category	FY 2008-09 Actual
Domestic	1618.87
Commercial	247.22
Public Lighting	89.09
Irrigation	69.65
Public Water Works	67.63
Industrial LT	133.36
Industrial HT	1818.55
Railway	562.72
MES	42.00
Total	4649.11

- 9.8 The Commission has treated the inter-state sale to be part of the difference in availability resulting from variation in actual loss levels and approved loss levels and accordingly considered it as part of the dis-incentivized cost to be borne by the licensee, as detailed in Section 11 of this Order.

Transmission & Distribution Losses (T&D Losses)

Licensee's submission

- 9.9 The licensee has estimated an overall T&D loss level of 41.85% for FY 2008-09. The T&D losses has been projected based on a target T&D loss reduction of 1.50%.
- 9.10 The licensee stated that the increase in the LT network and rural electrification provides scope for higher losses both technical and commercial.

- 9.11 The licensee also submitted that it has been implementing various theft curbing measures to reduce the theft of electricity. It has also created Anti Power Theft (APT) cell to monitor various energy consumption patterns of various consumers involved in theft from external sources. It has also taken up remote metering data analysis and sealing and locking of metering devices etc.
- 9.12 The table below summarises the T&D losses as proposed by the licensee for FY 2008-09.

Table 77: Proposed T&D losses for FY 2008-09

Description	FY 2008-09
Total energy sales (MU)	4802
Overall T&D loss %	41.85%
Overall T&D Loss (MU)	3456

Commission's analysis

- 9.13 The Commission takes notes of the steps taken by the licensee to reduce the T&D losses but feels that T&D losses proposed by the licensee are still on a very higher side and the same cannot be approved by the Commission. The licensee needs to take concrete measures to reduce the T&D losses so that the normative levels are achieved over time. The Commission in its last tariff order for FY 2006-07 had directed the licensee to reduce its T&D loss by 4% every year till the normative level is achieved.
- 9.14 In view of the same and also in compliance of the Direction no. 10 in the Order of the Hon'ble APTEL in appeal no. 129 of 2007; the Commission has set a time bound trajectory for reduction in T&D losses, as mentioned in the Section 7.19 of this Order.
- 9.15 In terms of the set trajectory, the Commission approves an overall T&D loss target of 28.66% for FY 2008-09.
- 9.16 The Commission in the last tariff order had also directed the licensee 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 Losses and results achieved. However, the Board has not submitted any report on the same. The Commission takes very strong note of this and has issued fresh directives in this regard in the Directives section of this Order.
- 9.17 The table below summarises the transmission & distribution losses approved by the Commission:

Table 78 : Approved T&D Losses for FY 2008-09

Description	FY 2008-09
Total energy sales (MU)	4249.11
Overall T&D loss %	28.66%
Overall T&D Loss (MU)	1867.72

Energy Requirement

Licensee's submission

- 9.18 The licensee submits that the energy requirement is either met through power from its own generating units or from the power purchased from the external sources.
- 9.19 The licensee has proposed the energy requirement of 8258 MU for FY 2008-09. The projection of energy requirement is based on energy sales of 4802 MU being grossed up by the proposed T&D losses of 41.85%. The total energy requirement as proposed by the licensee is given as under:

Table 79 : Proposed Energy Requirement for FY 2008-09

Energy Balance	FY 2008-09 (MU)
Total energy sales	4802
Overall T&D loss %	41.85%
Overall T&D loss	3456
Total Energy Requirement	8258

Commission's analysis

- 9.20 The energy requirement approved by the Commission is based on the approved sales projections of 4649.11 MU and approved T&D loss of 28.66%. The total energy requirement worked out to 6516.83 MU, as summarised hereunder:

Table 80 : Approved Energy Requirement for FY 2008-09

Energy Balance	FY 2008-09 (MU)
Total energy sales	4649.11
Overall T&D loss %	28.66%
Overall T&D loss	1867.7
Total Energy Purchase	6516.83

Own Generation- PTPS

Licensee's submission

- 9.21 The licensee stated that while the PTPS has 10 generating Units, 6 units are almost 35 yrs old and have outlived their life while Units 7-10 which were installed during 1977-86 have also become reasonably old. Due to aging of the plants, capacities of Unit 1-8 are de-rated and hence the overall capacity stands reduced to 770 MW as against the original installed capacity of 840 MW.

- 9.22 The licensee states that only unit 1 & 7 were operational and balance units are non-operational as overhauling and restoration work is going on. The overhauling of unit 2 was completed and was operation since 12th Feb., 2008.
- 9.23 Based on the above consideration, the licensee has proposed the following operational parameters and generating cost for PTPS:

Table 81: Proposed energy generation from PTPS for FY 2008-09

Parameters	Units	FY 2008-09 (Prov.)
Installed Capacity	MW	840
De-rated Capacity (Usable)	MW	770
Availability factor	%	60%
Plant Load Factor	%	17.79%
Auxiliary consumption	%	14.0%
Station Heat Rate	Kcal/kWh	4334
Calorific value of coal	Kcal/kg	4350
Calorific value of Oil	Kcal/l	10500
Coal transit loss	%	2%
Price of coal- Landed Cost (incl. transit loss)	Rs/Tonne	1000
Price of Oil (LDO & FO)	Rs/Kl	30,000
Specific Coal Consumption	Kg/kWh	0.96
Specific oil consumption	ml/kWh	15
Projection		
Gross generation	MU	1200
Auxiliary consumption	MU	168
Net Generation	MU	1032
Coal Consumption	MT	1152113
Oil Consumption	KL	18000
Coal cost	Rs Cr	115.21
Oil Cost	Rs Cr	54.00
Total Fuel Cost	Rs Cr	169.21
Other expenses related to generation	Rs/U	0.031
Other expenses related to generation (Rs Cr)	Rs Cr	3.72
Total Variable Cost	Rs Cr	172.93
Per unit fuel cost (on Gross generation)		1.44
Per unit fuel cost (on Net generation)		1.68

Commission's analysis

- 9.24 The Commission has approved the per unit fuel cost on the basis of the trajectory specified for the various operational parameters of the PTPS station in Section 11 of this Order and the 'Generation Tariff Regulations, 2004'. The other parameters, such as, calorific value of coal, calorific value of oil, price of fuel (coal & oil) have been approved at the same as that proposed by the licensee.
- 9.25 Accordingly, the Commission has estimated the per unit fuel cost of Rs. 1.24/kWh as against Rs.1.68/Kwh proposed by the licensee. The table below summarises the parameters considered for the calculation of variable cost of PTPS for FY 2008-09:

Table 82: Approved per unit rate from PTPS for FY 2008-09

Parameters	Units	FY 2008-09
Installed Capacity	MW	840
De-rated Capacity (Usable)	MW	770
Availability factor	%	60%
Plant Load Factor	%	34%
Auxiliary consumption	%	10.50%
Station Heat Rate	Kcal/kWh	3450
Calorific value of coal	Kcal/kg	4350
Calorific value of Oil	Kcal/l	10500
Coal transit loss	%	0.80%
Price of coal- Landed Cost (incl. transit loss)	Rs/Tonne	1000
Price of Oil (LDO & FO)	Rs/Kl	30000
Specific Coal Consumption	Kg/kWh	0.79
Specific oil consumption	ml/kWh	10.77
Projection		
Gross generation	MU	2293.37
Auxiliary consumption	MU	240.80
Net Generation	MU	2052.56
Coal Consumption	MT	1772550.6
Oil Consumption	KL	24700
Notional Coal cost	Rs Cr	177.26
Notional Oil Cost	Rs Cr	74.10
Total Fuel Cost-notional	Rs Cr	251.36
Other expenses related to generation	Rs/U	0.031
Other expenses related to generation (Rs Cr)	Rs Cr	3.72
Total Variable Cost	Rs Cr	255.08
Per unit oil cost	Rs/Kwh	0.36
Per unit coal cost	Rs/Kwh	0.86
Per unit fuel cost (on Gross generation)	Rs/Kwh	1.11
Per unit fuel cost (on Net generation)	Rs/Kwh	1.24

- 9.26 The actual generation data for FY 2008-09 was not made available, therefore the Commission has taken the actual gross generation of PTPS from the PGCIL's Annual report for FY 2008-09 which is 1012 MU and an auxiliary consumption of 14% (which was the actual auxiliary consumption of PTPS for FY 2006-07) to arrive at a net generation of 870.3 MU.
- 9.27 Accordingly, the Commission has determined and approved the fuel cost of Rs. 108.16 Cr for FY 2008-09.
- 9.28 The Commission has discussed the detailed estimation of fixed cost of PTPS in the subsequent paragraphs, according to which the total fixed cost of PTPS works out to Rs.228.71 Cr for FY 2008-09.
- 9.29 Continuing the approach as adopted in the Tariff Order for FY 2006-07, the Commission projects an amount of Rs.131.73 Cr towards inefficient fixed cost of PTPS for FY 2008-09, on the basis of estimated net generation of 870.3 MU, as detailed in Section 11 of this Order.
- 9.30 The Commission reiterates that the above has been done particularly to prevent inefficiencies of the licensee to be passed on to the consumers, who are already facing hardship due to poor quality of supply and poor availability of power.
- 9.31 The total cost of energy generation from PTPS, including both fixed and variable cost amounts to Rs.205.13 Cr @ Rs.2.36/unit for FY 2008-09, as summarised in the table given below:

Table 83: Approved energy generation cost from PTPS

Particulars	Unit	FY2008-09
Fuel cost	Rs./kWh	1.24
Fixed cost	Rs./kWh	1.12
Total cost	Rs./kWh	2.36
Fuel Cost	Rs. Cr	108.16
Fixed Cost	Rs. Cr	133.03
Total Cost	Rs. Cr	205.13

Inefficient cost of PTPS

- 9.32 The Commission has computed the inefficient cost of PTPS for FY 2008-09 at Rs.131.73 Cr, as detailed in Section 11 of this Order.

Own Generation- SHPS

Licensee's submission

- 9.33 SHPS has an installed capacity of 130 MW and is a multi-purpose project which caters to the irrigation needs & drinking water requirement of Ranchi city.
- 9.34 The licensee states that the reservoir faces a problem of silting and it is regularly following up with the concerned department to implement the scheme to get the problem resolved at the earliest.
- 9.35 The licensee has submitted the following details related to generation of SHPS:

Table 84 : Proposed Generation of SHPS

Description	Units	FY 2008-09 (Prov.)
Capacity	MW	130
Gross Generation	MU	151
Aux Consumption	MU	0.24
Net Hydel generation	MU	151
Cost related to Hydel Generation	Rs. Cr	0.57
Cost per Unit (on Net generation)	Rs/Kwh	0.04

Commission's analysis

- 9.36 The actual generation data for FY 2008-09 was not made available, therefore the Commission has taken the actual gross generation of SHPS from the PGCIL's Annual report for FY 2008-09 which is 236.8 MU, after considering the auxiliary consumption.
- 9.37 Since the cost of hydel stations is fixed in nature, the Commission approved an amount of Rs 6.63 Cr towards fixed cost of SHPS

Power Purchase availability and cost

Licensee's submission

- 9.38 The licensee has submitted that its balance power requirement is met from external power purchase from TVNL, Central Generating station- NTPC & NHPC, DVC, traders etc.
- 9.39 The licensee states that it has explored all possibilities to procure power from available sources to meet urgent requirement of the state due to power shortage scenario.

- 9.40 The power purchase for FY 2008-09 is estimated based upon Merit Order power purchase. Tala and Chukha are international projects and hence the power purchase obligation is bound by the contractual terms.
- 9.41 The power from DVC points of supply are constrained from connectivity to network and cannot follow a Merit order dispatch schedule. The balance power purchase is computed based on the principle of merit order dispatch after taking into account the variable cost of each power source available to licensee and is shown in the table below:

Table 85: Merit order dispatch for power purchase of FY 2008-09

Merit order for Power Purchase (MU)	Variable cost Rs/unit	Quantum of power (MU)
Sources		
Chukha	1.61	162
Tala PTC	1.91	356
DVC	2.44	3200
Short term power/PTC	7.50	130
Rangit	0.66	41
Talcher	0.67	419
TVNL	0.85	2002
Farakka	1.24	525
Kahalgaon	1.31	75
Teesta	1.62	61
DVC STOA	2.89	49
WBSEB	3.70	55

- 9.42 The licensee has submitted that the net energy available at the State grid is estimated based on external losses in the ERLDC network. This loss is based on the actual units purchased and actual units received at the state grid. The external loss for FY 2008-09 is 3.61%. The table below provides the gross power purchase and the respective cost from each source for FY 2008-09:

Table 86: Proposed power purchase for FY 2008-09

Gross Power Purchase	Units MU	Cost (Rs. Cr)
Sources		
NTPC		
Farakka	545	93
Kahalgaon	78	14
Talcher	434	55
NTPC-Total	1057	162
NHPC		

Rangit	43	7
Chukha	168	26
Teesta	63	10
NHPC- Total	274	43
Other Sources		
DVC	3200	1024
DVC STOA	51	14
TVNL	2002	380
WBSEB	55	23
Tala PTC	369	68
Net UI	0	0
PGCIL		28
ERLDC		0.42
PTC STOA	135	98
Other sources-Total	5812	1635
Gross Power Purchase	7143	1840

Commission's analysis

- 9.43 The Commission has considered the power purchase requirement of the licensee based on the actual data submitted by the licensee.
- 9.44 The generation of PTPS & SHPS has been taken from the PGCIL's Annual Report for FY 2008-09. The Commission, therefore, has approved a total power purchase of 7066.07 MU at an average per unit cost of Rs. 2.51/Kwh for FY 2008-09.

Table 87: Approved Power Purchase Cost for FY 2008-09

Sources	Net Purchase Units (MU)	Average Rate (Rs/Kwh)	Cost (Rs. Cr)
NTPC			
Farakka	576.28	2.30	132.87
Kahalgaon	133.29	2.19	29.24
Talcher	491.92	1.48	72.60
NTPC-Total	1201.5	1.95	234.3
NHPC			
Rangit	43.84	1.79	7.85
Teesta	229.97	1.71	39.35
NHPC- Total	273.8	1.72	47.2
Other Sources			
DVC	3040.4	2.88	875.88
DVC STOA	126.97	2.78	35.30
Chukha	200.8	1.57	31.53
TVNL	2027.2	2.05	415.57
WBSEB	49.50	4.27	21.12
Tala PTC	437.64	1.83	79.98

Short term power/ PTC	-8.59	8.61	-7.39
Sub Total	5873.88	2.47	1451.99
Net UI	-283.12	-	-
PGCIL	-	-	40.22
ERLDC	-	-	0.49
Total Power Purchase	7066.07	2.51	1774.19

Employee Cost

Licensee's submission

- 9.45 For estimating the employee cost for FY 2008-09, the licensee has considered a normal increment of 6.68% over the employee cost of FY 2007-08.
- 9.46 In addition to this, the board proposes to contribute Rs.100 Cr against pension and provident fund corpus which has also been included in the employee cost. The licensee is of the view that pension corpus fund is a legible revenue expenditure item and cannot be contributed from anywhere else other than through its ARR. JSEB submits that the SERC's of other states have also accepted such costs submitted by utilities and allowed the pension corpus fund to be created through contribution from ARR submissions spread across few years.
- 9.47 The licensee further states that the employee costs will also have an impact of 6th pay Commission, as the board would have to release arrear which is aptly included to the minimal extent of Rs. 50 Cr in FY 2008-09.
- 9.48 The board has disaggregated the employee cost for Generation, Transmission and Distribution on the basis of number of employees. The total employee cost is disaggregated as under:

Table 88 : Proposed disaggregated employee costs (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Salary	34.95	11.10	75.64	121.70
Overtime	1.59	0.51	3.44	5.54
DA	16.78	5.33	36.31	58.41
Other Allowance	2.30	0.73	4.97	7.99
Bonus	0.03	0.01	0.07	0.12
Sub-Total	56	18	120	194
Medical reimbursement	0.23	0.07	0.50	0.80
Leave Encashment	1.84	0.58	3.98	6.40
Payment under workmen compensation	0.03	0.01	0.06	0.09
Total other staff cost	2	1	5	7
Staff Welfare expenses	0.24	0.08	0.52	0.83

GPF/CPF	13.79	4.38	29.83	48
Gratuity & GSS	9.19	2.92	19.89	32
Pension corpus & GPF Trust	28.72	9.122	62.15	100
Terminal benefits	52	16	112	180
Provision for 6th pay revision	14	5	31	50
Less: Employee expenses capitalised	13.16	4.18	28.48	45.83
Total Employee Costs	111	35	240	386

Commission's analysis

- 9.49 The Commission approves the gross employee costs of Rs. 340.88 Cr for FY 2008-09 by considering an escalation factor of 6% over the approved employee cost for FY 2007-08, which is in accordance with the 'Generation Tariff Regulations, 2008' .
- 9.50 In compliance to Direction no.6 in the Order of the Hon'ble APTEL in Appeal no.129/2007, the Commission approves the pension and provident fund corpus fund of Rs. 100.00 Cr as proposed by the Licensee.
- 9.51 The Commission also approves an amount of Rs.50.00 Cr towards 6th Pay Commission, as proposed by the licensee.
- 9.52 The Commission has also considered the capitalisation of employee expenses amounting to Rs.28.69 Cr at the rate of 12%, as proposed by the licensee.
- 9.53 The components of employee cost have been functionally disaggregated in the same ratio as was approved by the Commission in the tariff order of FY 2006-07. Other allowances and staff welfare allowances are disaggregated in the ratio of net employee cost approved by the Commission in the previous tariff order.
- 9.54 The total employee cost allowed to the licensee is Rs. 312.19 Cr for FY 2008-09, as shown in the table below

Table 89 : Approved disaggregated employee costs for FY 2008-09 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Salary	36.89	11.05	60.55	108.49
Overtime	1.39	0.41	2.27	4.07
DA	12.14	3.63	19.86	35.63
Other Allowance	2.47	0.73	4.04	7.24
Bonus	0.00	0.00	0.01	0.01
Sub-Total	52.88	15.84	86.72	155.44
Medical reimbursement	0.33	0.10	0.54	0.96
Leave Travel Assistance	0.06	0.00	0.13	0.19
Leave Encashment	1.92	0.57	3.14	5.64

Payment under workmen compensation	0.09	0.03	0.14	0.25
Total other staff cost	2.40	0.70	3.96	7.05
Staff Welfare expenses	0.25	0.07	0.40	0.72
Terminal benefits	9.43	2.82	15.42	27.66
Corpus fund for Pension	34.03	10.18	55.79	100.00
Impact of VI Pay Commission	17.01	5.09	27.90	50.00
Total	116.00	34.69	190.19	340.88
Less Capitalised	9.56	2.39	16.74	28.69
Net Employee Cost	106.44	32.30	173.45	312.19

Administrative & General Expenses

Licensee's submission

- 9.55 The licensee has proposed the Administrative & General (A&G) expenses of Rs.87 Cr for FY 2008-09.
- 9.56 The licensee states that it is implementing new measures to upgrade and innovate to streamline its revenue and consumer assistance. It is implementing a new system for billing, Billing Revenue & Energy Management System (BREMS) which will have an outgo Rs. 20 Cr yearly.
- 9.57 The board has also submitted that it has engaged the services of an agency for the setting up and operation of Zonal Call Centres across the state which will address the consumer problems. Moreover, it has to pay rent for offices across the state including the rent of the headquarter building. It is also paying insurance cost against the insurance of PTPS and will also be insuring the transmission and central stores across the state.
- 9.58 The licensee has disaggregated the A&G cost based on the number of employees.

Table 90 : Proposed disaggregated A&G Costs for FY 2008-09 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Rent	0.80	0.25	1.73	2.78
Insurance	0.14	0.05	0.31	0.50
Telephone, fax, Mobile	0.57	0.18	1.24	2.00
Legal charges	0.57	0.18	1.24	2.00
Audit charges	0.39	0.12	0.84	1.36
Consultancy charges/tech fees	0.86	0.27	1.86	3.00
Conveyance charges	1.35	0.43	2.92	4.69
Vehicle Expenses	1.15	0.36	2.49	4.00
IT initiatives/Networking /Computerisation	7.45	2.37	16.12	25.93

CISF (PTPS)	0.39	0.12	0.84	1.35
Fees & Subscription	0.03	0.01	0.07	0.12
Books & periodicals	0.09	0.03	0.19	0.30
Printing & stationery	0.72	0.23	1.55	2.50
Advertisement	0.72	0.23	1.55	2.50
Electricity & water Charges	0.93	0.30	2.02	3.25
Entertainment	0.29	0.09	0.62	1.00
Contract Charges	2.30	0.73	4.97	8.00
Freight & other purchase related to expenses	0.61	0.19	1.33	2.14
Miscellaneous expenses (incl. computerized billing)	5.52	1.75	11.94	19.20
Total A&G Costs	24.88	7.90	53.85	86.63

Commission's analysis

- 9.59 The Commission has approved the A&G expenses of Rs.50.70, by considering an escalation factor of 6% p.a. over the approved A&G expenses for FY 2007-08, in accordance with the 'Generation Tariff Regulations, 2004'.
- 9.60 The Commission appreciates the steps proposed to be undertaken by the licensee to improve its IT system; but since the licensee has not given any status of the expenditure incurred on the IT initiatives, the Commission is for the time being allowing Rs. 15 Cr as towards A&G expenses for IT initiatives for FY 2008-09.
- 9.61 Disaggregation of A&G costs has been done in the same ratio as was done by the Commission in the Tariff Order of FY 2006-07. The total A&G expenses allowed to the licensee is RS. 50.70 Cr for FY 2008-09.
- 9.62 The item-wise details of A&G expenditure approved by the Commission is detailed hereunder:

Table 91 : Approved disaggregated A&G Costs for FY 2008-09 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Rent, Rates & Taxes	0.18	0.05	0.30	0.54
Insurance	0.10	0.03	0.17	0.31
Telephone, fax, Mobile	0.34	0.10	0.57	1.02
Legal charges	0.25	0.08	0.42	0.75
Audit charges	0.44	0.12	0.71	1.27
Consultancy charges	0.51	0.15	0.84	1.50
Technical Fees	0.02	0.01	0.03	0.06
Other professional charges	0.01	0.00	0.01	0.02
Conveyance charges	1.59	0.48	2.64	4.70
Fees & Subscription	0.11	0.06	0.23	0.40
Books & periodicals	0.02	0.01	0.03	0.05

Printing & stationery	0.17	0.05	0.28	0.50
Advertisement	0.24	0.07	0.40	0.71
Water Charges	0.09	0.03	0.15	0.26
Electricity Charges	1.30	0.39	2.14	3.83
Entertainment Charges	0.04	0.01	0.06	0.11
Misc. expenses	6.09	1.86	10.15	18.10
Freight	0.10	0.03	0.17	0.30
Other purchase and related expenses	0.43	0.13	0.71	1.28
IT Initiatives	5.06	1.54	8.41	15.00
Total A&G Costs	17.09	5.19	28.42	50.70

Gross Fixed Assets

Licensee's submission

9.63 The licensee has submitted the capital investment plan for FY 2008-09 as follows :

Table 92 : Proposed Capital Investment for FY 2008-09 (Rs. Cr)

Description	Amount
Generation	412
Transmission	969
Distribution:	
<i>RGGVY</i>	1700
<i>APDRP</i>	374
<i>Annual Development Programme</i>	330
<i>Agriculture Pump Energization scheme</i>	37
<i>IT Initiatives</i>	40
Distribution (sub-total)	2481
Total Capex	3862

9.64 The capitalization schedule proposed by the licensee is shown as under:

Table 93: Assumption for capitalisation to Assets

Capitalisation schedule	Year 1	Year 2	Year 3
Generation	70%	30%	0%
Transmission	25%	50%	25%
Distribution	50%	50%	0%

- 9.65 Based on the above capitalisation schedule, the licensee has computed the GFA for FY 2008-09 for each function as under:

Table 94: Gross Fixed Assets for FY 2008-09 (Rs. Cr)

Gross Fixed Assets	Generation	Transmission	Distribution	Total
GFA-Opening balance	856	288	1309	2452
Net additions during the year	308	321	1510	2138
GFA-Closing balance	1163	609	2819	4591

Commission's analysis

- 9.66 The Commission has considered the gross fixed assets (GFA) of the licensee on the basis of the closing GFA approved by the Commission for FY 2007-08.
- 9.67 Meanwhile, as mentioned in the analysis of the petition for FY 2007-08, the Commission has observed that the licensee has been submitting an ambitious capital investment plan and capitalization schedule in previous years whereas the actual capital expenditure has been much lower than the proposed plan. For FY 2008-09 also, the licensee has given a highly ambitious plan of Rs.3862 Cr.
- 9.68 The Commission feels it will not be appropriate to allow the plan as proposed by the licensee as it will burden the consumers and instead, for the time being, approves Rs. 1000 Cr for the capital expenditure proposed to be undertaken by the licensee for FY 2008-09.

Table 95: Approved Capital Investment Plan for FY 2008-09 (Rs. Cr)

Gross Fixed Assets	Generation	Transmission	Distribution	Total
Capital Investment Plan	102.6	256.4	641	1000.00
Addition considered for FY 2008-09*	57.62	140.98	340.27	538.87

* includes capitalisation of WIP of previous years

- 9.69 The additions of FY 2008-09 have been considered on the basis of the following capitalization schedule, which is based on the past trend observed in the case of licensee.

Table 96: Approved capitalisation schedule for FY 2008-09

Capitalisation Schedule	Year 1	Year 2	Year 3	Year 4
Generation	30%	20%	20%	20%
Transmission	25%	30%	30%	15%
Distribution	25%	25%	25%	25%

- 9.70 Since the capital expenditure is essential from the point of view of the load growth and loss reduction, the Commission shall true up the capital investment of the licensee on the basis of the audited figures as and when the same are made available by the licensee.

- 9.71 Based on the above, the approved gross fixed assets (GFA) and net fixed assets (NFA) of the licensee for FY 2008-09, is summarised hereunder:

Table 97: Approved Gross Fixed Assets for FY 2008-09 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Opening Gross Block	724.09	307.97	1024.05	2056.11
Net Additions for the year	57.62	140.98	340.27	538.87
Gross Block at the end of year	78.71	448.95	1364.32	2594.98
Less: Accumulated Depreciation	522.47	137.81	481.50	1141.78
Net block/Fixed Assets	259.24	311.14	882.82	1453.20
Less: Consumer Contribution	0	0	138.93	138.93
Net block/ fixed assets excl. Consumer Contribution	259.24	311.14	743.89	1314.27

Repair & Maintenance Expenses

Licensee's submission

- 9.72 The licensee has projected the repair & maintenance (R&M) expenses of Rs.66 Cr for FY 2008-09.
- 9.73 The licensee states that it is spending heavily on the repair & maintenance of damaged units of PTPS as it feels that expenditure against PTPS overhauling is in the benefit JSEB as well as the consumers as the cost of power from PTPS is lower than the external power purchase. Moreover, increase in generation would result in optimum utilization of fixed cost of PTPS
- 9.74 The licensee has disaggregated the R&M costs based on the opening balance of GFA for each function- Generation, Transmission & Distribution.

Table 98 : Proposed Repair & maintenance costs (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Plant & Machinery	2.00	3.05	9.07	14.12
Building	1.81	0.61	2.78	5.20
Civil Works	0.70	0.23	1.07	2.00
Hydraulic	0.27	0.09	0.42	0.78
Lines, cable & network	10.47	3.52	16.01	30.00
Vehicles	0.26	0.09	0.40	0.75
Furniture & Fixtures	0.18	0.06	0.27	0.51
Office equipments	0.17	0.06	0.26	0.48
Total R&M Costs	15.86	7.71	30.28	53.85

Commission's analysis

- 9.75 The Commission notes that the licensee has projected a very higher expenditure under the head R&M expenses, without any corresponding improvement in operational parameters
- 9.76 Therefore, the Commission approves the R&M expenses as a percentage of opening GFA for FY 2007-08 by applying a percentage of 1.83%.
- 9.77 On the basis of approach adopted during FY 2007-08, the Commission approves the repair and maintenance (R&M) expenses of Rs. 37.61 Cr as detailed below:

Table 99 : Approved R&M Expenses for FY 2008-09 (Rs. Cr)

Description	Amount
Gross Bock as on 31.03.2004	1439.77
R&M Cost as per Annual Accounts of FY 2004-05	26.34
R&M Cost as a percentage of opening GFA	1.83%
Opening GFA for FY 2008-09	2056.11
R&M expenses approved for FY 2007-08	37.61

- 9.78 The disaggregation of the total R&M cost into generation, transmission and distribution is done in the same proportion as proposed by the licensee in its ARR petition for FY 2007-08.
- 9.79 The disaggregated R&M expenses as approved by the Commission are detailed in the table below:

Table 100 : Approved R&M Expenses for FY 2008-09 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
P&M	5.68	1.36	6.75	13.79
Buildings	1.20	0.29	1.43	2.92
Civil Works	0.47	0.11	0.56	1.14
Hydraulics	0.18	0.04	0.21	0.42
Lines, Cables, Network	7.61	1.82	9.03	18.47
Vehicles	0.17	0.04	0.19	0.40
Furniture & Fixture	0.08	0.02	0.10	0.19
Office Equipments	0.12	0.03	0.14	0.28
Total	15.50	3.71	18.40	37.61

Bad & doubtful debt

Licensee's submission

- 9.80 The licensee has proposed bad and doubtful debt as 1% of the total revenue. It states that there is always a certain percentage of revenue which remains uncollected from the consumer. The estimated provision for bad & doubtful debt is as proposed by the licensee is provided below:

Table 101: Bad & doubtful debt for FY 2008-09 (Rs. Cr)

Particulars	FY 2007-08
Revenue from sale of power	1552
Provision for bad & doubtful debts	15
Provision for B&D debts as % of revenue	1%

Commission's analysis

9.81 As per 'Distribution Tariff Regulations, 2004' no amount is 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. Therefore, The Commission does not approve any amount against bad & doubtful debts.

Depreciation*Licensee's submission*

9.82 The licensee has proposed the aggregated depreciation of Rs. 140 Cr for FY 2008-09.

9.83 The licensee has considered the average depreciation rates from FY 2003-04 to FY 2005-06 which are worked out as 2.53%, 6.54% & 7.62% for Generation, Transmission & Distribution respectively. The following table summarises the depreciation charges as proposed by the licensee for FY 2008-09:

Table 102: Proposed Depreciation expenses for FY 2008-09 (Rs. Cr)

	Generation	Transmission	Distribution	Total
GFA-Opening balance	856	288	1309	2452
Depreciation for the year	22	19	100	140
Depreciation rate %	2.53%	6.54%	7.62%	5.72%

Commission's analysis

9.84 The 'Distribution Tariff Regulations, 2004' and 'Generation Tariff Regulations, 2004' specify that depreciation shall be calculated annually as per SLM at the rates of depreciation prescribed in the schedule attached to the said Regulations in Appendix-II. Further, it is provided that capital base for the purpose of depreciation shall be the historical cost of the asset with the residual life of the asset being 10% of its approved original cost.

9.85 However, in view of the licensee inability to classify its assets in accordance with Appendix II of the respective Regulations, the Commission has for the time being considered the classification as per the Tariff Order for FY 2006-07.

- 9.86 The depreciation rate is computed on the basis of the rates specified in the “distribution Tariff Regulations, 2004’ and ‘Generation Tariff Regulations, 2004’.
- 9.87 However, depreciation on assets created out of consumer contribution, grants etc has been deducted from the gross depreciation of the distribution function, to arrive at the net depreciation charge for distribution function.
- 9.88 The calculation of depreciation charges for generation function is detailed in the table given below:

Table 103: Approved Depreciation Charges for Generation function for FY 2008-09 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	2.38	0.19	0%	-
P&M	264.56	21.05	3.60%	9.52
Buildings	55.94	4.75	3.60%	2.01
Civil Works	21.77	1.73	1.80%	0.39
Hydraulics	8.16	0.65	1.80%	0.15
Lines, Cables, Network	354.36	28.20	3.60%	12.76
Vehicles	7.86	0.63	6.00%	0.47
Furniture & Fixture	3.63	0.29	6.00%	0.22
Office Equipments	5.44	0.43	6.00%	0.33
Total	724.09	57.62		25.85

- 9.89 The calculation of depreciation charges for transmission function is detailed in the table given below:

Table 104: Approved Depreciation Charges for Transmission function for FY 2008-09 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation Charges
Land	1.01	0.46	0%	-
P&M	112.89	51.68	7.84%	8.85
Buildings	23.65	10.83	3.02%	0.71
Civil Works	9.14	4.18	1.80%	0.16
Hydraulics	3.23	1.48	1.80%	0.06
Lines, Cables, Network	151.06	69.15	5.27%	7.96
Vehicles	3.23	1.48	33.40%	1.08
Furniture & Fixture	1.61	0.74	12.77%	0.21
Office Equipments	2.15	0.98	12.77%	0.27
Total	307.97	140.98		19.31

- 9.90 The calculation of depreciation charges for distribution function is detailed in the table given below:

Table 105: Approved Depreciation Charges for Distribution function for FY 2008-09 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	3.36	1.12	0%	-
P&M	374.20	124.34	7.84%	29.34
Buildings	79.23	26.33	3.02%	2.39
Civil Works	30.97	10.29	1.80%	0.56
Hydraulics	11.53	3.83	1.80%	0.21
Lines, Cables, Network	500.98	166.47	5.27%	26.40
Vehicles	10.80	3.59	6.00%	0.65
Furniture & Fixture	5.40	1.80	6.00%	0.32
Office Equipments	7.56	2.51	6.00%	0.45
Total	1020.69	339.16	0.38	60.32
Less: Dep. On assets created out of CC	-	-	-	35.53
Net Depreciation	-	-	-	24.79

9.91 As per the above calculations, the Commission approves the total depreciation charges (generation, transmission and distribution) of Rs.69.95 Cr.

Interest on Working Capital

Licensee's submission

9.92 The licensee has calculated interest on working capital for each function separately by drawing the references from the tariff order of Tata Steel for FY 2005-06 and TVNL for FY 2007-08 approved by the Commission.

9.93 The working capital for generation is summarised as under:

Table 106: IWC estimation for Generation function for FY 2008-09 (Rs. Cr)

Particulars	Amount
O&M Expenses	14
Maintenance spares 1% of GFA	9
Receivables equivalent to 60 days	79
Cost of Fuel (Primary & Secondary)	29
Total working Capital	130
Rate of interest	12.25%
Interest on working capital	16

9.94 The working capital for transmission is summarised as under:

Table 107: IWC estimation for Transmission function for FY 2008-09 (Rs. Cr)

Particulars	Amount
O&M Expenses	4
Maintenance spares 1% of GFA	3
Receivables equivalent to 60 days	36
Total working Capital	43
Rate of interest	12.25%
Interest on working capital	5

9.95 The working capital for distribution is summarised as under:

Table 108: IWC for Distribution function for FY 2008-09 (Rs. Cr)

Particulars	Amount
O&M Expenses	27
Maintenance spares 1% of GFA	13
Receivables equivalent to 60 days	608
Less; Security Deposits	172
Total working Capital	477
Rate of interest	12.25%
Interest on working capital	58

Commission's analysis

9.96 The Commission has considered the interest on working capital as per the norms specified for computation of working capital requirements in the "Generation Tariff Regulations, 2004" and 'Distribution Tariff Regulations, 2004'.

9.97 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.

9.98 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.

Table 109: Approved IWC for Generation function for FY 2008-09 (Rs. Cr)

Sl. No.	Particulars	Approved by JSERC
1	Cost of Coal for 1½ month	9.39
2	Secondary Fuel Oil for 1 month	2.62
3	Operation & Maintenance expenses for 1 month	33.37
4	Maintenance expenses @ 1% of Plant & Equipment	25.95
5	Total Working Capital	71.34
6	Interest on Working Capital @ 12.25%	8.74

9.99 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 the case of licensee the approved shortfall is 1% and the interest on working capital has been calculated accordingly.

9.100 The prevailing short term prime lending rate of SBI, which is 12.25%, is considered as the interest rate for calculating the interest on working capital for FY 2008-09.

9.101 The Computation of working capital for the distribution function is shown in the table below:

Table 110: Approved IWC for Distribution function for FY 2008-09 (Rs. Cr)

Particulars	Approved by JSERC
Bad & Doubtful debt as a % of revenue	1%
Revenue at existing tariff	1541.59
Bad & Doubtful debt (in Rs. Cr)	15.42
Interest on Working Capital	1.89

9.102 The Commission has accordingly approved an interest on working capital Rs. 10.63 Cr for the licensee for FY 2008-09.

Interest and Other Finance Charges

Licensee's submission

9.103 The licensee has proposed interest and finance charges of Rs. 1021 Cr Interest cost is functionally separated between Generation, Transmission & Distribution.

9.104 The table given below summarises the break-up of the amount projected by the licensee, as interest and finance charges:

Table 111: Proposed interest and finance charges (Rs. Cr)

Interest Cost	Generation	Transmission	Distribution	Total
Commercial Loans				
Generation Loans	67	-	-	67
Transmission Loans	-	158	-	158
Distribution Loans	-	-	111	111
Building loans	0.07	0.04	0.18	0.29
APDRP	-	-	19	19
ADP	-	-	7	7
MNP	-	-	19	19
RGGVY	-	-	4	4
RE State Plan	-	-	20	20
Power Purchase	-	-	39	39
Others (for power purchase)	-	-	184	184

CPA/CPA DVC/CPA NHPC/ CPA Suspense	-	-	111	111
Interest on working capital loan	16	5	58	80
Interest on commercial loans-total	83	163	572	818
State govt. loans (erstwhile BSEB)	-	-	194	194
Gross Interest	83	163	766	1012
Less: Interest Capitalized	5	30	21	56
Add: Interest on Consumer Security Deposit	-	-	10	10
Add: Finance Charges	1	0	53	55
Net interest & Financing Costs-Total	80	134	808	1021

Commission's analysis

- 9.105 In the Tariff Order of FY 2006-07, the Commission did not approve any amount against the interest and finance charges as it was of the view that licensee has huge amount under cash in hand and bank and thus, there is no need for licensee to resort to high cost of borrowings. Also, the licensee can meet its fund requirement from the available funds.
- 9.106 However, in compliance to the Hon'ble APTEL's Order vide Appeal no 129 of 2007, the Commission has now decided to provisionally allow the interest and finance charges as proposed by the licensee for the loans taken in previous years, except for power purchase loans which are covered under interest on working capital.
- 9.107 The Commission has considered the debt components of the additional capitalisation for the year at 70%, which is in accordance to the 'Distribution Tariff Regulations, 2004' and "Generation Tariff Regulations, 2004'. The Interest rate has been considered at 13%.
- 9.108 The Interest on working capital has already been calculated separately in the earlier section and does not form part of the calculation of interest and finance charges. The Commission approves an interest and finance charges of Rs. 524.87 Cr for FY 2008-09.

Return on Equity (RoE)

Licensee's submission

- 9.109 The licensee has calculated RoE on the equity base of Rs.709 Cr at the rate of 14%, which amounts to Rs.99 Cr The proposed disaggregated return on equity is summarised in the table below:

Table 112 : Proposed disaggregated RoE for FY 2008-09 (Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Opening Balances				
Gross Fixed Assets	856	288	1309	2452
Less: Consumer Contribution	-	-	88	88
GFA less consumer contribution	856	288	1221	2364
Normative equity 30% of GFA	257	86	366	709
ROE @ 14% of Normative Equity	36	12	51	99

Commission's analysis

9.110 In accordance with the Regulations, the normative equity of 30% is estimated by taking the GFA less consumer contribution. The return on normative equity is approved by applying a rate of 14% , as proposed by the licensee, amounting to Rs.52.61 Cr.

Table 113: Approved RoE for FY 2008-09 (Rs. Cr)

	Generation	Transmission	Distribution	Total
Opening GFA	724.09	307.97	1024.05	2056.11
Less: Consumer Contribution			803.56	803.56
GFA less Consumer Contribution	724.09	307.97	220.49	1252.54
Normative Equity	217.23	92.39	66.15	375.76
Return on Equity	30.41	12.93	9.26	52.61

Non Tariff Income (NTI)

Licensee's submission

9.111 The licensee has proposed a total of Rs.177.34 Cr, as NTI from sources such as delayed payment surcharge, Income from Fixed deposits, Income from rebates and Income from Incentive. The proposed disaggregated non-tariff income have been summarised in the table below:

Table 114: Proposed Non tariff income for FY 2008-09 (in Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Realizable D.P.S	-	-	30.	30
Income from Investment (F.D)	-	-	8	8
Interest on advance to Supplier/ Contractor	0.03	0.03	0.03	0.09
Income from rebates	-	-	139.00	139.00
Income from Trading	0.04	0.04	0.04	0.12
Income from staff welfare activities	0.04	0.01	0.08	0.13
Total Non-Tariff Income	0.11	0.08	177.23	177.34

Commission's analysis

9.112 The Commission has approved the NTI of Rs. 352.43 Cr, which includes net UI receivable by the licensee for FY 2008-09. The component-wise break-up of approved NTI is summarised in the table given below:

Table 115: Approved NTI for FY 2008-09 (Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Realisable D.P.S @ 10% of D.P.S	0.00	0.00	30.20	30.20
Sale of water	3.51	0.00	0.00	3.51
Meter rent	0.00	0.23	4.45	4.68
Sale of tender paper	0.22	0.05	0.27	0.54
Income from Investment (F.D)	0.00	0.00	8.00	8.00
Income on advance to supplier/Contractor	0.03	0.03	0.03	0.09
Income from rebates	0.00	0.00	139.00	139.00
Income from trading	0.04	0.04	0.04	0.12
Income from staff welfare activities	0.04	0.01	0.08	0.13
UI Payable	0.00	0.00	2.80	2.80
UI Receivable	0.00	0.00	168.96	168.96
Net UI receivable/payable	0.00	0.00	166.16	166.16
Total Non tariff income	3.84	0.36	348.22	352.43

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

9.113 As detailed in Section 11 of this Order, the Commission has calculated Rs.415.88 Cr as disincentive cost for non achievement of T&D loss reduction target by the licensee as per the T&D loss reduction trajectory approved by the Commission.

Penalty for non-compliance of the Standards of Performance (SoP)

9.114 In the Tariff order for FY 2006-07, the Commission has directed the licensee to implement the Standards of Performance Regulations by 1st January 2008 and submit the compliance report to the Commission thereafter, failing which the energy charge for all categories will be reduced by 2.5% from that day.

9.115 Till date the licensee has not submitted the compliance report for SoP, therefore, the Commission imposes the penalty of 2.5% of the energy charges for FY 2008-09 w.e.f. from 1st April 2008 to 31st March 2009 and accordingly an amount of Rs.29.95 Cr. has been deducted from the ARR of the licensee for FY 2008-09.

Revenue from Existing Tariff

Licensee's submission

9.116 The licensee has submitted the consumer category-wise revenue from existing tariffs for FY 2008-09, on the basis of the projected number of consumers and sales for each category of consumer. The revenues from existing tariff amounts to Rs.1522 Cr for the FY 2008-09.

Commission's analysis

9.117 On the basis of approved sales to various categories of consumers, the Commission determines the revenue from sale of power amounting to Rs.1541.59 Cr, as against Rs.1522 Cr submitted by the licensee, at the existing tariff (made applicable by Tariff order for FY 2003-04), as detailed hereunder:

Table 116 : Approved Revenue from Existing Tariffs for FY 2008-09 (Rs.Cr)

Consumer Category	Units Sold	Rate*	Revenue
Domestic	1618.87	1.37	221.52
Commercial	247.22	4.09	101.08
Public Lighting	89.09	1.25	11.10
Irrigation	69.65	0.73	5.10
Industrial LT	133.36	4.93	65.68
HTS (inc PWW)	1273.18	4.63	589.79
HTSS	613	4.09	250.48
Railway	562.7	4.97	279.58
MES	42.00	2.76	11.58
Total	4649.11		1541.59

* Rates includes applicable energy and fixed charges and MMC

Resource Gap from GoJ

Licensee's submission

9.118 In the Tariff Revision Proposal for FY 2008-09 submitted in March 2009 and subsequent additional information enclosed as Annexure III to this Order, the licensee has submitted that it has received the resource gap of Rs.80.00 Cr from GoJ during FY 2008-09 and it may also be deducted while arriving at the net revenue requirement.

Commission's analysis

9.119 The Hon'ble APTEL's in its direction has stated that the resource gap should not form part of the Tariff determination process. Accordingly, the Commission has not considered any resource gap for tariff determination for the years when there is no resource gap received from the Govt of Jharkhand.

9.120 Meanwhile, the licensee has proposed to the Commission in the tariff revision proposal for FY 2008-09, submitted in March 2009, to consider the resource gap as part of the coverage of revenue gap for tariff determination process. Accordingly, the Commission has considered the resource gap of Rs.80.00 Cr for FY 2008-09, while arriving at the net revenue requirement of the licensee.

Summary of the ARR for FY 2008-09

9.121 In view of the above, the functionally disaggregated ARR for Generation function as proposed by the licensee and approved by the Commission for FY 2008-09 is summarised in the tables below:

Table 117: Summary of the ARR for Generation function for FY 2008-09 (Rs. Cr)

Annual Revenue Requirement	As proposed by petitioner	As Approved by JSERC
Fuel	253.00	108.16
Employee	57.00	106.43
Repair & Maintenance	18.00	15.50
Admin & General	12.00	17.09
Interest & Financing Charges	37.00	35.17
Interest on working capital	16.00	8.74
Depreciation	21.00	25.85
Less: inefficient cost of PTPS		131.73
Total Costs	414.00	185.20
Add: Reasonable return	35.00	30.41
less: Non tariff income	0.12	3.85
ARR	448.88	211.76

9.122 The functionally disaggregated ARR for transmission function as proposed by the licensee and approved by the Commission for FY 2008-09 is summarised in the tables below:

Table 118: Summary of the ARR for transmission function for FY 2008-09 (Rs. Cr)

Annual Revenue Requirement	As proposed by petitioner	As Approved by JSERC
Employee	35.00	32.30
Repair & Maintenance	8.00	3.71
Admin & General	8.00	5.19
Interest & financing charges	129.00	71.40
Interest on working capital	5.00	0.00
Depreciation	19.00	19.31
Total Cost	204.00	131.90
Add: Reasonable return	12.00	12.93
less: Non tariff income	0.08	0.36
ARR	215.92	144.48

9.123 In view of the above, the functionally disaggregated ARR for distribution function as proposed by the licensee and approved by the Commission for FY 2008-09 is summarised in the tables below:

Table 119: Summary of the ARR for Distribution Function for FY 2008-09 (Rs. Cr)

Annual Revenue Requirement	As proposed by petitioner	As Approved by JSERC
Power Purchase	1840.00	1774.19
Employee	240.00	173.45
Repair & Maintenance	30.00	18.40
Admin & General	54.00	28.42
Interest and financing charges	750.00	418.30
Interest on working capital	58.00	1.89
Depreciation	100.00	24.79
Provision for bad & doubtful debts	15.00	0.00
Less Disincentive for T&D Loss		415.88
Less penalty on SoP		29.95
Total Costs	3087.00	1993.62
Add: Reasonable return	51.00	9.26
less: Non tariff income	177.00	348.22
ARR	2961.00	1654.66

Consolidated ARR

9.124 The table below summarises the ARR proposed by the licensee and approved by the Commission for FY 2008-09.

Table 120 : Proposed and Approved ARR for FY 2008-09 (Rs. Cr)

Annual Revenue Requirement	As proposed by petitioner	As Approved by JSERC
Power Purchase Cost	1840.29	1774.19
Fuel Cost	173.50	108.16
R&M Cost	65.72	37.61
Employee's Cost	386.05	312.19
A&G Cost	86.63	50.70
Depreciation	140.28	69.95
Bad Debts Provision	15.22	0.00
Interest & Financing Charges	942.12	524.87
Interest on Working Capital	79.00	10.63
Less: Inefficient Cost of PTPS	-	131.73
Less: Disincentive for non-achievement of T&D Loss targets	-	415.88
Less: Disincentive for non-compliance of SoP	-	29.95
Total Expenditure	3728.81	2310.73
Statutory Return	99.31	52.61
Gross Revenue Requirement	3828.12	2363.34
Less: Other Income	177.21	352.43
Net Revenue required	3650.91	2010.90
Revenue at existing tariff	1522.45	1541.59
Resource gap from GoJ	80.00	80.00
Revenue Gap	2048	389.31

9.125 Thus, the approved gap of Rs.389.31 Cr against the proposed gap of Rs.2048 Cr has been considered while finalising the tariff, as detailed in Section 12 of this Order.

A10: SUO MOTU ORDER FOR FY 2009-10 & FY 2010-11

10.1 As detailed in Section 2 of this order, the Commission decided to proceed suo-motu for determining the ARR for FY 2009-10 & FY 2010-11. The component-wise analyses of ARR and approvals applicable for FY 2009-10 & FY 2010-11 have been discussed in this Section.

Energy Sales

10.2 The Commission had directed the licensee to submit the actual/latest commercial information figures for FY 2009-10. The licensee has submitted the category-wise actual during the FY 2009-10 up to the month of November'09. On the basis of actual sales made available by the licensee up to November'09, the Commission has estimated the sales during FY 2009-10 by proportionally increasing the sales for the remaining 4 months (December'09- March'10).

10.3 For estimating the sales for FY 2010-11, the Commission has made use of the CAGR methodology and accordingly computed the category-wise sales by considering the 3/5 year CAGR recorded for various categories of consumers during the previous years.

10.4 The table given below summarises the approved category wise energy sales :

Table 121: Approved Energy Sales (MU)

Category	FY 2009-10	FY 2010-11
Domestic	1806.77	2067.89
Commercial	230.52	247.22
Public Lighting	109.42	119.39
Irrigation	70.12	70.70
Public Water Works	70.43	72.25
Industrial LT	144.29	154.53
Industrial HT	1865.90	1958.73
Railway	619.15	668.18
MES	45.00	48.00
Total	4961.60	5406.88

Transmission & Distribution Losses (T&D Losses)

10.5 The Commission has already deliberated on the T&D loss reduction trajectory as detailed in the preceding sections and also in Section 11 of this Order. Continuing the same approach for FY 2009-10 & FY 2010-11, the Commission approves the transmission & distribution losses (T&D) losses, as detailed hereunder:

Table 122 : Approved T&D Losses for FY 2009-10 & FY 2010-11

Description	FY 2009-10	FY2010-11
Total energy sales (MU)	4961.62	5406.88
Overall T&D loss %	24.66%	20.66%
Overall T&D Loss (MU)	1624.02	1407.94

Energy Requirement

- 10.6 Based on the approved sales projections of 4961.62 MU and 5406.88 MU and T&D loss of 24.66% and 20.66%, the total energy requirement during FY 2009-10 & FY 2010-11 is worked out as 6585.64 MU and 6814.82 MU respectively.
- 10.7 The energy requirement approved by the Commission for FY 2009-10 and FY 2010-11 is summarised hereunder:

Table 123 : Approved Energy Requirement for FY 2009-10 & FY 2010-11 (in MU)

Energy Balance	FY 2009-10	FY2010-11
Total energy sales	4961.62	5406.88
Overall T&D loss %	24.66%	20.66%
Total Energy Purchase	6585.64	6814.82

Own Generation- PTPS

- 10.8 The Commission has approved the per unit fuel cost on the basis of the trajectory specified for the various operational parameters of PTPS as detailed in Section 11 of this order and also in accordance with the 'Generation Tariff Regulations,2004'.The other parameters, such as, calorific value of coal, calorific value of oil, price of fuel (coal & oil) have been approved at the same as that proposed by the licensee.
- 10.9 The other parameters such as calorific value of coal, calorific value of oil, price of coal, price of oil have been taken on the basis of their value approved for FY 2008-09 and the Commission would consider the true-up as and when the actual figures of the same are made available to the Commission.
- 10.10 Thus, the Commission approves per unit fuel cost (net) of Rs.1.05/kWh and Rs.0.92/kWh for FY 2009-10 & FY 2010-11 respectively
- 10.11 The table below summarises the parameters considered for the calculation of variable cost of PTPS for FY 2009-10 and FY 2010-11:

Table 124: Approved Variable (Energy) Charges of PTPS for FY 2009-10 & FY 2010-11

THERMAL GENERATION	Units	FY 2009-10	FY 2010-11
Assumptions			
Installed Capacity	MW	840	840
De-rated Capacity (Usable)	MW	770	770
Availability Factor	%	60%	60%
Plant Load Factor	%	36.00%	38.00%
Auxiliary consumption	%	10.50%	10.50%
SHR	Kcal/Kwh	3350	3250
CV of coal	Kcal/Kg	4350	4350
CV of oil	Kcal/L	10500	10500
Overall Heat	Kcal	8,134,711	8,330,322
Heat from Coal	Kcal	7992166	8276495
Heat from oil	Kcal	142546	53827
Coal Transit loss	%	0.30%	0.30%
Price of coal- Landed cost incl. transit loss	Rs/tonne	1000	1000
Price of oil (LDO & FO)	Rs/Kl	30000	30000
Specific Coal Consumption	Kg/Kwh	0.77	0.75
Sp. Oil consumption	ml/Kwh	5.59	2.00
Projection			
Gross generation	MU	2428.27	2563.18
Auxiliary consumption	MU	254.97	269.13
Net generation	MU	2173.30	2294.04
Coal Consumption	MT	1842808	1908368
Oil consumption	Kl	13576	5126
Coal Cost	Rs Cr	184.28	190.84
Oil cost	Rs Cr	40.73	15.38
Total fuel cost	Rs Cr	225.01	206.22
Other expenses related to generation	Rs/U	0.031	0.031
Other expenses related to generation (Rs Cr)	Rs Cr	3.72	3.72
Total Variable Cost-Notional	Rs Cr	228.73	209.94
Per unit oil Cost	Rs./Kwh	0.19	0.07
Per unit Coal cost	Rs./Kwh	0.85	0.83
Per unit fuel cost (on Gross generation)	Rs./Kwh	0.94	0.82
Per unit fuel cost (on Net generation)	Rs./Kwh	1.05	0.92

- 10.12 The Commission has considered the estimated gross generation of 1050 MU and 1100 MU for FY 2009-10 and FY 2010-11, which is based on an estimated increase of around 4% as compared to the previous years. After considering an estimated auxiliary consumption of 14%, Commission estimates net generation of 903 MU and 946 MU respectively during FY 2009-10 and FY 2010-11 respectively.
- 10.13 The Commission by applying the approved per unit cost of Rs.1.05/unit and Rs.0.92/unit on the above-said estimated generation during FY2009-10 and FY 2010-11, approves the fuel cost of Rs. 95.04 Cr and Rs.86.57 Cr for FY 2009-10 and FY 2010-11 respectively.

- 10.14 The Commission has discussed the detailed estimation of fixed cost of PTPS in the subsequent sections, according to which the total fixed cost works out to Rs.201.58 Cr and Rs.195.71 Cr respectively for FY 2009-10 and FY 2010-11.
- 10.15 On the basis of approach adopted during FY 2003-04 to FY 2006-07, based on the estimated actual net generation of 903 MU and 946 MU during FY 2009-10 & FY 2010-11, the Commission has projected an amount of Rs.117.83 Cr and Rs.115.01 Cr. towards inefficient fixed cost of PTPS for FY 2009-10 & FY 2010-11 respectively, as detailed in Section 11 of this Order.
- 10.16 The Commission reiterates that the above has been done particularly to prevent inefficiencies of the licensee to be passed on to the consumers, who are already facing hardship due to poor quality of supply and low availability of power.
- 10.17 The total cost of energy generation from PTPS, including both fixed and variable cost amounts to Rs.178.79 Cr and 167.28 Cr i.e. Rs.1.98/unit and Rs.1.77/unit for FY 2009-10 and FY 2010-11, as summarised in the table given below:

Table 125: Approved energy generation cost from PTPS

Particulars	Unit	FY2009-10	FY 2010-11
Fuel cost	Rs./kWh	1.05	0.92
Fixed cost	Rs./kWh	0.93	0.85
Total cost	Rs./kWh	1.98	1.77
Fuel Cost	Rs. Cr	95.04	86.57
Fixed Cost	Rs. Cr	83.75	80.71
Total Cost	Rs. Cr	178.79	167.28

Inefficient cost of PTPS

- 10.18 The Commission has computed the inefficient cost of PTPS for FY 2009-10 and FY 2010-11 at Rs.117.83 Cr and Rs.115.01 Cr respectively, as detailed in Section 11 of this Order.

Own Generation- SHPS

- 10.19 Assuming that the generation from SHPS will remain at the same level as that approved for FY 2008-09, the Commission approves the net generation of 236.8 MU from SHPS for both the years.
- 10.20 The Commission also approves the total fixed cost of Rs.6.63 Cr for SHPS for both FY 2009-10 and FY 2010-11 respectively.

Power Purchase Cost

10.21 The Commission has projected the power purchase during FY 2009-10, based on the actual data of power purchase submitted by the licensee up to January 2010, as additional information. For estimating the power purchase for FY 2010-11, the Commission has considered the power purchase projections for FY 2009-10 and actual power purchase recorded during FY09.

10.22 Accordingly, the source-wise power purchase approved by the Commission for FY 2009-10 & FY 2010-11 is depicted in the table given below:

Table 126: Approved Power Purchase Cost for FY 2009-10 & FY 2010-11

	FY 2009-10			FY 2010-11		
	Net Purchase (MU)	Av. Rate (Rs/Kwh)	Amount (Rs. Cr)	Net Purchase (MU)	Av. Rate (Rs/Kwh)	Amount (Rs. Cr)
CGS						
NTPC						
Farakka	631.62	2.47	155.80	692.27	2.47	170.76
Kahalgaon	178.96	1.70	30.40	240.27	1.70	40.81
Talcher	491.92	1.55	76.39	491.92	1.55	76.39
Sub- Total	1302.5		262.6	1424.5		288.0
NHPC						
Rangit	47.63	1.78	8.47	51.75	1.78	9.21
Teesta	355.0	1.87	66.21	547.91	1.87	102.19
Sub- Total	402.6	1.85	74.7	599.7	1.86	111.4
Other Sources:						
DVC	3119.8	2.88	898.76	3201.26	2.88	922.23
Additional Power from DVC on STOA	126.97	2.77	35.17	126.97	2.77	35.17
Chukha-Bhutan	225.2	1.58	35.62	252.55	1.58	39.95
TVNL	2027.2	2.05	415.57	2027.15	2.05	415.57
WBSEB	55.02	4.66	25.65	61.16	4.66	28.51
TALA PTC-Bhutan	452.0	1.83	82.63	466.83	1.83	85.34
Short term power/PTC	-14.58	6.52	-9.51	-24.74	6.52	-16.14
Sub- total	5991.56		1483.89	6111.18		1510.63
UI	-114.13			-114.13		
PGCIL			40.2			40.2
ERLDC			0.49			0.49
Total Power Purchase	7582.53	2.46	1861.85	8021.17	2.43	1950.68

Employee Cost

10.23 The Commission has approved the gross employee costs of Rs. 252.34 Cr and Rs.214.483 Cr for FY 2009-10 & FY 2010-11 respectively, by considering an escalation factor of 6% on the normal employee cost of the previous years, in accordance with the 'Generation Tariff Regulation, 2004'.

- 10.24 The Commission also approved an amount of Rs.50.00 Cr towards the of 6th pay Commission implementation for FY 2009-10.
- 10.25 The Commission also approves an employee capitalisation of Rs.30.06 Cr and Rs.25.55 Cr during FY 2009-10 and FY 2010-11.
- 10.26 The components of employee cost have been functionally disaggregated in the same ratio as was approved by the Commission in the tariff order of FY 2006-07. Other allowances and staff welfare allowances are disaggregated in the ratio of net employee cost approved by the Commission in the previous tariff order.
- 10.27 The Commission approves the net employee cost of Rs.222.28 Cr for FY 2009-10, as depicted in the table given below:

Table 127: Approved employee cost for FY 2009-10 (Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Salaries	39.10	11.72	64.18	115.00
Over time	1.47	0.44	2.40	4.31
Dearness allowance	12.87	3.85	21.05	37.77
Other allowance*	2.61	0.78	4.29	7.68
Bonus	0.01	0.00	0.01	0.02
Sub-Total	56.05	16.79	91.93	164.77
Medical expenditure (Re-imburement)	0.35	0.10	0.57	1.02
Leave travel Assistance	0.07	0.00	0.14	0.20
Earned Leave encashment	2.04	0.61	3.33	5.98
Payment under workmen compensation Act	0.09	0.03	0.15	0.27
Total other staff cost	2.54	0.74	4.19	7.48
Staff welfare expenses*	0.26	0.08	0.43	0.77
Terminal benefits**	9.99	2.99	16.34	29.32
Impact of VI Pay Commission	17.01	5.09	27.90	50.00
Total	85.87	25.68	140.79	252.34
Less : Expenses Capitalised	10.018	2.505	17.532	30.055
Net Employee Cost	75.85	23.18	123.25	222.28

- 10.28 The Commission approves the net employee cost of Rs.188.93 Cr for FY 2010-11, as depicted in the table given below:

Table 128: Approved employee cost for FY 2010-11 (Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Salaries	41.45	12.42	68.03	121.90
Over time	1.56	0.47	2.55	4.57
Dearness allowance	13.64	4.08	22.31	40.04
Other allowance*	2.77	0.83	4.54	8.14
Bonus	0.01	0.00	0.01	0.02
Sub-Total	59.42	17.80	97.44	174.66
Medical expenditure (Re-imburement)	0.37	0.11	0.60	1.08
Leave travel Assistance	0.07	0.00	0.15	0.22
Earned Leave encashment	2.16	0.65	3.53	6.34

Payment under workmen compensation act	0.10	0.03	0.16	0.29
Total other staff cost	2.70	0.78	4.44	7.92
Staff welfare expenses*	0.28	0.08	0.45	0.81
Terminal benefits**	10.59	3.17	17.32	31.08
Total	72.98	21.83	119.66	214.48
Less : Expenses Capitalised	8.710	2.602	14.233	25.546
Net Employee Cost	64.27	19.23	105.43	188.93

Administrative & General Expenses

10.29 For the purpose of A&G expenses also, the Commission has considered an escalation factor of 6% on all the components of A&G costs, in accordance with the 'Generation Tariff Regulations, 2004', over the approved A&G expenses for FY 2008-09 and FY 2009-10 respectively.

10.30 Disaggregation is done in the same ratio as was done by the Commission in the previous tariff order of FY 2006-07.

10.31 The item-wise details of A&G expenditure approved by the Commission for FY 2009-10, is detailed hereunder:

Table 129 : Approved disaggregated A&G Costs for FY 2009-10 (Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Rent Rates & Taxes	0.20	0.06	0.32	0.57
Insurance	0.11	0.03	0.18	0.33
Telephone charges, Postage telegram and telex Charges	0.36	0.11	0.60	1.08
Legal Charges	0.27	0.08	0.44	0.79
Audit Fee	0.46	0.13	0.76	1.35
Consultancy charges	0.54	0.16	0.89	1.59
Technical fees	0.02	0.01	0.03	0.06
Other professional Charges	0.01	0.00	0.01	0.02
Conveyance & Travel	1.68	0.51	2.79	4.98
Fees & subscription	0.12	0.06	0.24	0.42
Books & Periodicals	0.02	0.01	0.03	0.06
Printing & Stationery	0.18	0.05	0.30	0.53
Advertisements	0.25	0.07	0.42	0.75
Water Charges	0.09	0.03	0.15	0.28
Electric Charges	1.37	0.41	2.27	4.06
Entertainment Charges	0.04	0.01	0.06	0.11
Misc. Expenses	6.46	1.97	10.76	19.19
Freight	0.11	0.03	0.18	0.31
Other purchase related expenses	0.45	0.14	0.76	1.35
Total	12.75	3.87	21.21	37.84

10.32 Similarly, for FY 2010-11 the approved A&G expenses is depicted in the table given below:

Table 130 : Approved disaggregated A&G Costs for FY 2010-11(Rs. Cr)

Particulars	Generation	Transmission	Distribution	Total
Rent Rates & Taxes	0.21	0.06	0.34	0.61
Insurance	0.12	0.04	0.19	0.35
Telephone charges, Postage telegram and telex Charges	0.39	0.11	0.64	1.14
Legal Charges	0.29	0.09	0.47	0.84
Audit Fee	0.49	0.14	0.80	1.43
Consultancy charges	0.58	0.17	0.94	1.69
Technical fees	0.02	0.01	0.04	0.06
Other professional Charges	0.01	0.00	0.01	0.02
Conveyance & Travel	1.78	0.54	2.96	5.28
Fees & subscription	0.13	0.06	0.25	0.44
Books & Periodicals	0.02	0.01	0.03	0.06
Printing & Stationery	0.19	0.06	0.32	0.57
Advertisements	0.27	0.08	0.45	0.79
Water Charges	0.10	0.03	0.16	0.29
Electric Charges	1.46	0.44	2.41	4.30
Entertainment Charges	0.04	0.01	0.07	0.12
Misc. Expenses	6.84	2.09	11.41	20.34
Freight	0.11	0.03	0.19	0.33
Other purchase related expenses	0.48	0.15	0.80	1.43
Total	13.52	4.11	22.48	40.11

Gross Fixed Assets

10.33 The closing GFA of FY 2008-09 and FY 2009-10 are considered as the opening GFA for FY 2009-10 & FY 2010-11 respectively. However, as no capital expenditure is considered for FY 2009-10 & FY 2010-11 and the only addition in fixed assets is on account of conversion of previous years' CWIP into the fixed assets.

10.34 The approved GFA/NFA for FY 2009-10 is summarised as under:

Table 131: Approved Gross Fixed Assets for FY2009-10 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Opening GFA	781.71	448.95	1364.32	2594.98
Net Addition	28.30	106.16	221.16	355.62
Closing GFA	810.01	555.11	1585.48	2950.61
Less: Accumulated Depreciation	550.38	165.95	507.89	1224.22
Net Block/Fixed Asset	259.63	389.16	1077.59	1726.38
Less: Cons cont			158.14	158.14
Net Block/Fixed Asset (ex. CC)	259.63	389.16	919.45	1568.24

10.35 Similarly, the approved GFA/NFA for FY 2010-11 is summarised as under:

Table 132: Approved Gross Fixed Assets for FY2010-11 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Opening GFA	810.01	555.11	1585.48	2950.61
Net Addition	28.30	91.54	221.16	341.01
Closing GFA	838.32	646.65	1806.64	3291.61
Less: Accumulated Depreciation	579.30	200.75	534.31	1314.36
Net Block/Fixed Asset	259.02	445.90	1272.33	1977.26
Less: Cons cont			165.43	165.43
Net Block/Fixed Asset (Excl. CC)	259.02	445.90	1106.90	1811.82

Repair & Maintenance Expenses

10.36 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 2009-10 & FY 2010-11 respectively.

10.37 The disaggregation of the total R&M cost into GTD is done in the proportion proposed by the licensee. The R&M expenses as approved by the Commission is detailed in the table below:

Table 133 : Approved Repair & maintenance costs for FY 2009-10 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
P&M	7.17	1.72	8.52	17.41
Buildings	1.52	0.36	1.80	3.68
Civil Works	0.59	0.14	0.70	1.43
Hydraulics	0.22	0.05	0.26	0.53
Lines, Cables, Network	9.61	2.30	11.40	23.31
Vehicles	0.21	0.05	0.25	0.51
Furniture & Fixture	0.10	0.02	0.12	0.25
Office Equipments	0.15	0.03	0.17	0.35
Total	19.56	4.68	23.23	47.47

10.38 Similarly, desegregated total R&M expenses as approved by the Commission for FY 2010-11 are detailed in the table below:

Table 134 : Approved Repair & maintenance costs for FY 2010-11 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
P&M	8.15	1.96	9.68	19.79
Buildings	1.72	0.41	2.05	4.18
Civil Works	0.67	0.16	0.80	1.63
Hydraulics	0.25	0.06	0.30	0.61
Lines, Cables, Network	10.92	2.62	12.96	26.50
Vehicles	0.24	0.06	0.28	0.58
Furniture & Fixture	0.11	0.03	0.14	0.28
Office Equipments	0.17	0.04	0.20	0.40
Total	22.24	5.32	26.41	53.97

Depreciation

- 10.39 The 'Distribution Tariff Regulations, 2004' and 'Generation Tariff Regulations, 2004' specify that depreciation shall be calculated annually as per SLM at the rates of depreciation prescribed in the schedule attached to the said Regulations in Appendix-II. Further, it is provided that capital base for the purpose of depreciation shall be the historical cost of the asset with the residual life of the asset being 10% of its approved original cost.
- 10.40 However, in view of the licensee inability to classify its assets in accordance with Appendix II of the respective Regulations, the Commission has for the time being considered the classification as per the Tariff Order for FY 2006-07.
- 10.41 The depreciation rate is computed on the basis of the rates specified in the "distribution Tariff Regulations, 2004' and 'Generation Tariff Regulations, 2004'.
- 10.42 However, depreciation on assets created out of consumer contribution, grants etc has been deducted from the gross depreciation of the distribution function, to arrive at the net depreciation charge for distribution function.
- 10.43 The calculation of depreciation charges for generation function is detailed in the table given below:

Table 135: Approved Depreciation charges for generation function for FY 2009-10 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	2.57	0.09	0%	-
P&M	285.61	10.34	3.60%	10.28
Buildings	60.39	2.19	3.60%	2.17
Civil Works	23.50	0.85	1.80%	0.42
Hydraulics	8.81	0.32	1.80%	0.16
Lines, Cables, Network	382.55	13.85	3.60%	13.77
Vehicles	8.49	0.31	6.00%	0.51
Furniture & Fixture	3.92	0.14	6.00%	0.24
Office Equipments	5.88	0.21	6.00%	0.35
Total	781.71	28.30		27.91

- 10.44 The calculation of depreciation charges for generation function for FY 2010-11 is detailed in the table given below:

Table 136: Approved Depreciation Charges for Generation function for FY 2010-11 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	2.66	0.09	0%	-
P&M	295.95	10.34	3.60%	10.65
Buildings	62.57	2.19	3.60%	2.25
Civil Works	24.35	0.85	1.80%	0.44

Hydraulics	9.13	0.32	1.80%	0.16
Lines, Cables, Network	396.41	13.85	3.60%	14.27
Vehicles	8.79	0.31	6.00%	0.53
Furniture & Fixture	4.06	0.14	6.00%	0.24
Office Equipments	6.09	0.21	6.00%	0.37
Total	810.01	28.30		28.92

10.45 The calculation of depreciation charges for transmission function for FY 2009-10 is detailed in the table given below:

Table 137: Approved Depreciation Charges for Transmission function for FY 2009-10 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	1.47	0.35	0%	-
P&M	164.57	38.91	7.84%	12.90
Buildings	34.48	8.15	3.02%	1.04
Civil Works	13.32	3.15	1.80%	0.24
Hydraulics	4.70	1.11	1.80%	0.08
Lines, Cables, Network	220.21	52.07	5.27%	11.61
Vehicles	4.70	1.11	33.40%	1.57
Furniture & Fixture	2.35	0.56	12.77%	0.30
Office Equipments	3.13	0.74	12.77%	0.40
Total	448.95	106.16		28.14

10.46 The calculation of depreciation charges for transmission function for FY 2010-11 is detailed in the table given below:

Table 138: Approved Depreciation Charges for Transmission function for FY 2010-11 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	1.82	0.30	0%	-
P&M	203.49	33.56	7.84%	15.95
Buildings	42.63	7.03	3.02%	1.29
Civil Works	16.47	2.72	1.80%	0.30
Hydraulics	5.81	0.96	1.80%	0.10
Lines, Cables, Network	272.28	44.90	5.27%	14.35
Vehicles	5.81	0.96	33.40%	1.94
Furniture & Fixture	2.91	0.48	12.77%	0.37
Office Equipments	3.88	0.64	12.77%	0.49
Total	555.11	91.54		34.80

10.47 The calculation of depreciation charges for Distribution function for FY 2009-10 is detailed in the table given below:

Table 139: Approved Depreciation Charges for distribution function for FY 2009-10 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	4.48	0.73	0%	-
P&M	498.55	80.82	7.84%	39.09
Buildings	105.56	17.11	3.02%	3.19
Civil Works	41.27	6.69	1.80%	0.74
Hydraulics	15.35	2.49	1.80%	0.28
Lines, Cables, Network	667.45	108.19	5.27%	35.17
Vehicles	14.39	2.33	6.00%	0.86
Furniture & Fixture	7.20	1.17	6.00%	0.43
Office Equipments	10.08	1.63	6.00%	0.60
Total	1364.32	221.16	0.38	80.37
Less: Dep. On the Assets Created out of CC				53.98
Net Depreciation				26.39

10.48 The calculation of depreciation charges for distribution function for FY 2010-11 is detailed in the table given below:

Table 140: Approved Depreciation Charges for distribution function for FY 2010-11 (Rs. Cr)

Description	Opening GFA	New Addition	Dep. rate	Depreciation charges
Land	5.20	0.73	0%	-
P&M	579.36	80.82	7.84%	45.42
Buildings	122.68	17.11	3.02%	3.70
Civil Works	47.95	6.69	1.80%	0.86
Hydraulics	17.84	2.49	1.80%	0.32
Lines, Cables, Network	775.64	108.19	5.27%	40.88
Vehicles	16.73	2.33	6.00%	1.00
Furniture & Fixture	8.36	1.17	6.00%	0.50
Office Equipments	11.71	1.63	6.00%	0.70
Total	1585.48	221.16	0.38	93.40
Less: Dep. On the Assets Created out of CC				66.976
Net Depreciation				26.42

10.49 As per the above calculations, the Commission approves the total net depreciation charge (generation, transmission and distribution) of Rs.82.44 Cr and 90.14 Cr for FY 2009-10 and FY 2010-11 respectively.

Interest on Working Capital

10.50 Interest on working capital is provided on both the functions of generation and distribution of electricity in terms of the respective Regulations. The rate of interest on working capital is taken to be the short-term Prime Lending Rate of State Bank of India as on 1st April of the year for which the tariff is determined.

10.51 The Working Capital requirement as per the ‘Generation Regulations, 2004’ includes:

- (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.

10.52 Similarly, the elements of 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. The approved shortfall is 1% of the total revenue and the interest on working capital has been approved accordingly.

10.53 The calculation of interest on working capital for FY 2009-10 is summarised below:

Table 141: Calculation of working capital for FY 2009-10 (Rs. Cr)

Description	Basis	Generation	Transmission	Distribution	Total
Bad & doubtful debt as a % of revenue	1%	-	-	-	
Revenue at existing tariff	1624.40	-	-	-	
Bad & Doubtful debt (in Rs Cr)	16.24	-	-	-	
Interest on Working Capital for FY 2008-09 (distribution)	1.99	8.10	0	1.99	10.09

10.54 Similarly, the calculation of interest on working capital for FY 2010-11 is summarised below:

Table 142: Calculation of working capital for FY 2010-11 (Rs. Cr)

Description	Basis	Generation	Transmission	Distribution	Total
Bad & doubtful debt as a % of revenue	1%	-	-	-	
Revenue at existing tariff	1754.87	-	-	-	
Bad & Doubtful debt (Rs. Cr)	17.55	-	-	-	
Interest on Working Capital for FY 2008-09 (distribution)	2.15	8.19	0	2.15	10.34

Interest and Other Finance Charges

- 10.55 The Commission allows the aggregate interest and other finance charges of Rs.524.87 Cr for both FY 2009-10 and 2010-11, at the same level as that approved for FY 2008-09, since no capital investment has been considered for both these years.
- 10.56 The Commission shall true-up actual interest and finance charges, subject to prudence check, once the audited/ provisional accounts for the respective years are submitted by the licensee.

Return on Equity (RoE)

Commission's analysis

- 10.57 The normative equity of 30% is estimated by taking the gross fixed assets less consumer contribution. The return is then calculated as 14% on the normative equity, as proposed by the licensee. The following table summarises the return on equity for FY 2009-10:

Table 143: Approved Return on Equity for FY 2009-10 (Rs. Cr)

	Generation	Transmission	Distribution	Total
Opening GFA	781.71	448.95	1364.32	2594.98
Less: Consumer Contribution			1064.84	1064.84
GFA less Consumer Contribution	781.71	448.95	299.48	1530.14
Normative Equity	234.51	134.68	89.85	459.04
Return on Equity	32.83	18.86	12.58	64.27

- 10.58 Similarly, the following table summarises the return on equity for FY 2010-11:

Table 144: Approved Return on Equity for FY 2010-11 (Rs. Cr)

	Generation	Transmission	Distribution	Total
Opening GFA	810.01	555.11	1585.48	2950.61
Less: Consumer Contribution			1295.59	1295.59
GFA less Consumer Contribution	810.01	555.11	289.90	1655.02
Normative Equity	243.00	166.53	86.97	496.51
Return on Equity	34.02	23.31	12.18	69.51

Non Tariff Income (NTI)

- 10.59 The Commission has computed the NTI of Rs. 360.06 Cr and Rs.367.29 Cr respectively for FY 2009-10 & FY 2010-11.
- 10.60 The component-wise break-up of approved NTI for FY 2009-10 is summarised in the table given below:

Table 145: Approved NTI for FY2009-10 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Realisable D.P.S @ 10% of D.P.S	0.00	0.00	30.20	30.20
Sale of Water	3.63	0.00	0.00	3.63
Meter Rent	0.00	0.26	5.06	5.32
Sale of tender paper	0.22	0.05	0.27	0.54
Income from investment (F.D)	0.00	0.00	8.00	8.00
Income on advance to supplier/contractor	0.03	0.03	0.03	0.09
Income from rebates	-	-	145.87	145.87
Income from trading	0.04	0.04	0.04	0.12
Income from staff welfare activities	0.04	0.01	0.08	0.13
Net UI receivable/Payable	0.00	0.00	166.16	166.16
Total non tariff income	3.96	0.39	355.70	360.06

10.61 Similarly, for FY 2010-11 the component-wise break-up of approved NTI is summarised in the table given below:

Table 146: Approved NTI for FY2010-11 (Rs. Cr)

Description	Generation	Transmission	Distribution	Total
Realisable D.P.S @ 10% of D.P.S	0.00	0.00	30.20	30.20
Sale of Water	3.66	0.00	0.00	3.66
Meter Rent	0.00	0.28	5.29	5.57
Sale of tender paper	0.22	0.05	0.27	0.54
Income from investment (F.D)	0.00	0.00	8.00	8.00
Income on advance to supplier/contractor	0.03	0.03	0.03	0.09
Income from rebates	-	-	152.83	152.83
Income from trading	0.04	0.04	0.04	0.12
Income from staff welfare activities	0.04	0.01	0.08	0.13
Net UI receivable/Payable	0.00	0.00	166.16	166.16
Total non tariff income	3.99	0.41	362.90	367.29

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

10.62 As detailed in Section 11 of this Order, the Commission has calculated Rs.995.89 Cr and Rs.1552.93 Cr disincentive cost for non achievement of T&D loss reduction target by the licensee during FY 2009-10 and FY2010-11 respectively, as per the T&D loss reduction trajectory approved by the Commission.

Penalty for non-compliance of the Standards of Performance (SoP)

- 10.63 In the Tariff order for FY 2006-07, the Commission has directed the licensee to implement the Standards of Performance Regulations by 1st January 2008 and submit the compliance report to the Commission thereafter, failing which the energy charge for all categories will be reduced by 2.5% from that day.
- 10.64 Till date the licensee has not submitted the compliance report for SoP, therefore, the Commission imposes the penalty of 2.5% of the energy charges for FY 2009-10 w.e.f. from 1st April 2009 to 31st March 2010 and accordingly an amount of Rs.31.46 Cr. has been deducted from the ARR of the licensee for FY 2009-10.
- 10.65 However, the Commission has not imposed any penalty for non-compliance of SoP as of now for FY 2010-11. If the licensee still defaults in submission of compliance report as detailed in directives Section of this Order, the rate of penalty will be enhance to 3.00% of the energy charges.

Revenue from Existing Tariff

- 10.66 On the basis of approved sales to various categories of consumers, the Commission determines the revenue from sale of power amounting to Rs.1625.42 Cr for FY 2009-10 at the existing tariff (made applicable by Tariff order for FY 2003-04), as detailed in the table given hereunder

Table 147: Approved Revenue from Existing Tariffs for FY 2009-10 (Rs. Cr)

Consumer Category	Units Sold	Rate	Revenue
Domestic	1806.77	1.37	247.23
Commercial	230.52	4.09	94.26
Public Lighting	109.42	1.25	13.63
Irrigation	70.12	0.73	5.14
Industrial LT	144.29	4.93	71.07
Industrial HT(incl. PWW)	1936.33	4.51	874.08
Railway	619.15	4.97	307.61
MES	45.00	2.76	12.40
Total	4961.6		1625.42

- 10.67 Similarly, on the basis of approved sales estimation to various categories of consumers, the Commission determines the revenue from sale of power amounting to Rs.1754.87 Cr for FY 2010-11 at the existing tariff (made applicable by Tariff order for FY 2003-04), as detailed in the table given hereunder

Table 148: Approved Revenue from Existing Tariffs for FY 2010-11 (Rs. Cr)

Consumer Category	Units Sold	Rate*	Revenue
Domestic	2067.89	1.37	282.96
Commercial	247.22	4.42	109.29
Public Lighting	119.39	1.24	14.81
Irrigation	70.70	0.73	5.18
Industrial LT	154.53	5.21	80.50
Industrial HT (incl. PWW)	2030.98	4.51	916.93
Railway	668.18	4.97	331.97
MES	48.00	2.76	13.23
Total	5406.88		1754.87

Summary of the ARR for FY 2009-10 & FY 2010-11

10.68 In view of the above, the functionally disaggregated ARR approved by the Commission for FY 2009-10 & FY 2010-11 is summarised in the tables below.

10.69 The table below summarises the ARR for generation function:

Table 149: Approved ARR of Generation Function for FY 2009-10 & FY 2010-11 (Rs. Cr)

Annual Revenue Requirement	FY 2009-10	FY 2010-11
Fuel	95.04	86.57
Employee	75.85	64.27
Repair & Maintenance	19.56	22.24
Admin & General	12.75	13.52
Interest & Financing Charges	35.17	35.17
Interest on working capital	8.10	8.19
Depreciation	27.91	28.92
Less: Inefficient cost of PTPS	117.83	115.01
Total Costs	156.55	143.88
Add: Reasonable return	32.83	34.02
Less: Non tariff income	3.96	3.99
ARR	185.42	173.91

10.70 ARR for transmission function approved by the Commission for FY 2009-10 and FY 2010-11 is summarised in the table below:

Table 150: Summary of the ARR for Transmission Function for FY 2009-10 & FY 2010-11 (Rs. Cr)

Annual Revenue Requirement	FY 2009-10	FY 2010-11
Employee	23.18	19.23
Repair & Maintenance	4.68	5.32
Admin & General	3.87	4.11
Interest & financing charges	71.40	71.40
Interest on working capital	0	0
Depreciation	28.14	34.80
Total Cost	131.27	134.85
Add: Reasonable return	18.86	23.21
less: Non tariff income	0.39	0.41
ARR	149.73	157.76

10.71 ARR for distribution function approved by the Commission for FY 2009-10 and FY 2010-11 is summarised in the table below:

Table 151: Summary of the ARR for Distribution Function for FY 2009-10 & FY 2010-11 (Rs. Cr)

Annual Revenue Requirement	FY 2009-10	FY 2010-11
Power Purchase	1861.85	1950.68
Employee	123.25	105.43
Repair & Maintenance	23.23	26.41
Admin & General	21.21	22.48
Interest and financing charges	418.30	418.30
Interest on working capital	1.99	2.15
Depreciation	26.39	26.42
Provision for bad & doubtful debts	0	0
Less Disincentive for T&D Loss	995.89	1552.93
Less: Penalty for SoP	31.46	
Total Costs	1448.87	998.95
Add: Reasonable return	12.58	12.18
less: Non tariff income	355.70	362.90
ARR	1105.75	648.23

Consolidated ARR

10.72 The table below summarises the ARR approved by the Commission for FY 2009-10 & FY 2010-11.

Table 152 : Approved ARR for FY 2009-10 & FY 2010-11 (Rs. Cr)

Annual Revenue Requirement	FY 2009-10	FY 2010-11
Power Purchase Cost	1861.85	1950.68
Fuel Cost	95.04	86.57
R&M Cost	47.47	53.97
Employee's Cost	222.28	188.93
A&G Cost	37.84	40.11
Depreciation	82.44	90.14
Interest & Financing Charges	524.87	524.87
Interest on Working Capital	10.09	10.34
<i>Less: Inefficient Cost of PTPS</i>	<i>117.83</i>	<i>115.01</i>
<i>Less: Disincentive for non-achievement of T&D Loss targets</i>	<i>995.89</i>	<i>1552.93</i>
<i>Less: Disincentive for non-compliance of SoP</i>	<i>31.46</i>	<i>-</i>
Total Expenditure	1736.69	1227.67
Statutory Return	64.27	69.51
Gross Revenue Requirement	1800.96	1347.18
Less: Other Income	360.06	367.29
Net Revenue required	1440.90	979.89
Revenue at existing tariff	1625.42	1754.87
Revenue Gap	-184.52	-774.98

10.73 The Commission approved the net revenue surplus of Rs.184.52 Cr and Rs.774.98 Cr for FY 2009-10 and FY 2010-11 respectively.

A11: TREATMENT OF INEFFICIENT COST

11.1 This chapter deals with the treatment of the inefficiencies of the licensee in:

- (a) the generation of electricity as a result of its inability to improve the performance of the Thermal Plant vis-à-vis the operational parameters governing it;
- (b) the distribution system as a result of the inability to reduce losses vis-à-vis the targets given by the Commission;
- (c) non-compliance of Standards of Performance (SoP) as per directives of the Commission in the Tariff Order for FY 2007-08.

Inefficient cost of PTPS

11.2 The performance of PTPS has been a matter of grave concern for the State of Jharkhand. Even though the station is old, the performance of the plant in comparison to other similar plants of the Country has been below par.

11.3 In the previous Tariff orders for FY 2003-04 and FY 2006-07, the Commission had set targets for the improvement in the operational parameters of the thermal station and determined the tariff accordingly. The targets set for various operational parameters in the previous tariff orders is shown here under:

Table 153: Targets set by Commission in Previous Tariff Orders of JSEB

Financial Year	PLF*	Auxiliary (MU)	Specific Oil Consumption	SHR (Kcal/Kwh)
FY 2003-04	27.0%	14.63%	24.13	3,947.5
FY 2004-05	31.3%	14.63%	24.13	3,878.4
FY 2005-06	35.7%	9.00%	2.00	2,600.0
FY 2006-07	40.0%	9.00%	2.00	2,600.0
FY 2007-08	44.3%	9.00%	2.00	2,600.0
FY 2008-09	48.7%	9.00%	2.00	2,600.0
FY 2009-10	53.0%	9.00%	2.00	2,600.0
FY 2010-11	57.3%	9.00%	2.00	2,600.0

* As per Trajectory set in Tariff Orders of FY 2003-04 and FY 2006-07

11.4 In accordance with these parameters, the Commission in the Tariff Order for FY 2006-07 disallowed a cost of Rs.104.58 Cr as the inefficient fixed cost of PTPS. This disallowance was based on the actual generation data submitted by the licensee for FY 2006-07 and the target set by the Commission for the operational parameters. The Commission was of the view that the actual performance of PTPS has been low primarily due to the lack of initiative from the licensee, and the same should not be passed on to the consumers.

- 11.5 The Commission observes that the operational performance of the thermal plant has deteriorated even further in recent years, as detailed hereunder:

Table 154: Summary of performance of PTPS Thermal Station

Financial Year	PLF	Auxiliary (MU)	SHR (Kcal/Kwh)
FY 2003-04	15.81%	17.03%	3947.5
FY 2004-05	11.02%	22.40%	3878.4
FY 2005-06	12.55%	22.32%	3993.6
FY 2006-07	9.12%	13.96%	4248.0
FY 2007-08*	10.35%	14.30%*	4392.0*
FY 2008-09*	15.00%	14.00%*	4334.0*

* Proposed by Licensee

- 11.6 In view of the analysis and directions given in Hon'ble APTEL's Order dated 8.5.2008 and also considering that many units of PTPS are more than 35-40 years old and it may not be feasible for the licensee to achieve the operational targets, the Commission has now decided to relax the norms of the operational parameters vis-à-vis the target set in the previous Tariff Orders.
- 11.7 The Commission sets the timelines for the improvement of operational parameters as per the revised norms for attaining PLF of 45% and SHR of 2950 Kcal/Kwh by the end of FY 2013-14.
- 11.8 The CERC (Terms and Conditions of Tariff) Regulations, 2009 has also set similar guidelines for old vintage plants like Talcher TPS (460 MW). It is pertinent to note that the configuration for Talcher TPS (460 MW) comprises of 4 units of 60 MW, which were commissioned in 1967-69 and 2 units of 110 MW, which were commissioned in 1982-83.
- 11.9 The revised norms set by the Commission for PTPS are tabulated hereunder:

Table 155: Revised Norms- Operational parameters

	PLF	Auxiliary Consumption	Transit loss of coal	Specific Oil Consumption	SHR
FY 2003-04	27%	14.55%	5.54%	24.13	3948
FY 2004-05	28%	13.55%	4.50%	23.13	3850
FY 2005-06	29%	12.55%	3.25%	22.13	3750
FY 2006-07	30%	11.55%	2.25%	21.13	3650
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
FY 2011-12	40%	10.50%	0.30%	2.00	3150
FY 2012-13	42%	10.50%	0.30%	2.00	3050
FY 2013-14	45%	10.50%	0.30%	2.00	2950

11.10 Meanwhile, according to Govt. of India, Ministry of Power, CEA Revised Guidelines for Renovation and Modernisation/ Life extension works of Coal/ Lignite based thermal power stations, October, 2009 it is mentioned w.r.t. retirement of old units of 100 MW or less capacity as under-

“5.0 RETIREMENT OF VERY OLD UNITS:

A very large number of small size units of 100 MW or less capacity are in operation. The average Plant Load Factor of most of these units is very low, even less than 50%. These units are of non-reheat type having very low design efficiencies. Further, because of their ageing & technological obsolescence, these units are performing at further lower efficiency than their design value. Such units need to be retired in a phased manner. The following approach for non-reheat units and other higher size reheating units may be followed for the purpose:

- *Consider for retirement of all non-reheat units of 100 MW or less rating. However, those units on which major R&M/LE activities have been undertaken and are performing well, such units may continue to operate for another 10 years from the date of post R&M/LE to enable them to recover the expenditures incurred.*
- *Larger size units can also be considered for retirement on economically non-viability on case to case basis.*
- *The retirement may be prioritized according to their level of performance, say unit heat rate deviating more than 20% to be retired first and subsequently those units with deviation of 15% & 10% from their design heat rate.*
- ***The SEBs/ GENCOs may identify new generating capacity to be added as substitute for older units so that overall installed capacity is not affected.”***

11.11 The Commission observes that in case of units of PTPS which were commissioned during mid sixties and in early seventies, JSEB is expected to plan for replacement of obsolete equipment and systems in these units with new available items to ensure support and services from manufacturers, since over such a long period after commissioning the Original Equipment Manufacturers (OEM) as per the technological developments of new products, would have stopped providing service support for the maintenance of their original supplies.

11.12 Meanwhile, the Commission is of the view that the variation in the actual performance of PTPS vis-à-vis the revised targets set by the Commission is still substantial and the inefficiencies of the system cannot be allowed to be passed on to the consumers.

11.13 It is pertinent to mention that the ‘Generation Tariff Regulations, 2004’ also clearly specifies that on lower/poor availability of the Thermal plant, the fixed cost would be adjusted in the proportion of the normative availability of the plant. The licensee has submitted an availability of 58% and 60% with the tariff petitions of FY 2007-08 and

FY 2008-09, however, at the same time, the licensee has submitted a plant load factor (PLF) of 10.33% and 17.79% for these years respectively. The Commission views that it is unlikely to have so much difference in the availability and PLF and it is evident that the availability shown by the licensee is not correct.

- 11.14 Accordingly, the Commission has computed the cost of inefficiency for the purpose of true-up of FY 2006-07 as well as for ARR determination of FY 2007-08 to FY 2010-11, on the same basis as was adopted in the Tariff Order of FY 2006-07, tabulated hereunder:

Table 156: Inefficient Cost of PTPS for FY 2006-07 to FY 2010-11

Financial Year	Normative Generating Units (MU)	Actual generating units (MU)	Approved per Unit Fixed Cost (Rs/Kwh)	Approved Fixed cost for PTPS (Rs. Cr)	Allowed Fixed cost (Rs. Cr)	Cost of inefficiency (Rs. Cr)
FY 2006-07	1789.84	529	0.83	148.62	43.92	104.70
FY 2007-08	1931.83	600	0.73	140.11	43.54	96.57
FY 2008-09	2052.56	870	1.11	228.71	96.98	131.73
FY 2009-10	2173.30	903	0.93	201.58	83.76	117.83
FY 2010-11	2294.04	946	0.85	195.72	80.71	115.01
Total						565.83

Disincentive for non-achievement of T&D Loss targets

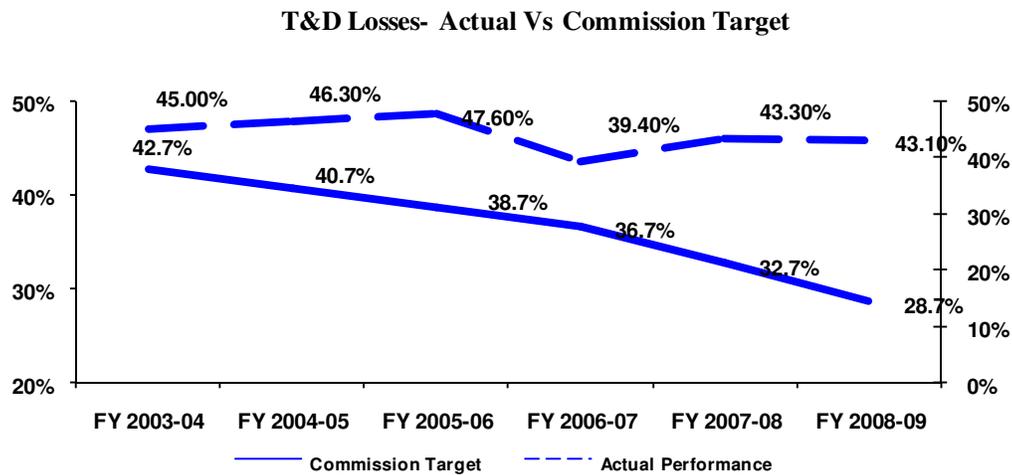
- 11.15 The T&D losses in the licensed area of JSEB are another major area of concern for the State. The Commission vide its Tariff Orders FY 2003-04 and FY 2006-07 had set time bound targets for the reduction of these losses, as tabulated hereunder:

Table 157: T&D Loss Trajectory set by Commission in previous Tariff Orders

Financial Year	T&D Loss targets
FY 2003-04	42.66%
FY 2004-05	40.66%
FY 2005-06	38.66%
FY 2006-07	36.66%
FY 2007-08	32.66%
FY 2008-09	28.66%
FY 2009-10	24.66%
FY 2010-11	20.66%

- 11.16 The Commission had considered the energy requirement of the licensee in the tariff orders of FY 2003-04 and FY 2006-07 as per the targets specified above and accordingly, determined the ARR and tariff for these years.

11.17 The Commission observes that the performance of the licensee with respect to the T&D losses has deteriorated in recent years, as charted hereunder:



11.18 It is evident from the above, that during FY 2008-09 the loss levels of the licensee have increased to almost the same level as that in FY 2003-04. This clearly suggests that the licensee has not made sincere efforts to reduce the losses in recent years.

11.19 The Commission gave an opportunity to the licensee to submit its own loss reduction trajectory, but the licensee has not responded on the same.

11.20 The Commission is of the view that the variation in the actual performance of the licensee vis-à-vis the targets set by the Commission is substantial and the inefficiencies of the system due to lack of sincere efforts of the licensee cannot be allowed to be passed on to the consumers. The Hon'ble APTEL's in the Order dated 08.05.2008 has also expressed concerns on the performance of the licensee with respect to the T&D losses and other operational parameters.

11.21 Accordingly, the Commission has decided to disallow the inefficiency of the licensee with respect to T&D loss variations vis-à-vis the targets for previous years from FY 2003-04 to FY 2010-11.

11.22 The Commission has computed the cost of inefficiency as summarised hereunder:

Table 158: T&D Loss Trajectory set by Commission

Financial Year	T&D Loss targets set by Commission in previous TO	Energy requirement as per JSEB (MU)	Energy requirement as per Target losses (MU)	Variation on account of inefficiency (MU)	Average Rate of Purchase (Rs/Kwh)	Cost of inefficiency (Rs. Cr)
FY 2003-04	42.66%	5205.79	4993.02	212.77	2.38	50.56
FY 2004-05	40.66%	5876.7	5315.13	561.57	2.48	139.01
FY 2005-06	38.66%	6580.15	5619.20	960.95	2.44	234.86
FY 2006-07	36.66%	7193.52	6881.62	311.89	2.65	82.67
FY 2007-08	32.66%	7479.99	6297.47	1182.52	2.33	275.41
FY 2008-09	28.66%	8173.15	6516.83	1656.32	2.51	415.88
FY 2009-10	24.66%	8722.29	6585.64	2136.65	4.66*	995.89
FY 2010-11	20.66%	9203.93	6814.82	2389.12	6.50*	1552.93
Total						3747.21

* This is the estimated rate of trading of surplus power/procurement of deficit power. This rate will be trued up on average basis on the basis of the provisional data for power purchase furnished by the licensee in subsequent Tariff Order.

11.23 In its previous Tariff Order for FY 2006-07, the Commission has directed the licensee to reduce its T&D losses by 4% p.a. to each a normative T&D loss level of 15%. However, the Commission has taken a view that considering the ground realities, the licensee shall need some time to reach the normative loss levels targets of 15%.

11.24 In view of the above and the directives of the Hon'ble APTEL vide order dated 08.05.2008, the Commission has decided to set revised time bound T&D loss targets for future years such that the licensee is able to reach the normative T&D loss level of 15% by the end of FY 2016-17.

Table 159: T&D Loss Trajectory for future years set by Commission

Financial Year	T&D Loss Level targets	Loss reduction Required
FY 2011-12	19.00%	1.6%
FY 2012-13	18.00%	1%
FY 2013-14	17.00%	1%
FY 2014-15	16.00%	1%
FY 2015-16	15.50%	1%
FY 2016-17	15.00%	1%

11.25 Since the current loss levels of the licensee are much higher than the targets, the licensee can make efforts to reduce more losses than required as per the trajectory above and reach the required loss levels by FY 2016-17.

Penalty for non-compliance of the Standards of Performance (SoP)

11.26 In the Tariff order for FY 2006-07, the Commission has directed the licensee to implement the Standards of Performance Regulations by 1st January 2008 and submit the compliance report to the Commission thereafter, failing which the energy charge for all categories will be reduced by 2.5% from that day.

11.27 Till date the licensee has not submitted the compliance report for SoP, therefore, the Commission imposes the penalty of 2.5% of the energy charges w.e.f. from January 2008 and accordingly an amount of Rs.68.42 Cr. has been disallowed from the ARR of licensee, as also detailed in the earlier sections of this Tariff Order.

A12: SUMMARY OF THE ARR FOR FY 2003-04 TO FY 2010-11

Summary of the Annual Revenue Requirement

- 12.1 The Commission has conducted the detailed analysis and provisional true up for FY 2003-04 to FY 2006-07 based on the provisional accounts of these years as well as the analysis of FY 2007-08 & FY 2008-09 in addition to the suo-motu determination of ARR for FY 2009-10 and FY 2010-11.
- 12.2 The summary of revenue gap/surplus approved by the Commission is given in the table below

Table 160: Approved Revenue Gap/surplus for FY 2003-04 to FY 2010-11

Particulars	Units	Approved by JSERC
Annual Revenue Requirement for FY 2010-11	Rs. Cr	979.89
Revenue (Gap)/Surplus for FY 2009-10 (as per suo-motu for FY 2009-10)	Rs. Cr	-184.52
Revenue (Gap)/Surplus for FY 2008-09 (as per analysis of petition for FY 2008-09)	Rs. Cr	389.31
Revenue (Gap)/Surplus for FY 2007-08 (as per analysis of petition for FY 2007-08)	Rs. Cr	381.77
Revenue (Gap)/Surplus for FY 2006-07 (as per provisional true up of FY 2006-07)	Rs. Cr	390.03
Revenue (Gap)/Surplus for FY 2005-06 (as per provisional true up of FY 2005-06)	Rs. Cr	-47.78
Revenue (Gap)/Surplus for FY 2004-05 (as per provisional true up of FY 2004-05)	Rs. Cr	35.68
Revenue (Gap)/Surplus for FY 2003-04 (as per provisional true up of FY 2003-04)	Rs. Cr	-13.35
Total Revenue Requirement up to FY 2010-11	Rs. Cr	1931.03
Revenue at Existing Tariff FY 2010-11	Rs. Cr	1754.87
Cumulative Revenue (Gap)/Surplus	Rs. Cr	(176.17)

- 12.3 The cumulative ARR for FY 2010-11 and revenue gap from FY 2003-04 to FY 2009-10 approved by the Commission amounts to **Rs. 1931.03 Cr**, at the existing tariff approved by Commission vide Tariff Order for FY 2003-04.
- 12.4 The licensee will be able to generate revenue of Rs.1754.87 Cr during FY 2010-11, at the existing tariffs, leaving a resultant revenue gap of Rs.176.17 Cr

A13: TREATMENT OF REVENUE GAP

Licensee's submission

- 13.1 The licensee has proposed the following treatment of revenue gap for FY 2007-08 and FY 2008-09

Table 161: Proposed Treatment of Revenue Gap for FY08 & FY09

	FY 2007-08	FY 2008-09
Annual Revenue Requirement	2975	3651
Revenue @ Existing Tariff	1405	1522
Subsidy/Resource gap	77	80
Revenue Gap/(Surplus)	1492	2048
Coverage of Revenue Gap		
Additional Revenue@ Proposed Tariff	-	451
Regulatory Asset	1492	1597
Revenue Gap	-	-

- 13.2 The licensee has proposed to meet the ARR for FY 2007-08 partly to an extent of Rs. 1405 Cr through revenue from existing tariff and from resource gap of Rs 77 Cr from GoJ. The ARR for FY 2008-09 is proposed to be partly met from revenue from existing tariff to an extent of Rs 1522 Cr and a resource gap of Rs 80 Cr from GoJ. Licensee has further submitted that it is left with huge revenue gaps to an extent of Rs 1492 Cr in FY 2007-08 and Rs 2048 Cr in FY 2008-09.
- 13.3 To further meet the revenue gap JSEB has proposed a tariff revision of Rs. 405 Cr only to lower the revenue gap and would be still left with huge uncovered revenue gap, which it has proposed to be treated as regulatory asset.
- 13.4 The proposed hike in category wise tariffs is already depicted in Table 8 of Section 5.5 of this order.

Views of the Commission

- 13.5 The Commission has decided to update the tariff for various categories on the basis of the following
- Revenue Gap of Rs. 176.17 Cr envisaged by the Commission;
 - The Tariff proposal of licensee for various categories;
 - 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.
- 13.6 As mentioned in Table 160: Approved Revenue Gap/surplus for FY 2003-04 to FY 2010-11 above, the Commission has envisaged a total revenue gap of Rs. 176.17 Cr up to FY 2010-11. The tariffs have been increased to the extent of covering this gap only.
- 13.7 The Commission has also ensured, while determining the tariffs, that the tariffs are increased only for those energy and demand components for which the licensee has given a proposal. Therefore, the tariff has not been increased for those categories for which no increase has been proposed by the licensee. For instance, the licensee has not proposed any increase in the energy charges for LTIS, SS-I and HTSS category. The Commission has accordingly not considered any increase in the energy charges for these categories.
- 13.8 In view of the above, it is pertinent to update the tariffs in Jharkhand especially since, as per the analysis of the Commission, a revenue gap of Rs. 176.17 Cr has been estimated up to FY 2010-11.
- 13.9 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

A14: TARIFF APPROVED BY THE COMMISSION FOR FY 2010-11

Generation Tariff

- 14.1 The Commission has determined the Generation tariff of both PTPS and SHPS for FY 2010-11 on the basis of the approved operational parameters, estimated generation and the cost of generation for these plants. The summary of the approved Generation tariff of the two plant for FY 2010-11 is depicted below

Table 162: Approved Generation tariff of PTPS and SHPS for FY 2010-11

Description	Unit	PTPS	SHPS
Net generation	MU	946	236.8
Variable Charges	Rs. Cr	86.57	0.00
Fixed Charges	Rs. Cr	195.72	6.63
Less: Inefficient cost of PTPS	Rs. Cr	115.01	0.00
Total Charges	Rs. Cr	167.28	6.63
Generation tariff	Rs/unit	1.77	0.28

Transmission Tariff

- 14.2 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 2010-11 is depicted below

Table 163: Approved Transmission tariff for FY 2010-11

Description	Unit	Transmission business
Net energy available at transmission level	MU	9318.07
Transmission losses	%	5%
Net energy available at Distribution level	MU	8852.16
Transmission Charges approved by Commission	Rs. Cr	157.76
Transmission tariff	Rs/unit	0.18

Distribution- Wheeling Tariff

- 14.3 The Commission has determined the wheeling tariff for the distribution business of the licensee on the basis of the approved energy available at the distribution level and the distribution cost pertaining to the wheeling business of the licensee. The applicable distribution cost for wheeling charges has been assumed at 50% of the total distribution cost of the licensee. The summary of the approved wheeling tariff for FY 2010-11 is depicted below

Table 164: Approved Wheeling tariff for FY 2010-11

Description	Unit	Transmission business
Net energy available at Distribution level	MU	8852.16
<i>Distribution cost</i>	%	50%
Employee	Rs. Cr	105.43
Repair & Maintenance	Rs. Cr	26.41
Admin & General	Rs. Cr	22.48
Interest and financing charges	Rs. Cr	418.30
Interest on working capital	Rs. Cr	2.15
Depreciation	Rs. Cr	26.42
Provision for bad & doubtful debts	Rs. Cr	0.00
Add: Reasonable return	Rs. Cr	12.18
less: Non tariff income	Rs. Cr	362.90
<i>Total Distribution Cost</i>	<i>Rs. Cr</i>	<i>250.47</i>
Applicable Distribution cost (@ 50%)	Rs. Cr	125.54
Wheeling Tariff	Rs/Unit	0.14

Distribution- Retail Supply Tariff

14.4 As mentioned earlier, the Commission has determined the revenue gap of Rs. 176.17 Cr up to FY 2010-11. In line with the basis mentioned in Section 13 of this Order for updating the tariff, the Commission has determined the category wise retail tariffs for FY 2010-11, as depicted in the table below

Table 165: Existing and Approved Tariff

Consumer category	Existing				Approved			
	Fixed Charge	Energy Charge		Minimum Monthly Charge	Fixed Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate	Rate	Unit	Unit	Rate	Rate
DS-I (a)- Kutir Jyoti Connections (Metered)	0	Rs./Kwh	1.00	Nil	0	Rs./Kwh	1.10	Nil
DS-I (a)- Kutir Jyoti Connections (Unmetered)	Rs 27 per connection per month	Rs./Kwh	0.00	Nil	Rs 30 per connection per month	Rs./Kwh	0.00	Nil
DS-I (b)- Kutir Jyoti Connections (Metered)	0	Rs./Kwh	1.00	Nil	0	Rs./Kwh	1.10	Nil
DS - I (b)- other rural domestic consumers	Rs 65 per connection per month	Rs./Kwh	0.00	Nil	Rs 72 per connection per month	Rs./Kwh	0.00	Nil

Consumer category	Existing				Approved			
	Fixed Charge	Energy Charge		Minimum Monthly Charge	Fixed Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate	Rate	Unit	Unit	Rate	Rate
(Unmetered)								
DS – II	Rs. 20 per connection per month	Rs./kWh (0-200 Units per month)	1.35	Nil	Rs. 25 per connection per month	Rs./kWh (0-200 Units per month)	1.50	Nil
		Rs./kWh (Above 200 Units per month)	1.70	Nil	Rs. 30 per connection per month	Rs./kWh (Above 200 Units per month)	1.90	Nil
DS – III	Rs. 40 per connection per month	Rs./kWh	1.70	Nil	Rs. 50 per connection per month	Rs./kWh	1.90	Nil
DS HT	Rs. 30 per kVA per month	Rs./kWh	1.50	Nil	Rs. 40 per kVA per month	Rs./kWh	1.65	Nil
NDS – I	0	Rs./kWh	1.25	Nil	0	Rs./kWh	1.35	Nil
NDS – I (Unmetered)	Rs. 110/kW/month or part thereof for connected load up to 1 KW. Rs. 50/kW/month for each additional 1kW or part thereof	Rs./kWh	0	Nil	Rs. 120/kW/month or part thereof for connected load up to 1 KW. Rs. 50/kW/month for each additional 1kW or part thereof	Rs./kWh	0	Nil
NDS – II	Rs. 100 per kW per month or part thereof	Rs./kWh	3.60	Nil	Rs. 110 per kW per month or part thereof	Rs./kWh	3.95	Nil
LTIS	Rs. 60 /HP/month	Rs./Kwh	3.50	Nil	Rs. 75 /HP/month	Rs./Kwh	3.50	Nil
IAS - I (Metered)	0	Rs./kW	0.50	Nil	0	Rs./kW	0.50	Nil
IAS-I (Unmetered)	Rs. 50 /HP/month	Rs./kW	0	Nil	Rs. 50 /HP/month	Rs./kW	0.00	Nil
IAS – II (Metered)	0	Rs./kW	0.75	Nil	0	Rs./kW	0.75	Nil
IAS-I (Unmetered)	Rs. 200 /HP/month	Rs./kW	0	Nil	Rs. 200 /HP/month	Rs./kW	0.00	Nil
HTS	Rs. 140 per kVA per month	Rs./Kwh	4.00	For supply at 11 & 33 kV: 250 per kVA For supply at 132 kV:	Rs. 165 per kVA per month	Rs./Kwh	4.35	Nil

Consumer category	Existing				Approved			
	Fixed Charge	Energy Charge		Minimum Monthly Charge	Fixed Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate	Rate	Unit	Unit	Rate	Rate
				400 per kVA				
HTSS	Rs. 300 per kVA per month	Rs./kWh	2.50	Rs. 400 per kVA per month	Rs. 330 per kVA per month	Rs./kWh	2.50	Nil
RTS	Rs. 140 per kVA per month	Rs./Kwh	4.30	Nil	Rs. 180 per kVA per month	Rs./Kwh	4.50	Nil
SS-I	Rs 20/ Connection/ month	Rs./kWh	3.50	Nil	Rs 25/ Connection/ month	Rs./kWh	3.50	Nil
SS-II	Rs. 100 per 100 watt lamp. In addition, Rs 25 would be charged for each additional 50 Watt				Rs. 110 per 100 watt lamp. In addition, Rs 25 would be charged for each additional 50 Watt			
REC	NIL	Rs./Kwh	0.70	NIL	NIL	Rs./Kwh	0.70	Nil
MES	Rs 150/kVA/month	Rs./Kwh	2.50	NIL	Rs 160/kVA/month	Rs./Kwh	3.00	Nil

The above tariffs will be applicable from 1st May 2010.

A15: REDUCTION IN CROSS SUBSIDY

- 15.1 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.
- 15.2 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.
- 15.3 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 2010-11 is Rs. 3.57 per kWh.

Category	Sales	Av. Current Tariff	Av. 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 PROPOSED)
Domestic	2067.89	1.37	3.57	282.96	738.57	-455.61	332.91	1.61	-405.66
Non-Domestic	247.22	4.42	3.57	109.29	88.30	20.99	119.68	4.84	31.38
Low Tension	154.53	5.21	3.57	80.50	55.19	25.31	87.00	5.63	31.81
Irrigation & Agricultural	70.70	0.73	3.57	5.18	25.25	-20.07	5.14	0.73	-20.11
High Tension service	1405.04	4.73	3.57	664.52	501.83	162.69	732.00	5.21	230.17
HT Special S	625.94	4.03	3.57	252.42	223.56	28.85	253.41	4.05	29.85
Traction	668.18	4.97	3.57	331.97	238.65	93.32	367.12	5.49	128.47
Street Light Service	119.39	1.24	3.57	14.81	42.64	-27.83	18.17	1.52	-24.47
MES	48	2.76	3.57	13.23	17.03	-3.81	15.60	3.27	-1.43
Total	5406.88			1754.87	1931.03	-176.17	1931.03		0.00
Cross Subsidy Gen						-507.33			-451.68
Cross Subsidy Utilized						331.16			451.68

- 15.4 From the table given above, it can be seen that cross subsidy reduced from Rs.507.33 Cr (based on existing tariff) to Rs.451.68 Cr once new tariff structure comes into effect.

A16: TARIFF RELATED OTHER ISSUES

Tariff Philosophy

Licensee's submission

- 16.1 The licensee has submitted that, the average cost of supply for JUSCO is around Rs. 6.32 per unit in FY 2009-10, without taking into account past recoveries on account of revenue gap in FY 2007-08 and FY 2008-09. As against this, total revenue per unit (from all consumer categories) is estimated to be Rs.4.88/kWh with the average realization from the Domestic and Non-Domestic consumer categories being very low and in the range of Rs. 1.26 per unit to Rs. 1.86 per unit.
- 16.2 In order to partly meet the estimated revenue gap of Rs 1492 Cr in FY07-08 & Rs 2048 Cr in FY 08-09, JSEB proposes to make the following changes in the existing tariff rates with the objectives of:
- (a) Reduction of Cross-Subsidy – Movement of Tariff Structure towards Cost of Supply.
 - (b) Improvement in the proportion of recovery of fixed costs through Fixed/ Demand Charges.
 - (c) Improvement in Fixed: Energy charges ratio vis-à-vis the existing Fixed: Variable Cost structure of JSEB.

Views of the Commission

- 16.3 The Commission has computed the cumulative revenue gap of Rs.176.17 Cr for the period from FY 2003-04 to FY 2010-11. The assessment per unit for FY 2010-11 is estimated at Rs. 3.25 per unit with the average assessment for subsidized categories of domestic at Rs. 1.37/Kwh, agriculture Rs.0.73/Kwh and street light at Rs.1.24/Kwh being lower while the other categories have a higher assessment than the average assessment.
- 16.4 In regard of the reduction of cross subsidy and improvement in the proportion of fixed and energy costs, the Commission has ensured reduction in cross subsidies while determined the tariffs for FY 2010-FY 2011. Meanwhile, the Commission feels that it is important for the licensee to determine the cost of supply for each category, determine the cost related to energy & fixed charges, and then compare the same with the revenue recovered from the respective categories. The Commission have restated the relevant directives to the licensee for conducting the Cost of Supply study in the directive section of this Tariff Order.

Subsidised tariff to rural consumers

Licensee's submission

- 16.5 The licensee has stated that the rural consumers have the lowest tariff rates in the state and although, these consumers are partly being cross subsidized by HT consumers, it is not sufficient to cover the financial loss arising due to the supply to these consumers. Further, with the target of electrifying villages and releasing connection to rural household in the future years, it would become difficult to maintain the financial viability of the state power sector.
- 16.6 The Licensee has proposed that there should be a compensatory methodology devised by the Hon'ble Commission to re-compensate the financial burden taken by the state utility to supply power to the rural areas. It can be through an upfront payment of cash subsidy by the state government as followed in various other states.

Views of the Commission

- 16.7 The Commission states that it has increased the tariff for all categories, for which the tariff revision was proposed by the licensee, to the extent of covering the revenue gap of Rs. 176.17 Cr. There is no further gap available to re-compensate the financial burden taken by the state utility to supply power to the rural areas.

Recovery of partial costs through Tariff Revision proposal

Licensee's submission

- 16.8 The licensee has submitted that power purchase cost should not be denied in any case and recovered appropriately. JSEB has proposed the tariff such that the tariffs for all the categories should at least lead to recovery of average power purchase price.

Views of the Commission

- 16.9 The Commission states that it has allowed the power purchase cost as per the data provided by the licensee for the respective years. Meanwhile, the Commission has increased the tariff for all categories, for which the tariff revision was proposed by the licensee, to the extent of covering the revenue gap of Rs. 176.17 Cr.

Monthly Minimum Charges/ Consumption

Licensee's submission

16.10 The licensee has requested that the Monthly Minimum Charges/Consumption (MMC) should be allowed as the concept of Monthly Minimum Charges/Consumption (MMC) has been recognized in many states across the country. The Hon'ble Commission has also allowed Monthly Minimum Charges in the Tariff Order for Tata Steel for FY 2005-06. These charges have been receiving recognition only to ensure that the power utilities do not bear the risk of underutilization of electrical assets and also minimizes the risk of theft of electricity & malpractice. The MMC is always applicable when the consumption of a consumer goes below the desired level and maximum of MMC or the actual bill is payable by consumer.

Views of the Commission

16.11 The Commission observes that most of the States where MMC has been in place are either having single part tariff with no fixed charges or have removed the MMC once the fixed charges have been introduced.

16.12 The Commission also feels that it is only logical to have either fixed charges or the MMC. The licensee should get the cost of supply study done to determine the fixed and energy charge components in each category and thereafter submit the amount of fixed charge recoverable from such categories.

16.13 Accordingly, the Commission shall determine the amount of fixed charge which should be charged from each category such that the licensee is able to recover the cost of creating the network to the extent possible from the fixed charges.

16.14 Till such time the Commission has updated the tariffs as per the existing tariff structure and have allowed an increase in fixed charges to various categories as per the proposal of licensee but to the extent of covering the revenue gap.

16.15 The Commission will take appropriate action with regard to MMC charges in other licensed areas of the State.

Voltage Rebate

Licensee's submission

16.16 The Licensee has submitted that the voltage rebate applicable for the licensed area of JSEB is very high as compared to other States and hence is proposed to be reduced. The voltage rebates applicable in other states such as Punjab, Assam, Gujarat, Karnataka and West Bengal have been shown in the Table 4-30 of the tariff revision proposal for FY 2008-09 of JSEB, submitted in March 2009. The existing and proposed voltage rebate by JSEB is shown in the table below.

Table 166: Existing and Proposed Voltage Rebate

Load Factor	Load Factor Rebate	
	<i>Existing</i>	<i>Proposed</i>
Supply at 33 kV	5.00%	3.00%
Supply at 132 kV	7.50%	5.00%
Supply at 220 kV	7.50%	5.50%
Supply at 440 kV	7.50%	6.00%

Views of the Commission

16.17 The Commission accepts the proposal of the licensee.

Load Factor Rebate

Licensee’s submission

16.18 The load factor rebate has been proposed to be revised keeping in view the deficit situation already existing in the state and the high power purchase cost. In addition, the load factor rebate is very high as compared to other states and is also allowed above 50% in most of the states. The licensee has proposed to reduce the quantum of load factor rebate and has proposed to allow it only for load factor above 50%. The load factor rebate is applicable for HTS & HTSS category and is shown below.

Table 167: Existing and Proposed Load Factor Rebate for HTS & HTSS category

Load Factor	Load Factor Rebate	
	<i>Existing</i>	<i>Proposed</i>
40-60%	5%	3%
60-70%	7.5%	5%
70-100%	10%	7%

Views of the Commission

16.19 The Commission feels that the load factor rebate should be designed in such a way that it improves the efficiency of the network by inducing the HT consumers to improve their load factors and at the same time they should be encouraged to maintain a high load factor. Accordingly, the Commission has decided to forgo the load factor rebate for HT consumers having less than 60% load factor and have decided to retain the load factor rebate at the same level for consumer having higher Load factors.

Table 168: Existing and Approved Load Factor Rebate for HTS & HTSS category

Load Factor	Load Factor Rebate	
	<i>Existing</i>	<i>Approved</i>
40-60%	5%	Nil
60-70%	7.5%	7.5%
70-100%	10%	10%

Power Factor rebate and penalty

Licensee's submission

16.20 The licensee has proposed to increase the power factor penalty for for each fall in power factor up to 0.30 from 0.60 from of 0.10 to 0.01.

Views of the Commission

16.21 The Commission finds no specific reason to change the penalty rebate structure and rejects the proposal of the licensee.

16.22 Meanwhile, the licensee should conduct a study for conversion of tariff structure in to KVaH based tariff such that the incentive penalty mechanism will get in built in the tariffs.

Delayed Payment Surcharge

Licensee's submission

16.23 The licensee has submitted that during the public hearing for ARR & Tariff Petition FY 2006-07 various consumers has contended that 2% per month DPS chargeable for delayed payment of bills is very high and should be reduced. Accordingly, the licensee has proposed to revise the delayed payment surcharge rate to 1.5% per month and part thereof. However, for industrial consumers in HTS & HTSS, the licensee has proposed that the DPS is charged on a weekly basis and the rate of DPS proposed is 0.4% per week.

Views of the Commission

16.24 Keeping in view the interests of the consumers, the Commission accepts the proposal of the licensee.

ToD Tariffs

Licensee's submission

16.25 The licensee has proposed to design the ToD tariff such that it which would flatten the load curve and partially shift the load to the off peak period. The following is the ToD tariff proposed by the licensee

Table 169: Proposed ToD Tariff

Description	Proposed Time blocks	Proposed Tariff (plus Demand charges as applicable)
Off Peak Hour	10.00 PM - 06.00 AM	85% of normal rate of Energy Charge
Normal Hours	10.00 AM - 06.00 PM	Normal Tariff
Peak Hours	06.00 PM - 10.00 PM	200% of normal rate of Energy Charge
Peak Hours	06.00 AM - 10.00 AM	200% of normal rate of Energy Charge

Views of the Commission

16.26 The Commission has reviewed the ToD tariffs for various states and also compared the proposal of the licensee with the tariffs in the states.

Table 170: Existing ToD Tariff for HTS category

State	ToD Tariff (surcharge plus demand charges as applicable)	
	Peak Hour	Non-Peak hour
Madhya Pradesh	15%	7.5% as rebate
Gujarat	15% to 20% as per different slabs	10% to 25% as per different slabs
Bihar	20%	10%
Maharashtra	10% to 35% as per different slabs	10% to 35% as per different slabs
Jharkhand (Proposed)	100%	15%

16.27 The Commission observes that the peak hour tariff as proposed by the licensee is very high. The Commission decides to fix the off peak hour as proposed by the licensee and peak hour tariff at 20% higher rate than the energy charge, which is as per the tariff structure of Bihar.

16.28 The Commission directs the licensee to review the load curve as per the ToD tariff structure approved and submit a report to the Commission. The Commission will accordingly review the ToD tariff structure in the next ARR.

16.29 Meanwhile, the Commission also directs the licensee to implement the Non-Sunday Off Scheme, which was proposed by JUSCO in its previous ARR & Tariff petition for FY 2009-10.

Table 171: Additional rebate for Staggering Day

Criteria	Additional Tariff Rebate/Penalty (% of Energy Charges)
<p>Customer Opted and sanctioned for Non Sunday Off Scheme and</p> <ul style="list-style-type: none"> a) Max. Demand on declared off day is less than 20 % of Max. Demand recorded for the month; and b) Energy recorded on declared off day is less than 20% of the Average Energy drawn during the month on a particular day 	<p>A rebate of 1.25% on total bill amount excluding duty, arrears, and other charges not specifically for that particular month.</p>
<p>Customer opted and sanctioned for Non Sunday Off scheme and Non-Compliance of either a) or b).</p>	<p>A penalty of 2.5% on total bill amount excluding duty, arrears, and other charges not specifically for that particular month</p>

16.30 The Commission directs the licensee to prepare a circular for implementation of the scheme along with the terms and conditions and submit the same to the Commission for approval. The timelines for this are given in the directive section of this order.

Miscellaneous charges and Terms & Conditions of Supply

Licensee's submission

16.31 The licensee has proposed to increase the miscellaneous charges and terms & conditions of supply for various activities, as given in Volume III of the petition for FY 2008-09.

Views of the Commission

16.32 The Commission has observed that the licensee has not given any justification for the proposed miscellaneous charges and also proposed the increase in miscellaneous charges without considering its effect on the ARR through the change in Non Tariff Income (NTI). The Commission directs the licensee to consider the impact of the proposed miscellaneous charges and show separate calculations for NTI at existing miscellaneous charges and NTI at proposed miscellaneous charges with details with a separate petition or while filing the next ARR. Till such time, the Commission retains all the miscellaneous charges as approved in the Tariff Order of FY 2006-07 (depicted in Section 17 of this Order).

16.33 As mentioned earlier in Section 6 of this Order, the licensee has not pointed out any specific terms and conditions of supply which are not mentioned in the Supply Code. As and when the licensee brings to the notice of the Commission any special situation/condition which warrants issue of specific term in the Supply Code, the Commission will consider accordingly.

A17: TARIFF SCHEDULE

APPLICABLE FROM 1ST MAY 2010

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.
- (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, with power supply at 11KV voltage level and load above 75 KW.

Service Character:

- (i) For DS-I (a): AC, 50 Cycles, Single phase at 230 volts for Kutir Jyoti connection for load below 0.03 KW
- (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.

Tariff:

Consumer category	Fixed Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate (Rs/Kwh)	Rate (Rs/Kwh)
DS-I (a), Kutir Jyoti Connections, metered	NA	Rs./kWh	1.10 (optional metered tariff)	Nil
DS-I (a), Kutir Jyoti Connections, unmetered	Rs. 30 per connection per month	Rs./kWh	0	Nil
DS - I (b)- other rural domestic consumers, metered	NA	Rs./kWh	1.10 (optional metered tariff)	Nil
DS - I (b)- other rural domestic consumers, unmetered	Rs. 72 per connection per month	Rs./kWh	0	Nil
DS – II	Rs 25 per connection per month (0-200 kWh)	Rs./kWh (0-200 Units)	1.50	Nil
	Rs 30 per connection per month (Above 200 kWh)	Rs./kWh (Above 200 Units)	1.90	Nil
DS – III	Rs. 50 per connection per month	Rs./kWh	1.90	Nil
DS HT	Rs. 40 per kVA per month	Rs./kWh	1.65	Nil

Delayed Payment Surcharge:

For Domestic Service category, the delayed payment surcharge will be at the rate of 1.5% per month and part thereof.

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 Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate (Rs/Kwh)	Rate (Rs/Kwh)
NDS – I, <=2 kW	NA	Rs./kWh	1.35	Nil
NDS-I, unmetered	Rs. 120 per kW per month Rs. 60 per kW per month for each additional 1 kW or part thereof	Rs./kWh	0	Nil
NDS – II	Rs. 110 per kW per month	Rs./kWh	3.95	Nil

Delayed Payment Surcharge:

For Non Domestic Category, the Delayed Payment Surcharge will at the rate of 1.5% per month and part thereof.

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:

Consumer category	Fixed Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate (Rs/Kwh)	Rate (Rs/Kwh)
LTIS	Rs. 75 /HP per month	Rs./Kwh	3.50	Nil

All consumer 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 KVA.

All consumer 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.

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.

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.

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 Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate (Rs/Kwh)	Rate (Rs/Kwh)
IAS - I (Metered)	Nil	Rs./kWh	0.50	Nil
IAS - I (Unmetered)	Rs 50/HP/month	Rs./kWh	0	Nil
IAS - II (Metered)	Nil	Rs./kWh	0.75	Nil
IAS – II (Unmetered)	Rs 200/HP/month	Rs./kW	0	Nil

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.

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	Fixed Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate (Rs/Kwh)	Rate (Rs/Kwh)
HTS - 11 kV	Rs. 165 per kVA per month	Rs./kW	4.35	Nil
HTS - 33 kV	Rs. 165 per kVA per month	Rs./kW	4.35	Nil
HTS - 132 kV	Rs. 165 per kVA per month	Rs./kW	4.35	Nil

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%

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.

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.

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, 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.

For billing, the demand shall be the maximum demand recorded during the month or 75% of the contract demand, whichever is higher.

Tariff:

Consumer category	Fixed Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate (Rs/Kwh)	Rate (Rs/Kwh)
HTSS - 11 kV	Rs. 330 per kVA per month	Rs./kW	2.50	Nil
HTSS - 33 kV	Rs. 330 per kVA per month	Rs./kW	2.50	Nil
HTSS - 132 kV	Rs. 330 per kVA per month	Rs./kW	2.50	Nil

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%

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.

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.

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	Fixed Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate (Rs/Kwh)	Rate (Rs/Kwh)
RTS	Rs. 180/kVA/month	Rs./kWh	4.50	NA

Delayed Payment Surcharge:

For Railway Traction service category, the Delayed Payment Surcharge will at the rate of 1.5% per month and part thereof.

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	Fixed Charge	Energy Charge		Minimum Monthly Charge
	Rate	Unit	Rate	Rate
SS-I (Metered)	Rs. 25/ Connection/month	Rs./kWh	3.50	NA
SS-II (Unmetered)	Rs. 110/ Connection/month	Rs./kWh	0	NA

Delayed Payment Surcharge:

For Street Light service category, the Delayed Payment Surcharge will at the rate of 1.5% per month and part thereof.

Rural Electric Co-operative (REC)

Applicability

This tariff schedule shall apply for use in Electric Co-operatives (licensee) 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 11 kV.

Tariff:

Consumer category	Fixed Charge	Energy Charge		Minimum Monthly Charge
	<i>Rate</i>	<i>Unit</i>	<i>Rate</i>	<i>Rate</i>
REC	NA	Rs./kWh	0.70	NA

Delayed Payment Surcharge:

For Rural Electric Cooperative service category, the Delayed Payment Surcharge will at the rate of 1.5% per month and part thereof.

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 Charge	Energy Charge		Minimum Monthly Charge
	<i>Rate</i>	<i>Unit</i>	<i>Rate</i>	<i>Rate</i>
Bulk Supply to MES	Rs. 160 per kVA per month	Rs./kW	3.00	Nil

Delayed Payment Surcharge:

For Military Engineering service category, the Delayed Payment Surcharge will at the rate of 1.5% per month and part thereof.

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 no 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		

S No.	Purpose	Scale of Charges	Manner in which payment will be realized
	broken		
	Single phase	25	Payable with energy bill
	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

A18: STATUS OF THE DIRECTIVES ISSUED BY THE COMMISSION IN THE TARIFF ORDER OF FY 2003-04

Directives as per Tariff Order 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
<p>Metering and Kutir Jyoti scheme</p> <p>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.</p> <p>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.</p>	<p>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.</p>	<p>The Commission is of the view that the Board should have provided an action plan for complete metering with in 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 Board has no monitoring process as such.</p>	<p>JSEB submits that it has been taking steps to curb the theft by replacing the non-performing/ defective meters on a regular basis.</p> <p>It is further in the process of replacement of defective meters actively and would replace all the defective meter</p>	<p>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.</p>
<p>Performance of PTPS Substation</p> <p>The Commission directed the Board to undertake necessary steps to reduce SHR and increase the PLF to its optimal level and to separately</p>	<p>The Board submitted that it has signed an agreement with NTPC on 30th August 2005 under partners in Excellence Program</p>	<p>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</p>	<p>The Board submitted that it has taken up overhauling and repairing work for almost all the units of PTPS and</p>	<p>The petitioner has not given any overhauling plan for each of its Unit, within a period of three</p>

Directives as per Tariff Order 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
<p>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</p> <p>To submit an action plan with in three months for proper fuel management system to improve the efficiency of plant.</p>	<p>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 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.</p>	<p>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 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.</p>	<p>the timeliness for commissioning of each is submitted with the proposal.</p>	<p>months.</p>
<p>Evacuating 100% power from TVNL Station</p> <p>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</p>	<p>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</p>	<p>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.</p>	<p>The Board has not submitted any response in regards to this directive in the Tariff Petition of FY 2008-09.</p>	<p>The Petitioner is directed to give the status report within three months of this order</p>

Directives as per Tariff Order 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
within one month from the date of issue order for FY 2003-04.				

A19: STATUS OF THE DIRECTIVES ISSUED BY THE COMMISSION WITH THE TARIFF ORDER FY 2006-07

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's views/Directives
<p>Sales Estimates and Projections</p> <p>The Commission directed the Licensee to undertake a detailed study for load research and demand forecast in order to correctly workout its short term and long term energy requirement</p>	<p>The Licensee 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.</p> <p>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).</p> <p>The Licensee 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.</p>	<p>The Commission directs the petitioner to submit the status report within 3 months of this Order.</p> <p>The Commission also directs the Licensee to submit the status report on the RFP for BREMS within three months of the issue of this order.</p>
<p>Circle level category-wise consumption</p> <p>The Commission directed the Licensee 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 licensee that in the next tariff petition, the licensee 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.</p>	<p>The licensee 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 licensee 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 licensee has submitted the raw data to the commission which it states that is in the crude form and may be inconsistent.</p>	<p>The Commission views that since the Petition was filed last year, the licensee had sufficient time since then to get the required data compiled. The Commission directs the licensee to start submitting the data within three months of this Order and in every quarter subsequently.</p>

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's views/Directives
	<p>The licensee 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).</p>	
<p>T&D Loss Estimate</p> <p>The Commission directed the licensee to formulate a task force for supervising the T&D loss in the state. The Commission also directed the Licensee 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.</p> <p>The Licensee was also directed to reduce its T&D loss by 4% every year till normative T&D loss level is reached.</p>	<p>The licensee 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 licensee 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.</p> <p>The licensee submitted that energy audit for all voltage levels, circles and division is undertaken by the energy audit cell of the licensee and the report on the same would be submitted as soon as the accurate results are achieved.</p> <p>The licensee 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.</p> <p>The licensee has also submitted that it has constituted special task force of two teams headed by an ESE.</p> <p>The licensee has submitted that it expects to reach the normative</p>	<p>The Commission feels the steps taken by the licensee are not sufficient as no quantitative results can be seen.</p> <p>The licensee 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.</p> <p>Regarding T&D loss reduction the Commission directs the licensee to follow the trajectory given in Section 7 & 11 of this Order. The results of steps taken be informed every three months</p>

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's views/Directives
	levels by FY 2014-15.	
<p>Metering Plan</p> <p>The Commission directed the licensee to formulate and submit a metering plan within a period of three months from the date of issue of order.</p> <p>The Commission also directed the licensee 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.</p>	<p>JSEB submits that it has been taking steps to curb the theft by replacing the non-performing/ defective meters on a regular basis.</p> <p>It is further in the process of replacement of defective meters actively and would replace all the defective meter</p>	<p>The Licensee has not complied with the directive of submitting the Metering Plan. The licensee 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.</p> <p>The Licensee shall ensure that the Metering plan is synchronized with the T&D loss reduction plan.</p>
<p>Feasibility Study for ToD tariff implementation</p> <p>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.</p>	<p>JSEB submitted that it would undertake such study with the motive to provide positive results in due course of time.</p>	<p>The Commission directs the petitioner to conduct the study within six months of this Order.</p>
<p>Cost of Supply study</p> <p>The Commission directed the licensee 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</p>	<p>The Licensee 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.</p> <p>The Licensee is also in the process of hiring the services of experienced consultant to undertake the study</p>	<p>The Commission directs the Licensee to submit the action taken report in this regard within three months of the issue of this order.</p>
<p>Performance of Self owned power plants</p> <p>The Commission directed the licensee to undertake necessary measures for increasing the PLF to its optimal level and to reduce SHR from the existing level and</p>	<p>The Licensee 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</p>	<p>The Commission directs the licensee 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</p>

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's views/Directives
<p>appropriately benchmark the working units with plants of similar background and age.</p> <p>The Commission directed the Licensee to step up its supervision to reduce the transit loss.</p> <p>The Commission directed the Licensee to look into the matter of silting immediately and resolve the conflicts, if any, on priority to improve generation from this plant.</p>	<p>submitted with the proposal.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>stations to the Commission. The Commission also directs the licensee 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.</p>
<p>Power Purchase and UI Sale</p> <p>The Commission directed the Licensee 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 Licensee to post the following information on its website every month:</p> <ol style="list-style-type: none"> Month Energy Purchased Electricity bill on account of energy purchased Hydel and Thermal generation Energy sold Energy billed Revenue collected 	<p>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.</p> <p>The Licensee has submitted that updated position of unit purchased from thermal units as well as hydel units along with UI sales and</p>	<p>The Commission directs the licensee to submit within one month 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.</p>

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's views/Directives
<p>h. Energy sold under UI i. Amount received under UI</p>	<p>purchase for FY 09-10.</p>	
<p>Actuarial Studies</p> <p>The Commission directed the Licensee 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.</p>	<p>The Licensee 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.</p> <p>JSEB further states that whenever the analysis is done and first hand results are available, a brief report would be submitted to the Commission.</p>	<p>The Commission directs the licensee 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.</p>
<p>Capitalization and Asset Registers</p> <p>The commission directed the Licensee to declare its capitalization policy and to provide the details regarding CWIP in the next tariff petition.</p> <p>The Commission therefore, directs the Licensee to provide data related to fixed assets and maintain an asset register classifying assets on the basis of appendix II of, JSERC Regulations, 2004.</p>	<p>JSEB submitted that it has already declared the capital expenditure plan for FY 2008-09 along with the ARR</p> <p>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.</p>	<p>The Commission directs the licensee to conduct study and creation of Fixed Asset Registers(FAR).</p> <p>The Fixed Assets register should be prepared within the time bound manner and the licensee should submit the action taken report to the Commission in this regard within six months of the issue of this Order.</p>
<p>Audited Accounts</p> <p>The Commission directed the Licensee to submit the audited annual accounts and asset registers for the previous years with detailed explanation and clarification. The Commission also directed the Licensee 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</p>	<p>The Licensee submits that the audit of annual 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.</p> <p>The Licensee states that it has already approved provisional annual accounts till FY 2005-06 and has submitted the same to CAG for audit. The audit of</p>	<p>The Commission directs the licensee to file the next tariff petition for FY 2011-12 by 1st November 2010 along with the audited accounts.</p>

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's views/Directives
order.	accounts by CAG is underway and would be submitted to the Commission upon approval of finalised Annual accounts by CAG.	
<p>Delayed Payment Surcharge</p> <p>The Commission directed the Licensee 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</p>	<p>The Licensee 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</p>	<p>The Commission directs the licensee to submit half yearly reports on the collection and arrears of DPS. The Commission also directs the licensee to formulate measures for resolving the problem of collection of DPS and submit the report within six months of the issue of this Order.</p>
<p>Standard of Performance</p> <p>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 Licensee fails to implement this, the energy charge for all categories may be reduced by 2.5% from that date.</p>	<p>The Licensee 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.</p> <p>The Licensee 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.</p>	<p>The Commission directs the licensee 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%.</p>
<p>Rural Consumers</p> <p>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.</p>	<p>The licensee 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.</p>	<p>The Commission directs the licensee 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.</p>
<p>Rural Electric Co-operative (Bulk Supply)</p> <p>The Commission directed the</p>		

Directives as per TO 2006-07	JSEB's Response in Tariff Petition of FY 2008-09	Commission's views/Directives
<p>Licensee 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.</p>	<p>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.</p> <p>The Licensee opines that this category may be retained as in future such consumers may request for a connection under this category.</p>	<p>The Commission views that since sufficient time has passed since the tariff petition was filed so the licensee should submit a status report whether any consumer has applied under this category and also whether the licensee has been able to identify any potential consumers. The directive should be complied within one month of this order failing which this category will be deleted .</p>
<p>High Tension Service and EHTS Category</p> <p>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.</p>	<p>The Licensee has submitted the data pertaining to number of consumers and load.</p>	<p>The Commission views that since the Petition was filed last year, the licensee had sufficient time since then to get the required data compiled.</p> <p>However, only the number of consumer and load has been supplied to the Commission.</p> <p>The Commission directs the licensee to submit the complete data within six months of this Order.</p>

A20: NEW DIRECTIVES

20.1 The Commission has observed through out the tariff petition that some areas of the operational and financial performance of the licensee require further improvement. Therefore, the Commission is issuing the following directives:

Complaint Redressal Mechanism

20.2 The Commission observed during the public hearings that many respondents complained about the lack of promptness and accessibility for registering the complaints for speedy redressal of their complaints. The Commission also views that the licensee need to have a robust complaint redressal mechanism at the grass root level so that the licensee is in a position to address the complaints of all consumers in a speedy manner. The Commission directs the licensee to implement the complaint redressal mechanism at the grass root level within six month of the issue of this Order and submit the compliance report to the Commission within the time frame.

Consumer Grievance Redressal Forum (CGRF)

20.3 The Commission observes that since there is only one CGRF in place in the entire area of the licensee, the Forum is not able to cater to the problem of the consumers. Therefore, the Commission directs the licensee to set-up new unit(s) of CGRF within six months of the issue of this Order.

20.4 The location of the new unit(s) may be decided on the basis of the higher cluster of consumers. However, the Commission leaves it to the discretion of the licensee to decide the location of the new unit.

Bill Payment Mechanism

20.5 The Commission has observed that the consumers face great difficulty in payment of bills because of insufficient number of bill payment counters. Moreover, the licensee has not provided alternative options of payment of bills for consumers.

20.6 The Commission directs the petitioner to initiate the drop-box facility for bill deposition and also develop a plan for online payment of bills. The licensee should also tie-up with various Banks for availing the facility of collection of payments through Banks. The compliance in this respect is to be reported within six months of this Order.

Billing related issues

20.7 The Commission has observed that one of the major reasons for higher T&D losses is the inability of the licensee to bill its consumers. It has been observed that despite selling energy on regular basis, there are cases where the licensee has failed to bill the consumers. As mentioned in the earlier directives in Section A19: of this Order, the licensee is directed to develop a comprehensive metering plan. The licensee should also ensure that it strengthens its metering, billing and collection mechanism, especially in the loss affected areas.

Timely Energisation of new connection

20.8 The Commission has observed that the licensee does not have a robust process to ensure that the new connections are energized in time. This is leading to hooking and theft of energy by consumers who are unable to get the new connection in time. As mentioned in the earlier directives in Section A19: of this order, the licensee should 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.

Camps for providing new connections in uncovered areas

20.9 The Commission has also observed that the licensee is not providing metered connections in many areas which is again leading to commercial losses to the utility because these people resort to illegal methods of using electricity. The Commission directs the licensee 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 directs the licensee to develop an action plan for the above and submit the same to the Commission within six months of this Order.

Data adequacy in next Tariff Petition and audit of accounts

20.10 The Commission directs the licensee to come up with the next tariff petition for FY 2011-12, after removing the various data deficiencies highlighted in this Tariff Order along with the audited account of FY 2009-10 and the latest information for FY 2010-11. The Commission also directs the licensee to ensure submission of subsequent ARR & Tariff filings for the ensuing years by 1st November every year.

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on this the 26th day of April, 2010.

Date: 26th April, 2010

Place: Ranchi

Sd/-
(MUKHTIAR SINGH)
CHAIRPERSON

**JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION
RANCHI**

Suo Motu Case No. **01** of **2010**

MUKHTIAR SINGH, Chairperson

IN THE MATTER OF

In compliance with the directions issued by the Hon'ble Appellate Tribunal for Electricity, New Delhi in Appeal No. 129 of 2007 and in I.A. No. 78 of 2009 and for determination of distribution of the licensee-JSEB for FY 2010-11.

AND

IN THE MATTER OF

1. Jharkhand Rice Millers Association, Ranchi.
2. Ranchi Goods Transport Association, Ranchi
3. Madhupur Chamber of Commerce, Madhupur
4. Jharkhand Induction Furnace Association, Dhanbad
5. Aditya Birla Chemicals (India) Ltd., Palamau
6. Jharkhand Small Industries Association, Ranchi
7. Shishir Kumar Poddar, Tirupati Carbons & Chemicals (P), Ltd., Ranchi
8. Federation of Jharkhand Chamber of Commerce & Industries, Ranchi

..... Interveners/Petitioners

For the Petitioners:

Shri Madhusudan Mittal, Advocate
Shri Ajit Kumar, Advocate
Shri Vijay Kumar Gupta, Advocate
Shri Biren Poddar, Advocate

For the licensee-JSEB:

Shri S.C. Mishra, E.S.E. (Comml.)
Shri Ashok Kumar
Shri Naresh Desai



ORDER
(10.03.2010)

The present case was posted for today by order dated 20.2.2010 whereby the Commission, after considering the submissions of the licensee-JSEB has decided to proceed to determine the provisional tariff of the licensee-JSEB for FY 2010-11, suo-motu, to comply with the Hon'ble Appellate Tribunal for Electricity's order dated 8.5.2008 passed in Appeal No. 129 of 2007 and order dated 23.9.2009 passed in I.A. No. 78 of 2009 filed on behalf of the licensee-JSEB, on the basis of the materials available with the Commission. Accordingly, a direction was issued to the licensee-JSEB publish notice inviting objections/suggestions/comments on the ARR for FY 2007-08 & 2008-09 and the tariff petition for FY 2008-09 filed by the licensee-JSEB. Pursuant to this direction, the licensee-JSEB had published the said notice in different newspapers inviting comments/suggestions/objections on the said ARR and tariff petition by 9.3.2010. Moreover, the Commission has also published the schedule for public hearings in the various newspapers of Jharkhand edition. Some objections/comments/suggestions have also been received by the licensee-JSEB as well as by the Commission. Therefore, there is nothing remain in this proceeding as the process for determination of tariff has already been initiated.

The Commission has also received intervener applications on behalf of the aforesaid petitioners. The main prayer of the interveners are to allow them to intervene in this suo-motu proceeding. A separate petition has also been filed by Shri Shishir Kumar Poddar, wherein a prayer for rectification/modification/clarification of the order dated 20.2.2010 passed by the Commission in this case.

Heard.

The main argument on behalf of the interveners/petitioners is that this Commission does not have the jurisdiction to proceed, suo-motu, under the Electricity Act, 2003 (hereinafter referred to as the 'Act'). It was argued that Section 64(3) of the Electricity Act, 2003 envisages that the Commission shall proceed for determination of tariff on receipt of an application as provided in sub-section (1) of this Section and the Commission shall complete the exercise of tariff determination within 120 days from the receipt of such application.

On behalf of the licensee-JSEB it was pointed out that Section 64(3) of the Electricity Act, 2003 should not be read in isolation rather it should be read along with other provisions of the Act. Section 3 read with Section 61 (i) of the Act provides for consideration of National Electricity Policy and Tariff Policy while determining the tariff. In this context it was also pointed out on behalf of the licensee-JSEB that the Tariff Policy framed under Section 3 of the Act by the Ministry of Power, Government of India

vide Resolution No. 23/2/2005-R&R (Vol.III) dated 6th January 2006 speaks about suo-motu initiation of the proceeding for determination of tariff by the Appropriate Commission.

The Commission though agree with the interveners/petitioners that Section 64(3) of the Electricity Act 2003 speaks about the filing of the application by the licensee and disposal thereof by the Commission within 120 days of its receipt. But this section does not say that the Appropriate Commission shall initiate proceedings **only** on receipt of such application. Had it been the intention of the Legislature, it would have specifically provided so. If the argument of the interveners/petitioners is accepted, it would mean that the Commission, which is a statutory regulatory body enjoined with the powers to determine the tariff and regulate the activities of the licensees, in the interest of the consumers and development of the industries, will be compelled to sit idle and the very purpose of constituting of the Commission would be defeated. This view finds support from the aforesaid Tariff Policy also formulated by the Government of India under Section 3 of the Act. The relevant para of the said Tariff Policy is reproduced below:

“Para 8.1(7): *Appropriate Commission should initiate tariff determination and regulatory scrutiny on a suo moto basis in case the licensee does not initiate filings in time. It is desirable that requisite tariff changes come into effect from the date of commencement of each financial year and any gap on account of delay in filing should be on account of licensee.”*

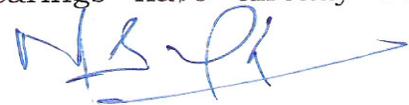


Page 4 of 6

In this context the Commission also refers provisions of Clause 31.2 of the JSERC (Terms & Conditions for Distribution Tariff) Regulations 2004 according to which it is mandatory for the distribution licensees to file tariff application by 1st November every year for the ensuing financial year. Since the licensee-JSEB has failed to file such application, the Commission has initiated suo-motu proceeding.

From the above, it is abundantly clear that this Commission has jurisdiction to proceed suo motu for determination of tariff and regulatory scrutiny, if the licensee does not file it in time. The action of the Commission is perfectly in accordance with the provisions of the Electricity Act 2003 and the Regulations framed thereunder. The Commission has also initiated this proceeding so that the order of the Hon'ble Tribunal can be complied with. Hence the argument of the petitioners/interveners that this Commission does not have the jurisdiction to proceed, suo-motu, in the facts and circumstances of this case, is hereby rejected.

The other argument on behalf of the interveners/petitioners is that by initiation of suo-motu proceeding, their interest will be adversely affected and they do not have the alternative remedy but to join as interveners. To me, this argument is based on unfounded apprehensions. The public notice was issued in all the leading newspapers inviting objections/suggestions/comments from all the stakeholders. Besides, the public hearings have already been



notified at five different places in the State of Jharkhand, which also has been given wide publicity. Therefore, the consumers and other stakeholders are at liberty to avail of the opportunity and put forth their comments/suggestions/objections by participating in those public hearings. The Commission is glad to note that the licensee and this Commission's office are already in receipt of some comments/objections/suggestions from various quarters pursuant to the notice published by the licensee.

In view of the above, the Commission do not find any merit in the intervention petitions of the petitioners and as such the same are rejected. As far as other suggestions/objections/comments are concerned, they are at liberty to raise them at the public hearings.

With the above observations the petitions of the petitioners are disposed off.


(Mukhtiar Singh)
Chairperson

10/03/2010

W.P. (PIL) No. 693 of 2004

In the matter of an application under Article 226 of the Constitution of India



1. The Jharkhand State Electricity Supply Workers Union through its General Secretary Balkunth Nath Singh
 2. The Jharkhand Power Engineers Service Association through its General Secretary Akshay Kumar
- Petitioners

-versus-

1. Jharkhand State Electricity Regulatory Commission through its Chairman and the Secretary, Second Floor, Rajendra Bhawan-cum-Sainik Bazar, Main Road, Ranchi 834 001.
 2. Jharkhand State Electricity Board through its Chairman, Kusai Colony, Doranda, P.S. Doranda, District Ranchi.
 3. Chief Engineer, Jharkhand State Electricity Board, Kusai Colony, Doranda, District Ranchi.
 4. State of Jharkhand through its Chief Secretary, Govt. of Jharkhand, Project Building, Dhurwa, Ranchi.
 5. Secretary, Department of Energy, Govt. of Jharkhand, Ranchi.
- Respondents.

For the Petitioners : Mr. M.S. Anwar, Sr. Advocate
Mr. Ramit Satender, Advocate

For the Respondents : Mr. Anil Kumar Sinha, A.G.
Mr. Delip Jerath, Advocate

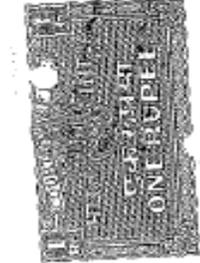
PRESENT
HON'BLE THE CHIEF JUSTICE
HON'BLE MR. JUSTICE TAPEN SEN

C.A.V. on 24.02.2004

Pronounced on 15/03/2004

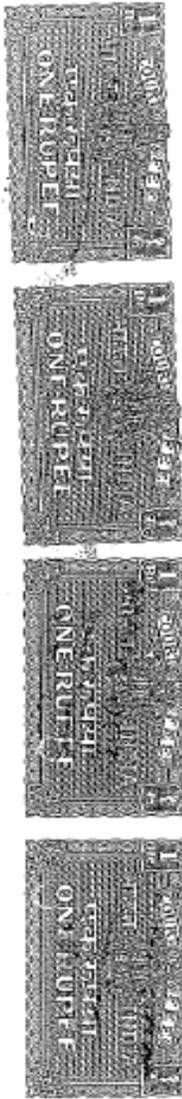
P.K. Balasubramanyan, C.J. This writ petition is filed by the Jharkhand State Electricity Supply Workers' Union and the Jharkhand Power Engineers Service Association, both consisting of the employees of Jharkhand State Electricity Board. The writ petition is filed challenging the tariff determination made by the Jharkhand State Electricity Regulatory Commission notified as the Tariff Order 2003-04. This writ petition, said to be in public

interest, strangely seeks to challenge the fixation of the tariff or the revision of the tariff, on the ground that the revision should have been higher or the tariff should have been fixed at a higher rate than the ones now adopted by the Regulatory Commission. There is also a prayer for the issue of a direction to the State to fill up the vacant posts in the Jharkhand State Electricity Board on the plea that more number of workers are needed for attending to the work of the Board. The further prayer is for the issue of a direction that more power should be purchased from the Damodar Valley Corporation than from the Tenughat Vidyut Nigam Limited as has now been suggested by the Tariff Commission. We asked learned counsel for the petitioner how public interest was subserved by this writ petition and whether this was not a writ petition by the Union seeking the improvement of the service conditions of the workmen or increase in employment opportunities? We also asked counsel a question as to how the prayer for fixing tariff at a higher rate would benefit the common man or the consumer? The answer was that by not fixing the rates at a higher figure, the workers would be considerably affected since there could be no increase in their emoluments and there would also be difficulty in meeting the obligation to pay their salaries and perquisites and this approach was adopted with a view to slowly privatize electric generation and transmission and to do away with the Board. It was also contended that the Regulatory Commission was not properly constituted under the Electricity Regulatory Commissions Act, 1998 since only a Chairman has been appointed without any member and that the recommendation of



such a Regulatory Commission was, therefore, void in law. It was also submitted that the Electricity Board was expected to make some profit, though not substantial profits, even while serving the need of the State and that of the citizens by generation and supply and the economic aspect has been lost sight of by the Regulatory Commission while fixing the tariff. It is also submitted that the rates payable by the industrial consumers have been reduced from what they were obliged to pay earlier and increase in the case of non-industrial consumer was so marginal that it amounts to no increase at all and this results in the increasing needs of the Board not being taken care of. It is thus submitted that the writ petition is filed in public interest, since it is necessary for the Board to survive so that the generation and supply of electrical energy could be properly attended to by a Board, served by an adequate and qualified staff.

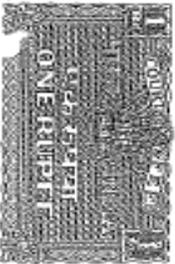
2. As regards establishment of State Electricity Regulatory Commission, Section 17(4) of the Electricity Regulatory Commissions, 1998 was referred to. Section 17(4) provides: - "State Commission shall consist of not more than 3 members, including the chairperson". Here, only the chairperson was named and no members were named. Since, the State Commission was to consist of not more than 3 (three) members including the chairperson, the State Commission would be complete only if at least the chairperson and a member were nominated. Section 82(4) of the Electricity Act, 2003 which has repealed the Regulatory Commissions Act was also referred to. That provision also provides that the State Commission shall



consist of not more than 3 (three) persons including a chairperson. Black's Law Dictionary was referred to explain the meaning of the expression 'including' to argue that, that indicated that at least one member had to be nominated along with the chairperson to constitute a Commission. We find considerable difficulty in accepting the submission. The relevant provision in both the enactments only says that the State Commission shall consist of not more than three members including the chairperson. It does not insist that there should be 3 (three) members to constitute the State Commission. We may now contrast Section 17(3) of the Regulatory Commissions Act with Section 3(4) of the Regulatory Commissions Act relating to the establishment and incorporation of the Central Commission. The said provision reads:-

- (4) *The Central Commission shall consist of the following members namely:-*
- (a) *a Chairperson and three other members;*
- (b) *the Chairman of the Central Electrical Authority appointed under sub-section(3) of Section 3 of the Electricity Supply Act, 1948, who shall be the Member, ex officio.*

The difference between the two provisions are obvious. Whereas for the constitution of the Central Commission a chairperson and three other members are mandatory, for constitution of the State Commission, the provision is only that it shall consist of not more than 3 (three) members, including the chairperson. There is no insistence that there should be three members including the chairperson to constitute the State Commission. When we come to the Electricity Act, 2003, this



distinction between the Constitution of the Central Commission and that of the State Commission is maintained. Whereas Section 76(5) of the Electricity Act, 2003 insists that Central Commission shall consist of chairperson and three other members, Section 82(4) only provides that the State Commission shall consist of not more than 3 (three) members, including the chairperson. It, therefore, appears to us that as far as the State Commission is concerned, it will be enough if the chairman is named, though it may be open to the State Government concerned to have a State Commission consisting of three members, including the chairperson. Therefore, merely because only the chairperson was notified by the State of Jharkhand, it could not be said that the State Regulatory Commission under the Regulatory Commissions Act was not properly constituted or that the tariff recommended by it is void or unenforceable.

3. As we have noticed, the complaint is that the tariff favours consumers and the rates fixed should have been higher. This prayer in our view cannot be said to subserve public interest. Public interest here is necessarily that of the consumers who should be provided with adequate power at reasonable rates and not the interests of the employees of the Electricity Board looking for more pay or more opportunities for employment. Incidentally, we may notice that the State Electricity Boards themselves would stand wound up on the expiry of one year from the coming into force of the Electricity Act, 2003 on 10.06.2003. Therefore, this part of the prayer for filling up of the posts in the Electricity Board before it has its statutory death, cannot be said to be in public interest. At best, this is some sort of a dispute

which the Union can raise at the appropriate level under the aegis of the Industrial Disputes Act, 1947.

4. Similarly, the argument that more power should be purchased from the Damodar Valley Corporation and less energy should be purchased from the Tenughat Vidyut Nigam Limited, concerns policy and it is not for this Court to direct the Government as to from which source it should purchase power or from which source it should purchase more power. We must also remember that we are not sitting in appeal over the decision of the Regulatory Commission in a writ petition of this nature. Since we find no illegality attached to the constitution of the State Commission which was the main plank of challenge by learned counsel for the petitioner, we are not satisfied that this writ petition deserves to be admitted as a public interest litigation. After all, as and when any consumer comes forward complaining of the tariff fixed, this court can examine the same within the confines of Article 226 of the Constitution of India. We do not think that an occasion for directing the hiking up of tariff rates at the instance of the petitioner-Union has arisen or is warranted in this writ petition.

We dismiss the writ petition.

— P. K. Baksubramanian, C.J.

— Tapen Sen, J.

Jharkhand High Court, Ranchi
Dated 15/3/2004.
Ambastha/

Certified to be true Copy

Bachchan
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Disregard
Admission Letter no. 1 of 1977

13th Jyestha, 1929
17/03/08

Signature
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P. 01

JHARKHAND STATE ELECTRICITY BOARD
Engineering Building, Dhurva, Ranchi - 834 004

Letter no. L-12Dated 28/3/10

From,

V.P. Dubey
Director of Finance

To,

The Secretary
JSERC, Ranchi

Sub: - Information regarding resource gap received in Financial Year 2008-09.

Sir,

As desired, It is to confirm that JSEB has received a sum of Rs. 80.00 Crores from GOJ during financial year 2008-09 as resource gap.

This same has been indicated in ARR petition 2008-09 table 2.2 page 7 of 44.

This amount may be treated for fixation of tariff.

Thanking you.

Yours faithfully


(V.P. Dubey)
Director of Finance

ANNEXURE-IV

List of participating members of public in the public hearing

S No.	Name	Address / Organisation if any	Place of Hearing
1	Tarkeshwar Singh	President Santhal pragana Chamber of Commerce, Deoghar	Deoghar
2	Pradeep Bajla	Modern Industries, Deoghar	Deoghar
3	Jitendra Keshri	Shayamgang Road B, Deoghar	Deoghar
4	Ashok Kumar Agarwal	General Secretary Chamber of Industries, Santhal Pargana, Deoghar	Deoghar
5	Ranjeet Kumar	Reporter Punjab Keshri	Deoghar
6	B.S. Bajpai	Reporter	Deoghar
7	Rakesh Ranjan	B.J.P. Mandal, J.C.D)	Deoghar
8	R.N. Sharma	S.P. Small Industries Asso.	Deoghar
9	J.P. Chaudhary	Vipro	Deoghar
10	Ashok Kumar	Reporter, Aaj	Deoghar
11	Sanjay Kumar Rai	Jasidih, Ratanpur	Deoghar
12	Jems Kumar Nabab	Reporter, Indian Punch	Deoghar
13	Sunit Kumar	Aaj Court Road, Deoghar	Deoghar
14	Arun Keshri	Hindustan Press	Deoghar
15	Rajkumar Sah	News 11, Deoghar	Deoghar
16	Suman Saurav	Ranchi Express	Deoghar
17	Alok Kumar	Ranchi Express	Deoghar
18	Madan	Deoghar	Deoghar
19	Prashant Singh	Hindustan, Deoghar	Deoghar
20	Angry Das	Prabhat Khabar	Deoghar
21	Lalan KantSarewar	Khushidate Farilane	Deoghar
22	Rajan Kumar Jha	Computer Centre, Deoghar	Deoghar
23	Hare Krishna Ray	Advocate, Civil Court, Deoghar	Deoghar
24	Arjun Prasad Keshri	Bazar Samiti, Deoghar	Deoghar
25	Suman Kumar	Karvibagh, Deoghar	Deoghar
26	Shekhar Kumar Bishnu	Baidhnathpur, Deoghar	Deoghar
27	Geenil Kumar Singh	North SBS Centre Circular Road, Deoghar	Deoghar
28	Md. Nfisuddin	Madhupur, Deoghar	Deoghar
29	Prabhavati Devi	Belaabagaes	Deoghar

30	Vijay Kumar Singh	Angika, Godda	Deoghar
31	Rajesh Ray	Deoghar	Deoghar
32	Sunil Kumar Jha	Jasidih, Deoghar	Deoghar
33	Jaykishor Prasad	Deoghar	Deoghar
34	Mahesh Kumar	Nandan Pahar, Deoghar	Deoghar
35	A. Kr. Sinha	Nehru Road, Chirkunde	Dhanbad
36	D. Jha	E.S.E./ Loyabad	Dhanbad
37	Motilal Agarwal	President, Association of Dhanbad District Chamber of Commerce & India	Dhanbad
38	Vinay Mishra	General Secy.	Dhanbad
39	Ramsewak Singh	Chuna , Godown, Saraidhela	Dhanbad
40	Maksud Alam	Arising Ispat Udyog	Dhanbad
41	Sultan Ahmed	Govindpur, Dhanbad	Dhanbad
42	Salim Khan	Naya Bazar, Dhanbad	Dhanbad
43	Md. Zubair Alam	Dhanbad, JMM	Dhanbad
44	Prakash Kumar	Dhanbad News-II	Dhanbad
45	Umesh Kumar	Dhanbad Sadhna News	Dhanbad
46	Ajay Kr. Sinha	Prasar Bharti	Dhanbad
47	Umesh Tiwary	Ranchi Express	Dhanbad
48	Sunil Kumar	Rashtriya Sahara	Dhanbad
49	Nitesh Mishra	365 days	Dhanbad
50	Kothri Pansd	C.K.D.	Dhanbad
51	Ajay Kumar	Prabhatty Khabar	Dhanbad
52	K.C. Goel	D.Z.F./ Kendra	Dhanbad
53	Jyosi Roy	Eye View News	Dhanbad
54	Lakhan Kr.	Eye View News	Dhanbad
55	Shiv Charan Sharma	Raj Hospital Road, Jharia	Dhanbad
56	M.S. Kehari	Ex-President, C. of Co	Dhanbad
57	D. Kumar	Poddar Para	Dhanbad
58	Ravi Shankar Sah	Poddar Para, Jharia	Dhanbad
59	Parvez Alam	Jharia	Dhanbad
60	Ashok Kumar Keshri	Jharia	Dhanbad
61	Ajay Kumar	Dhanbad	Dhanbad
62	P.K. Choudhary	Dhanbad	Dhanbad

63	Vijay Kumar	Hindustan Times	Dhanbad
64	J.P. Walia	Dhanbad	Dhanbad
65	S.S. Pandey	Dhanbad	Dhanbad
66	Neelmari	ETV-News Dhanbad	Dhanbad
67	Arun Kumar	ETV Reporter	Dhanbad
68	Bimal Agarwal	Karkenal	Dhanbad
69	Uma Kant Singh	C/C Jhankan Steel E/B	Dhanbad
70	Dilip Kumar	Maurya T.V.	Dhanbad
71	Nagendra Prasad	Dhanbad	Dhanbad
72	Suresh Bhinesoria	Palamu Dist. Vyavasayee. Sangh, Daltonganj	Medninagar
73	Om Prakash Bansal	Radmi	Medninagar
74	Awadhesh Kr. Singh	Sudna	Medninagar
75	S.K. Agarwal	Palamu Zila Vyavasayee Sangh	Medninagar
76	S.N. Sharma	Sudana, Daltonganj	Medninagar
77	Anup Kumar Agarwal	Ranchi Road, Daltonganj	Medninagar
78	Murari Ram	Chainpur, Madgava	Medninagar
79	Mahabir Singh Chandrawanshi	Daltonganj	Medninagar
80	Manmohan Prasad Yadav	Kamaru Grampanchang	Medninagar
81	Sachidanand Tiwari	Iknar, P.O. Suwa, Madininagar, Palamu	Medninagar
82	Pramod Kumar Tulsayan	Palamu Zila Vyavasayee Sangh	Medninagar
83	Raj Kumar Jain	Adayaksha Digambar Jain Samaj	Medninagar
84	Padam Chandra Jain	Vishu Mandir Road, D.Ganj	Medninagar
85	Niraj Kumar	Maidininagar	Medninagar
86	Parsuram Ojha	Adayaksha BJP	Medninagar
87	Arvind Tiwary	BJP	Medninagar
88	Sudhir Agarwal	Maidininagar	Medninagar
89	Gyan Shay	Prisident, Lions Club	Medninagar
90	Sudhir Kumar	Sect., Lions Club of Daltongang	Medninagar
91	Anup	Daltonganj	Medninagar
92	Badrinath	Hamidganj	Medninagar
93	Dinesh Tiwary	Lasliganj	Medninagar
94	Dilip Kumar	Ranchi Express	Medninagar
95	Prashant Kumar	Hamidganj	Medninagar

96	Manoj	Hamidganj	Medninagar
97	Sujit Kumar Paswan	Semar Road, Palamu	Medninagar
98	Ajay Kr. Tiwary	Daltonganj	Medninagar
99	Rajmune Mehta	Sudna, Daltonganj	Medninagar
100	Priya Dutta Das	Dainik Jagran	Medninagar
101	Lal Bahadur Sahu	Suwa	Medninagar
102	N.K. Pandey	Aditya Birla Chemicals India Limited, Garwa Road, Rehla	Medninagar
103	S.K. Singh	Aditya Birla Chemicals India Limited, Garwa Road, Rehla	Medninagar
104	Saiket Chatterjee	Prabhat Khabar	Medninagar
105	Samir Choudhary	R.N.M.	Medninagar
106	C.S. Sheuzla	President DCC, Daltonganj	Medninagar
107	Dhurbe Pd. Agarwal	Beluatikal, Daltonganj	Medninagar
108	Vijayanand Pathak	Daltonganj, Palamu	Medninagar
109	Pawan Kumar	Palamu	Medninagar
110	Salish Pandey	Daltonganj	Medninagar
111	Kumar Yugart	Daltonganj	Medninagar
112	Piyush	Daltonganj	Medninagar
113	Satish Pandey	Daltonganj	Medninagar
114	Bishwanath	Daltonganj	Medninagar
115	Y. Ojha	JSIA	Ranchi
116	Shishri Kumar Poddar	Poddar Niket, Bariatu Road, Ranchi	Ranchi
117	N.A. Khan	Aditya Birla Chemical Ltd	Ranchi
118	Hemant Poddar	Tirupak Carbons & Chemicals	Ranchi
119	Sharad Poddar	Jharkhand Small Ind. Association	Ranchi
120	Arun Chhawahhari	Jharkhand Small Ind. Association	Ranchi
121	U.K. Patodia	FICCI	Ranchi
122	Anjay Pacheriwala	Kokar Ranchi	Ranchi
123	M.S. Mittal	Jharkhand Small Ind. Association, FJCCI	Ranchi
124	B.K. Bulsyan	National Ind. Corp	Ranchi
125	S. Jhawar	JSIA	Ranchi
126	Mahesh Poddar	JSIA	Ranchi
127	Kedar Nath Lal Das	Jharkhand Tech, BIT Mesra	Ranchi
128	Manoj Singh	Prabhat Khabar	Ranchi

129	S.P. Singh	Laghu Udyog Bharti	Ranchi
130	Jiwan Jalan	Laghu Udyog Bharti	Ranchi
131	Annandeshwar	Laghu Udyog Bharti	Ranchi
132	S.P. Singh	Laghu Udyog Bharti	Ranchi
133	Suni Sood	IAEMP	Ranchi
134	Sushil	Ranchi	Ranchi
135	S.K. Rai	Ranchi	Ranchi
136	Birendra Roy	Ridhi-Sidhi Iron Pvt. Ltd. Hirsa, Dhanbad	Ranchi
137	Nadeem Khan	CPM Ranchi	Ranchi
138	Pawan Kumar	CHAI	Ranchi
139	Arun Kumar	Ranchi	Ranchi
140	Shakeel Ahmed	Samaj Vikash Santre	Ranchi
141	S.N. Kysin	605 B, Koyla Vihar Kala Rd.	Ranchi
142	Md. Pervez Akhtar	Karbala Chowk	Ranchi
143	B.N.P. Singh	Ranchi	Ranchi
144	Philip Matkar	Mongalam Plastic pvt. Ltd.	Ranchi
145	Jacob	Mongalam Plastic pvt. Ltd.	Ranchi
146	Karun Kumar	Dainik Jagran	Ranchi
147	Shakir Gilani	D.D. News	Ranchi
148	P. Singh	D.D. News	Ranchi
149	K.K. Poddar	Chotanagpur Graphite Industries	Ranchi
150	R.D. Sharma	New Madhukar Ranchi	Ranchi
151	Bhim Sahu	New Madhukar Ranchi	Ranchi
152	B.K. Mehta	Ratu Road, Ranchi	Ranchi
153	Amit	Prabhat Khabar	Ranchi
154	Ajeet Kumar	H/60 Harmu Ranchi	Ranchi
155	D. Pathak	H/60 Harmu Ranchi	Ranchi
156	Vijay Kr. Gupta	H/60 Harmu Ranchi	Ranchi
157	Amit Tulsyan	Piyada Tolli	Ranchi
158	Upender	ETV News	Ranchi
159	P.C. Jha	Uppar Bazar Ranchi	Ranchi
160	Amresh Jaiswal	Purulia Road, Ranchi	Ranchi
161	Anil Srivastava	Hindustan	Ranchi
162	Deepk Kr. Mahto	BIT Mesra	Ranchi

163	Johan Kerketta	Barram, Namkum	Ranchi
164	Jajpl Mahto	Barram, Namkum	Ranchi
165	Sudhir Singh	Kokar Ind. Area, Ranchi	Ranchi
166	R.P. Shahi	JSIA	Ranchi
167	P.K. Hebanusania	JSIA	Ranchi
168	Vijya Kumar	Pandra	Ranchi
169	Dr. Vishnu Rajgadia	Nai Dunia	Ranchi
170	Amit Kr. Bhattacharjee	H.No. 10 Tank Road, Kadma, Jamshedpur	Jamshedpur
171	Anjan Sarkar	21 Narmada Path Uliyan Kadma, Jamshedpur	Jamshedpur
172	P.L. Gautam	Singhbhum Industrial Association	Jamshedpur
173	Narayan Paul	Secretary SIA	Jamshedpur
174	Rajesh Kumar	Sorari	Jamshedpur
175	Binay Singh	Zinco India, C/35 III, Jamshedpur	Jamshedpur
176	S. Singh	SARPUL Auto	Jamshedpur
177	Binod Debora	Nerrich (Indai)	Jamshedpur
178	Jawahar Lal Sarma	Sonari	Jamshedpur
179	Santosh Bapat	Baridih	Jamshedpur
180	Suresh Sonnie	SCCI	Jamshedpur
181	Binod Agarwal	ASIA	Jamshedpur
182	O.P. Chopra	SMPL/ASIA	Jamshedpur
183	Deepak Dokania	ASIA	Jamshedpur
184	Inder Agrawal	ASIA	Jamshedpur
185	S. Khetan	ASIA	Jamshedpur
186	Binod Singh	ASIA	Jamshedpur
187	O.P. Sharma	ASIA	Jamshedpur
188	Samir Singh	ASIA	Jamshedpur
189	Swapan Mazumdar	ASIA	Jamshedpur
190	Darrath Upadhaya	ASIA	Jamshedpur
191	Sanjay Singh	ASIA	Jamshedpur
192	J.K. Verma	ASIA	Jamshedpur
193	Phiren Mahto	ASIA	Jamshedpur
194	S.P. Singh	ASIA	Jamshedpur
195	A.N. Mishra	KSPL	Jamshedpur
196	P.K. Singh	SIA, President	Jamshedpur

197	D.K. Singh	K.Y.S. S.F.A.	Jamshedpur
198	Prakash Barva	Kadma	Jamshedpur
199	Sanwarmal Sharma	Kansa Steel (P) Ltd	Jamshedpur
200	Vinod Sharma	Tata nagar Steel Forge	Jamshedpur
201	V.P. Singh	SIA	Jamshedpur
202	Jashir Singh	SIA	Jamshedpur
203	Mahesh Agarwal	HSPC	Jamshedpur
204	Ratan Joshi	Jugsalia	Jamshedpur
205	Sharwan Debuka	Pipe Ind., Jamshedpur	Jamshedpur
206	R.K. Sanemi	Adya Ent Pvt Ltd	Jamshedpur
207	P.R. Mishra	SSR Sponge Iron Ltd	Jamshedpur
208	Nirmal Kabra	S.K.D.C. & I	Jamshedpur
209	Suresh Sonthalia	ASIA	Jamshedpur
210	LalChand Agarwal	Laghu Udyog	Jamshedpur
211	Babulal Chakraborty	Parsudhi, Jamshedpur	Jamshedpur
212	Pajkej Kumar	Laghu Udyog Bharti	Jamshedpur
213	Y.K. Gupta	Laghu Udyog Bharti	Jamshedpur
214	Pradeep Srivastava	Laghu Udyog Bharti	Jamshedpur
215	Vijay P. Singh	Kadma	Jamshedpur
216	K.C. Jha	Kadma, Jamshedpur	Jamshedpur
217	Amit Agarwal	Sakchi, Jamshedpur	Jamshedpur
218	Neha	Jamshedpur	Jamshedpur
219	Shyam Kumar	Jamshedpur	Jamshedpur
220	Jubent Singh	Jamshedpur	Jamshedpur
221	A.Kr. Ranjan	Kadma	Jamshedpur
222	Pratap Singh	Prabhat Khabar	Jamshedpur
223	Chandan Jha	I-Next	Jamshedpur
224	Alok Kumar	Primal Deep Steel Pvt Ltd	Jamshedpur
225	S.P. Kedia	Katish Patamda	Jamshedpur
226	H.R. Jain	Laghu Udyog Bharti	Jamshedpur
227	Sudhir Singh	ASIA	Jamshedpur
228	Abhirov Kr. Jha	Baridih, Jamshedpur	Jamshedpur