## **BIHAR ELECTRICITY REGULATORY COMMISSION**



## Order on

Performance Review for FY 2013-14 and

Determination of Aggregate Revenue Requirement

And

Tariff for Retail Sale of Electricity for FY 2014-15

of

SOUTH BIHAR POWER DISTRIBUTION COMPANY LIMITED (SBPDCL)

Case No. 25 of 2013

28<sup>th</sup> February 2014



## **Bihar Electricity Regulatory Commission**

Ground Floor, Vidyut Bhawan – II Jawahar Lal Nehru Marg, Patna – 800 021

## Case No. 25/2013

#### In the matter of:

Determination of Revised Aggregate Revenue Requirement (ARR) and Retail Tariff for sale of electricity by the South Bihar Power Distribution Co. Ltd. to the consumers for the financial year 2014-15 in the State of Bihar.

And

South Bihar Power Distribution Company Ltd ----- Petitioner

Present:

U.N. Panjiar - Chairman S.C. Jha - Member

## **ORDER**

(Passed on 28<sup>th</sup> Day of February, 2014)

The Bihar State Electricity Board (hereinafter referred to as erstwhile BSEB) was constituted under section 5 of Electricity (Supply) Act, 1948 on 1st April, 1958. It was a deemed licensee in terms of Section 14 of the Electricity Act, 2003. Bihar State Electricity Board was engaged in the business of generation, transmission and distribution of electricity in the State of Bihar. In terms of Section 172 of the Act, the Board constituted under the repealed laws is to be deemed as the State

Transmission Utility and a licensee under the provisions of the Act for a period of one year from 10th June, 2003 i.e. the appointed date. Subsequently it has been mutually agreed by the Central Government and the Government of Bihar to authorize the Board to continue to function as a State Transmission Utility and Licensee.

The erstwhile Bihar State Electricity Board (BSEB) has been restructured on functional basis with effect from 1<sup>st</sup> November, 2012 into five successor companies under Bihar State Electricity Reforms Transfer Scheme 2012 vide Notification No. 17 dated 30.10.2012 issued by Energy Department, Government of Bihar, namely,

- 1) Bihar State Power Holding Company Limited (BSPHCL)
- 2) Bihar State Power Generation Company Limited (BSPGCL)
- 3) Bihar State Power Transmission Company Limited (BSPTCL)
- 4) North Bihar Power Distribution Company Limited (NBPDCL) and
- 5) South Bihar Power Distribution Company Limited (SBPDCL)

The Commission in its MYT Order dated 15<sup>th</sup> March 2013, has trued-up the ARR and revenue for FY 2011-12 of erstwhile BSEB and approved the ARR and tariff for the control period FY 2013-14 to FY 2015-16 for BSPGCL and BSPTCL separately. The Commission also determined the ARR for the control period for FY 2013-14 to FY 2015-16 for NBPDCL & SBPDCL together and determined retail supply tariff for FY 2013-14.

The South Bihar Power Distribution Company Limited filed petition for Annual Performance Review for FY 2013-14, Revised ARR for FY 2014-15 and determination of revised Tariff for FY 2014-15 on 14<sup>th</sup> November 2013.

In exercise of the powers vested in Bihar Electricity Regulatory Commission under section 62 (1) (d) read with Section 62 (3) and Section 64 (3) (a) of the Electricity Act, 2003 and Bihar Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations 2007 (hereinafter referred to as 'Tariff Regulations') and other enabling provisions in this behalf, the Commission issues this order for Reviewing of ARR and revenues for FY 2013-14 and approval of Revised

ARR for the financial year 2014-15 and determination of the Retail Tariff for the Financial Year 2014-15 for supply of electricity by the South Bihar Power Distribution Company to the consumers in the State of Bihar.

Regulation 6(5) of the Tariff Regulations provides for giving adequate opportunities to all stakeholders and general public for making suggestions/objections on the tariff petition as mandated under section 64(3) of the Electricity Act, 2003. Accordingly, the Commission directed SBPDCL vide letter No. 1568 dated 30.11.2013 to publish the ARR and tariff petition for FY 2014-15 in an abridged form as public notice in newspapers having wide circulation in the State inviting suggestions/objections on the tariff petition. Accordingly SBPDCL published the tariff petition in the abridged form as public notice in various newspapers and the tariff petition was also placed on the website of SBPDCL. The last date of submission of suggestions/objections was fixed as 31<sup>st</sup> January 2014.

The Commission, to ensure transparency in the process of tariff determination and for providing proper opportunity to all stakeholders and general public for making suggestions/ objections on the tariff petition and for convenience of the consumers and general public across the state, decided to hold the public hearing at the divisional headquarters of the State and accordingly the Commission held public hearing at Bhagalpur on 20.12.2013, Munger on 21.12.2013, Gaya on 11.02.2014 and Patna on 12.02.2013 & 13.02.2013.

The proposal of SBPDCL was also placed before the State Advisory Committee in its meeting held on 23.01.2014 and various aspects of the petition were discussed by the Committee. The Commission took the advice of the State Advisory Committee on Revised ARR and tariff petition of SBPDCL for FY 2014 -15 during the meeting of the Committee.

The Commission took into consideration the facts presented by the SBPDCL in its petition and subsequent various filings, the suggestions/objections received from stakeholders, consumer organizations, general public and State Advisory Committee and response of the SBPDCL to those suggestions/objections.

The Commission, taking into consideration all the facts presented by the Petitioner and by objectors and other stakeholders in writing or orally which came up during the public hearing and meeting of the State Advisory Committee, has reviewed the ARR and revenue for FY 2013-14 and approved the ARR for FY 2014-15 and determined the retail tariff for FY 2014-15.

The erstwhile BSEB and now the DISCOMs have not met the Renewable Purchase Obligation (RPO) in case of solar energy as per BERC (Renewable Purchase Obligation, its compliance and REC framework implementation) Regulations, 2010 as amended from time to time. The combined short fall was 0.20 MU, 0.67 MU and 14.86 MU during FY 2010-11, FY 2011-12 and FY 2012-13 respectively. In its Tariff Order for FY 2013-14, the Commission had decided that the distribution licensees will have to deposit into a separate fund the amount as per Regulation 9.1 of BERC (RPO Obligation, its Compliance and REC Framework Implementation) Regulations, 2010 if the RPO determined by the Commission is not met. As per the RPO Regulation, 2010, considering the forbearance price of Rs. 13.40 per kWh as per CERC order dated 23<sup>rd</sup> August 2011, an amount of Rs. 13.70 Crore is allocated to be deposited as a separate fund to be utilized for the purpose as directed by the Commission from time to time. This amount has been included in the ARR of SBPDCL for FY 2014-15.

The State Government has been giving resource gap grant to erstwhile BSEB which has been used for reducing the revenue gap of erstwhile BSEB. The State Government in its letter dated 19<sup>th</sup> September 2011 clarified that the resource gap grant being provided to SBPDCL shall be used first for compensating for the financial loss incurred by them on account of disallowed power purchase due to difference in the actual T&D loss and the T&D loss as approved by the Commission and the balance amount of resource gap grant shall be used towards subsidies to the agricultural and rural consumers.

SBPDCL in this Tariff Petition has proposed Distribution loss projection at 45.00% for FY 2014-15. The Commission has, however, fixed the distribution loss trajectory at 21.40% for FY 2014-15. The financial loss caused to SBPDCL due to difference

between the actual T&D loss as proposed by SBPDCL and T&D loss approved by the Commission has been compensated from the resource gap grant provided by the State Government.

The DISCOMs have projected resource gap grant of Rs. 2400 Crore for FY 2014-15 as they are obtaining a grant of Rs. 200 Crore per month. Out of this resource gap grant Rs. 1452.48 Crore is considered to SBPDCL as proposed in its petition. The resource gap grant of Rs. 1452.48 Crore for the FY 2014-15 is first adjusted towards disallowed power purchase cost amounting to Rs. 1283.49 Crore due to difference in the actual T&D loss and the T&D loss approved by the Commission and the balance amount of Rs. 168.69 Crore has been considered to subsidize the BPL, agricultural and rural consumers. The Commission has approved a revenue gap of Rs. 1056.84 Crore at the existing tariffs for FY 2014-15. After adjusting the Government subsidy to Kutir Jyoti, rural and agricultural consumers amounting to Rs. 168.69 Crore, the net gap at existing tariff is Rs. 888.15 Crore. As a result, the revenue gap for FY 2014-15 is reduced to Rs. 888.15 Crore against Rs. 2306.97 Crore projected by SBPDCL.

In the MYT order dated 15<sup>th</sup> March 2013, the Commission has approved average tariff hike of about 6.9% to avoid the tariff shock and retained an amount of Rs. 354.48 Crore as Regulatory Assets out of the total gap of Rs. 595.66 Crore for FY 2013-14 and also stated that this Regulatory Asset is to be amortized in subsequent three years.

The Commission decided that amortization of this Regulatory Assets can be considered after truing up of FY 2013-14 based on the audited annual accounts for FY 2013-14, since experience has shown that the gaps shown in the earlier tariff orders changed into surpluses in truing up. However, to meet the working capital expenses, the Commission has considered carrying cost for six months on this Regulatory Asset.

The truing up of ARR and revenue for FY 2012-13 resulted into a surplus of Rs. 1273.24 Crore out of which Rs. 827.61 Crore is allocated to SBPDCL. After considering the surplus of Rs. 827.61 Crore and carrying cost of Rs. 16.65 Crore on

the Regulatory Asset allocated, the net gap is worked out to be Rs. 77.19 Crore for FY 2014-15.

The Annual Revenue Requirement (ARR) approved for FY 2014-15 for the two power distribution companies together is Rs. 6328.70 Crore and the net revenue gap at existing tariff after adjusting the surplus of Rs. 1273.24 Crore of FY 2012-13 is Rs. 102.60 Crore.

SBPDCL has projected distribution losses at 45.00% for FY 2014-15 and most of the resource gap grant being given by the State Government is getting adjusted to meet the disallowed power purchase cost due to the high distribution losses. Huge investments are being made to replace worn out conductors and to strengthen the network. Meter reading and bill collection are entrusted to franchisees. By some more efforts, SBPDCL can certainly reduce losses as a result of which there will be saving in resource gap grant getting adjusted on this account, which can be utilized to reduce the revenue gap.

The Commission has considered that the gap of Rs. 102.60 Crore could be made up by the Distribution companies by improving their operational performance by reducing the distribution losses, which are very high. As large amounts are being invested to improve the Transmission and Distribution networks with the resources provided by State and Central Governments and distribution companies have taken steps for 100% metering, meter reading, billing and collection through appointment of revenue franchisees in rural areas and input based franchisees in town, it may be possible to reduce the losses to a considerable extent with the improved network and meet the gap.

In view of this, the Commission does not propose any increase in the Tariff for FY 2014-15. The NBPDCL and SBPDCL should make up the gap of Rs. 102.60 Crore by improving the operational performance.

The Commission has approved the same tariff structure for two distribution companies so that there is uniform tariff for same category of consumers in the entire state of Bihar.

The average Power Purchase cost for FY 2014-15 is Rs. 3.90 / kWh.

The average Cost of Supply for FY 2014-15 is Rs. 6.68 / kWh.

The average Revenue Realisation in FY 2014-15 is Rs. 5.03 / kWh.

However the Commission has made certain changes in the Tariff structure as below:

- i) The Commission has taken a decision in the Tariff Order to withdraw the minimum charges on DS-II consumers as they are all metered and meter reading are taken on monthly basis.
- ii) It is reported that most of the Kutir Jyoti consumers are consuming more than 30 units per month which is being allowed to be consumed by them at a lower rate. In view of this, the Commission has decided to determine the tariff for Kutir Jyoti (metered) consumers as below:

# Kutir Jyoti (Rural): (Metered)

A. First 30 units	160 paisa/ unit	
B. Above 30 units	Rate as per DS-I metered. Subject to a minimum of Rs. 40 per month per connection.	

## Kutir Jyoti (Urban): (Metered

C. First 30 units	195 paisa/ unit
D. For remaining units	Rate as per DS-II metered. Subject to a minimum of Rs. 50 per month per connection.

- iii) The Commission has also taken decision to withdraw Premium Tariff for 24 hours supply as the Government has already announced that all district headquarters will get 24 hours supply.
- iv) Facility of demand based tariff is extended to single phase Domestic Consumers also on an optional tariff basis.

The Commission has made an attempt to workout voltage-wise cost of supply for FY 2013-14 in accordance with the methodology indicated by Hon'ble APTEL in its order dated 10<sup>th</sup> May, 2012. Similar exercise has been carried out for FY 2014-15 also.

SBPDCL has not conducted detailed system studies to arrive at voltage-wise technical losses as indicated in the methodology given by APTEL. SBPDCL has furnished voltage-wise technical losses based on limited studies on its 220 KV, 132 KV and its 33 KV, 11 KV and LT system. SBPDCL has proposed Cumulative Technical loss of 30.29% for FY 2014-15. As per Hon'ble APTEL's judgment, T&D loss approved by the Commission has been considered for computing the voltage-wise cost of supply. The Commission has approved Cumulative Technical loss of 14.58% for FY 2013-14 as detailed below:

220 KV and 132 kV - 4.00%

33 kV - 5.00%

11 kV - 6.00%

LT - 7.00%

Cumulative Loss - 14.58%

This was considered as target for voltage-wise technical losses within total loss level of 26.00% for FY 2013-14 and accordingly voltage-wise cost of supply for FY 2013-14 was computed in MYT order dated 15<sup>th</sup> March 2013. The Commission has approved 4.00% transmission losses for BSPTCL and 21.40% distribution losses for DISCOMs for FY 2014-15. Similar exercise for computation of voltage-wise cost of supply for FY 2014-15 is made considering the voltage wise technical losses within total T&D loss level of 24.50%.

To encourage the consumers to avail power under 'Open Access' from other sources, the Commission has reduced the cross subsidy surcharge by about 50% (fifty percent) in its Tariff Order for FY 2013-14 which the Commission has retained during FY 2014-15 also. As a result, the consumers have to pay cross subsidy surcharge at the rate of about 50% of the rate computed as per the formula approved in Tariff Policy 2006.

The Commission has brought out Regulations on Fuel and Power Purchase Cost Adjustment (FPPCA) on 31.03.2012 and the formula given in the regulations has to be applied to arrive at FPPCA. The generation and distribution companies have to

claim Fuel and Power Purchase Cost Adjustments with prior approval of the Commission on a monthly basis.

The Commission has reviewed the directives issued earlier in the tariff orders for FY 2013-14 and noted that some of the directives issued are complied and some are partially attended. The Commission has dropped the directives complied with and the remaining directives are consolidated as "Fresh Directives" to the South Bihar Power Distribution Co. Ltd.

This Order is in 12 chapters which include Review for FY 2013-14 and detailed analysis of the Revised Annual Revenue Requirement (ARR) for FY 2014-15 for SBPDCL and Tariff for FY 2014-15.

The South Bihar Power Distribution Company Ltd. should ensure implementation of the order from the effective date after issuance of a Public Notice, in such a font size which is clearly visible, in two daily newspaper having wide circulation in the various parts of State within a week and compliance of the same shall be submitted to the Commission by the SBPDCL.

This order shall be effective from 1<sup>st</sup> April 2014 and shall remain in force till 31<sup>st</sup> March, 2015 or till the next tariff order of the Commission.

This order will be placed on the website of the Commission and a copy will be sent to SBPDCL, Department of Energy, Government of Bihar, Central Electricity Regulatory Commission and all State/Joint Electricity Regulatory Commissions.

Sd/(S. C. Jha) (U. N. Panjiar)
Member Chairman

## 8. Tariff Principles, Design and Tariff Schedule

## 8.1 Background

The Commission in determining the revised Annual Revenue Requirement (ARR) for FY 2014-15 and the retail tariff for FY 2014-15 has been guided by the provisions of the Electricity Act, 2003 the National Electricity Policy 2005 (NEP), the Tariff Policy 2006 (TP), Regulations on Terms and Conditions for Determination of Tariff issued by the Central Electricity Regulatory Commission (CERC) and BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007. Section 61 of the Act lays down the broad principles, which shall guide determination of retail tariff. As per these principles the tariff should progressively reflect cost of supply and also reduce cross subsidies within the period to be specified by the Commission. The Act also lays special emphasis on safeguarding consumer interests and also requires that the costs should be recovered in a reasonable manner. The Act mandates that tariff determination should be guided by the factors, which encourage competition, efficiency, economical use of resources, good performance and optimum investment.

The National Electricity Policy (NEP) aims at increased access to electricity, supply of reliable and quality power at reasonable rates, minimum life line consumption, financial turnaround and commercial viability of electricity sector and protection of consumer's interest. The Commission has considered factors as far as possible which aim at achieving the objectives of NEP while determining the revenue requirement of the two distribution companies and designing the retail tariff for consumers.

The Tariff Policy (TP) notified by Government of India in January 2006 provides comprehensive guidelines for determination of tariff and revenue requirement of power utilities. The Commission has endeavored to follow these guidelines as far as possible.

The Tariff Policy mandates that tariff should be within ±20% of the average cost of supply by FY 2010-11 and requires Commissions to lay down a road map for reduction of cross subsidy. The Commission has not revised the retail tariffs for FY 2014-15 and retained the tariffs as approved in the Tariff Order for FY 2013-14. The Commission has computed the average cost of supply on the basis of the revenue requirement allowed and the sale approved by the Commission for FY 2014-15 for arriving at the cross subsidy level during FY 2014-15.

The Commission has also determined the voltage-wise cost of supply as per the direction and guidelines provided by APTEL, for assessing whether the tariff rates are within ±20% of the voltage-wise cost of supply.

## 8.2 Revenue gap for FY 2014-15

SBPDCL, in its tariff petition for FY 2014-15 has proposed revision of retail tariffs of various consumer categories to earn additional revenue of Rs. 2307.22 Crore to meet the projected gap of Rs. 2307.22 Crore leaving no revenue gap carried forward.

However, on detailed scrutiny and application of prudency check on the annual revenue requirement filed by SBPDCL, the Commission has arrived at a more realistic and annual revenue requirement of Rs. 3762.86 Crore for FY 2014-15. After considering the surplus in truing up from FY 2006-07 to FY 2012-13, the net revenue requirement is Rs. 2951.90 Crore and the net revenue gap arrived at the existing tariff is Rs. 77.19 Crore. This revenue gap arrived is only based on the figures projected during FY 2014-15. The experience shows that truing up exercise based on the audited annual accounts of previous years has resulted into surplus. Therefore, the Commission does not approve any tariff increase for FY 2014-15. The Petitioner shall make up the gap by improving the operational performance, particularly reduction in high distribution losses which in turn will reduce the resource gap grant being given by the Government to meet the disallowed power cost due to not achieving the distribution loss target specified by the Commission and this saving in resource gap grant can be utilized to reduce the ARR.

The review of ARR and Revenue for FY 2013-14(RE) also indicates a gap of Rs. 369.00 Crore for both NBPDCL and SBPDCL as against the Regulatory Asset of Rs. 354.48 Crore approved for both the DISCOMs together in the Tariff Order for FY 2013-14. This revenue gap of Rs. 369.00 Crore for FY 2013-14 is not being carried forward in the ARR for FY 2014-15, and the final decision on this will be taken at the time of truing-up for FY 2013-14. However, the Commission has allowed carrying cost on the Regulatory Asset amounting to Rs. 25.61 Crore in the ARR for FY 2014-15 of both the DISCOMs.

## 8.3 Changes in Tariff proposed by SBPDCL:

The Petitioner has proposed certain changes in fixed charges, energy charges and monthly minimum charges criteria. The tariffs are designed to recover partial revenue gap and also aligned based on voltage- wise cost of supply study by the Petitioner. The changes proposed by SBPDCL are discussed below:

#### **MONTHLY MINIMUM CHARGES (MMC):**

The Petitioner has submitted that the monthly minimum charges are intended to recover fixed cost component for the investment made on the infrastructure. They are required especially in case where there are no meter readings or faulty meters leading to lack of assessment of energy consumption.

The Petitioner has further submitted that there is an urgent need for the Commission to increase the MMC for the categories in LT consumers namely Kutir Jyoti, Domestic and Non Domestic.

#### **Commission's View:**

The Commission is of the view that fixed charges are levied as a part tariff to recover the fixed costs of the DISCOM. The Commission recognizes that the fixed charges levied, do cover the fixed costs of the DISCOM but may not cover the capacity charge paid to the generator. The Commission has been allowing recovery of capacity charge of the generators partly through demand charges and partly through energy charges in the tariff. The levy of minimum monthly charges (MMC) goes against the

objective of energy conservation, since the consumer has a tendency to consume more energy whether it is required or not.

The Commission in its Tariff Order for FY 2013-14 has decided as below:

"The Commission has taken decision to discontinue levy of minimum charges for HT consumers in addition to demand charges in the Tariff Order of FY 2012-13. The Commission is of the view that monthly minimum charges should gradually be phased out for other categories of consumers also after metering of all consumers."

In pursuance of the above decision, the Commission decides to withdraw and discontinue the provision of MMC for urban domestic consumer category, DS-II as they are all metered and their meter reading is taken on a regular basis.

The Commission is also examining to consider to withdraw the MMC for other consumer categories after estimating the impact on the revenue of the DISCOM due to this and exploring possible methods to neutralize the impact on possible loss of revenue.

The distribution companies should make arrangement for cent percent metering and meter reading in rural areas to enable abolition of MMC for rural consumers as well.

## **RECOVERY OF FIXED COST EXPENSES:**

The Petitioner has proposed to increase the minimum monthly charges/combination of Fixed and Demand charges to recover the fixed cost of DISCOM fully.

#### Commission's View:

As mentioned above, the fixed costs of the Petitioners are recovered under fixed charges and the capacity charges of generating companies are recovered partly through demand charges and partly through energy charges from the consumers and not under Fixed/Demand charges alone.

#### **OTHER PROPOSED CHANGES:**

The Petitioner has proposed:

## a) Changes in applicability of HTSS (33/11 KV):

The Petitioner has submitted that the provision of inclusion of Ferro Alloys loads in this category without proper load assessment methodology, is burdening the Petitioner. The load of induction furnace is declared properly as per rating of induction furnace but the load of Arc furnace is not furnished/ disclosed correctly. The Petitioner faces like load imbalance and over loading of the system.

Hence, the Petitioner requests "Ferro Alloy Loads" to be excluded from applicability clause.

#### Commission's View

The Petitioner shall evolve a methodology to assess the load of Arc furnace on physical measurement of such load to avoid imbalance and overloading. Hence, the Commission does not propose to delete "including Ferro Alloy loads" for the applicability clause.

## b) Use of Transformer Capacity and its Compensation Assessment:

The Petitioner has proposed that where a HT consumer is found to be using higher capacity than admissible for his contract demand/ load, the compensation payable by the consumer to Board shall be assessed as under, without prejudice to the right of the Board to disconnect the supply.

2/3<sup>rd</sup> of the capacity of the transformer will be treated as contract demand of the consumer for the entire period of malpractice and contract demand so arrived less already billed demand (kVA) shall be charged at twice the applicable tariff rate.

#### Commission's View:

The Commission in Tariff Order dated 30<sup>th</sup> March 2012 for FY 2012-13 had taken decision under "Terms and Conditions" of HT tariff as below:

## "7. Transformer Capacity"

The transformer capacity of HT consumers shall not be more than 150% of the contract demand. Consumers found to be utilizing transformer of higher capacity than admissible for his contract load will fall under malpractice.

If standard capacity is not available of exact requirement then relaxation in transformer capacity up to 10% extra can be allowed in individual cases on request. All HT/EHT consumers having contract demand of 200 kVA and above may be allowed to have a standby transformer, where capacity shall not be more than the main transformer."

The Commission does not propose to revise the decision taken as above in the Tariff Order dated 30<sup>th</sup> March 2012. The Petitioner is directed to implement the above decision.

### **TARIFFS PROPOSED:**

<u>Full Cost Recovery:</u> The Petitioner has submitted that the proposed tariff hike is based on full cost recovery model of the total revenue gap computed for FY 2014-15.

#### **Commission's View:**

The Commission after detailed analysis and prudence check of the ARR proposed for FY 2014-15 has arrived at a gap of Rs. 77.19 Crore for FY 2014-15 after taking into consideration the surplus up to FY 2012-13 for SBPDCL.

The Commission does not propose any tariff increase for FY 2014-15. The DISCOM can make up the gap by improving the operational performances, particularly by reduction of distribution losses which are very high. As large amount is being invested to improve the transmission and distribution network in the state with the assistance of State and Central Government including replacement of old dilapidated conductors and 100% metering, it should be possible to reduce the losses. The DISCOM has also taken steps to improve metering, meter reading, billing and revenue realization mechanism which is expected to reduce the distribution losses and improve revenue.

<u>Changes in Slabs:</u> The Petitioner has also proposed for having single slabs in the category of Domestic and Non- Domestic.

## **Commission's View:**

The existing slab system provides lower rate up to 100 units for low income consumers and small commercial consumers and the rates are increased as consumption level goes up, to control consumption as a measure of energy conservation. Replacement of tariff slabs for different levels of consumption goes against the objective of energy saving and will also cause undue hardship to small consumers whose consumption is low. Hence, it is considered that the slab may be continued.

The tariff as determined in Tariff Order of 15<sup>th</sup> March 2013 will be continued except the following changes:

### 1. Tariff for Kutir Jyoti consumers:

As per the study conducted by the DISCOMs, the Kutir Jyoti consumers are consuming more than 30 units per month for which they are eligible for lower tariffs. It is proposed to charge higher tariff for consumption of more than 30 units per month as given below:

### Kutir Jyoti (Rural):

## (Metered)

a)	First 30 Units	160 paisa/unit
b)	For remaining units	Rate as per DS-I Metered. Subject to a minimum of
		Rs. 40 per connection per month.

## Kutir Jyoti (Urban):

## (Metered)

a)	First 30 Units	195 paisa/unit
b)	For remaining units	Rate as per DS-II metered. Subject to a minimum
		of Rs. 50 per connection per month.

#### 2. Demand based Tariff:

The 3 phase consumers with a connected load of 5 kW and above are allowed to opt demand based tariff as an optional tariff. There is a demand from single phase consumers also whose connected load is up to 7 kW for similar demand based tariff as an optional tariff in line with 3 phase consumers. The Commission has hence decided to extend demand based tariff (optional) to single phase domestic

consumers also at the tariff as indicated in the Tariff Schedule. If the single phase meters of the consumer does not have the facility to record maximum demand, he/she may get their meter changed to avail demand based tariff.

## 3. Meter Rent:

There is demand from some of the consumers that they are prepared to pay the metering cost in one lump sum, so that they need not to pay meter rent on monthly basis. The Commission has considered this issue and those consumers who are prepared to pay the entire cost of the metering arrangement are allowed to pay the cost estimated by the DISCOM and no meter rent shall be collected from such consumers.

#### 4. Premium Tariff:

The BSEB in its tariff petition for FY 2011-12 had proposed separate tariffs for low tension consumers for Patna area and rest of Bihar on account for maintaining close to 24 hours of supply to Patna area. In its tariff order for FY 2011-12, the Commission observed "The Commission feels that the Distribution Licensee cannot differentiate in making electric supply available to different areas. As per provisions of the Act, there should be equitable distribution of available energy in different areas. So the Commission directs the Board for distribution of energy in different areas of the state as far as possible. However, if the Board supplies or intends to supply power continuously to some areas including Patna this should not be done at the cost of supply to other areas. BSEB can charge premium over the normal tariff from consumers of such areas getting nearly 24 hours of supply from 33 kV or 11 kV feeders to all LT categories and 11 kV categories except Kutir Jyoti and Agricultural consumers. The continuous supply shall mean the normal supply excluding the grid failure, any force majeure condition, scheduled shut down and emergent breakdown. The Commission has accordingly allowed 10% premium on fixed and energy charge and in MMC in tariff rate of all LT consumers and 11 kV consumers except Kutir Jyoti and Agricultural consumers. The Board has to notify such areas."

The Commission allowed the provision of premium tariff in the Tariff Order for FY 2012-13 and FY 2013-14 also with certain conditions for improvement in the

distribution infrastructure and keeping technical teams ready round the clock for rectifying the defects.

The DISCOM has not yet been able to fulfill the conditions and has not notified any area for premium tariff. The power availability has now increased in the system. The Government has also announced 24 hours supply in district towns. Therefore, the Commission does not consider it appropriate to continue and allow premium tariff rate for areas having 24 hours supply.

## 8.4 Tariff Schedule

The approve Tariff Schedule which shall be effective from 1<sup>st</sup> April 2014 is given in Appendix-I.

Part A- Tariff Schedule for Low Tension

Part B- Tariff Schedule for High Tension

Part C- Miscellaneous and General Charges

## TARIFF SCHEDULE FOR RETAIL TARIFF RATES AND TERMS AND CONDITIONS OF SUPPLY FOR FY 2014-15

(Effective from 1<sup>st</sup> April, 2014)
PART - A: LOW TENSION SUPPLY

System of supply: Low Tension – Alternating Current, 50 cycles

Single Phase supply at 230 Volts

Three Phase supply at 400 Volts

The tariffs are applicable for supply of electricity to L.T consumers with a connected load up to 70 kW for domestic and non-domestic category, up to 99 HP for industrial (LTIS) and for public water works (PWW) category and up to 100 HP for irrigation category.

- Single Phase supply up to 7.0 kW
- Three Phase supply 5.0 kW and above

Category of Service and TARIFF RATES

### 1.0 DOMESTIC SERVICE

#### **Applicability**

This tariff is applicable for supply of electricity to domestic purposes such as lights, fans, radios, televisions, heaters, air-conditioners, washing machines, air-coolers, geysers, refrigerators, ovens, mixers and other domestic appliances including motor pumps for lifting water for domestic purposes. This is also applicable to the common facilities in the multistoried, purely residential apartments, buildings.

## 1.1 Kutir Jyoti Connections (KJ) – Rural / Urban

This will be applicable to (i) all huts (Kutir) and dwelling houses of rural and urban families below the poverty line (BPL) (ii) houses built under schemes like Indira Awas Yojana and similar such schemes for BPL families.

- Hut (Kutir) means a living place with mud wall and thatched roof or house built under Indira Awas Yojana and other similar schemes for BPL families which shall not exceed 200 Sq ft area.
- ii. The total connected load of Kutir Jyoti connection in a rural area should not

exceed 60 Watts and for an urban connection it should not exceed 100 watts and maximum consumption 30 units per month shall be allowed.

- iii. Use of CFL both in rural areas and urban areas should be encouraged.
- iv. In case it is detected that the norms prescribed in para (i) and (ii) above are violated, the Kutir Jyoti Tariff shall immediately become inoperative and rates applicable to DS I and DS- II category as the case may be, with appropriate charge shall apply in such cases.

## 1.2 Domestic Service – I (DS – I)

This is applicable to domestic premises in rural areas for a load up to 2 kW not covered by areas indicated under DS-II and not being fed from urban / town feeders.

### 1.3 Domestic Service – II (DS – II)

This is applicable for domestic premises in urban areas covered by Notified area committee / Municipality / Municipal Corporation / Development Authority / All District and Sub divisional towns / Block Head Quarters / Industrial areas /Contiguous Sub urban areas and also areas getting power from Urban / Town feeders for single phase supply for load up to 7 kW and three phase supply for load of 5 kW and above. Rural consumers having sanctioned load above 2 kW will also come under this category. Consumer has the option to take single -phase or three-phase supply connection for a load between 5 kW and 7 kW.

#### 1.4 Domestic Service – III (DS – III)

This is applicable for registered societies, for their residential colonies, having not less than 15 houses/flats in the colony. Residential colonies/multistoried residential complexes taking load in bulk at a single point with a minimum load of 2 kW per flat/house and maximum total load up to 70 kW.

#### **TARIFF RATES**

#### 1.0 Domestic Service

SI.	Category of consumer	Fixed charge	Energy charge					
		(Rs.)	(Paisa/ Unit.)					
1.1	Kutir Jyoti - BPL Consumers	Kutir Jyoti - BPL Consumers						
(i)	K.J. (Rural) - (Consumption up	to 30 units per m	onth)					
		Rs.55 /						
	Unmetered	connection /	X					
		per month						
			a) First 30 units at 160 Ps/ unit					
	Metered	Х	b) Remaining units, rate as per DS-I metered.					
			Subject to Monthly Minimum Charge of Rs.40 per month per connection.					
(ii)	K.J. (Urban) (consumption up	to 30 units per mo	onth)					
	Metered only	X	<ul><li>a) First 30 units at 195 Ps/ unit</li><li>b) Remaining units, rate as per DS-II</li></ul>					
			metered. Subject to Monthly Minimum Charge of Rs.50 per connection per month.					

Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra however the same shall be provided by the State Government support to consumers and will not be recovered from consumer.

SI.	Category of	Fixed Charge	Energy Charges	
	consumer	(Rs.)	Consumption in a	
			month (Units)	Rate P/unit
1.2	DS – I: Connected I	oad: up to 2 kW only		
		Rs.160/connection		
	Unmetered	/ per month	X	X
			First 50 units	200
		X	51-100 units	230
	Metered		Above 100 units	270
			Subject to Monthly M	linimum Charge
		X	(MMC)	of
			1st kW – 40 units per month	
			2nd kW – 20 units p	er month

Fuel and Power Purchase cost Adjustment (FPPCA) charges as applicable will be charged extra.

SI.	Category of	Fixed charge	Energy charges	
	consumer	(Rs.)	Consumption in a	Rate

			month (Units)	Ps/unit
1.3	DS – II (Metered)			
	Single phase	First kW Rs.55/month or		
	Up to 7 kW	part thereof/connection.		
		Additional kW- Rs.15 per		
		kW per month or part	1-100 units	285
		thereof.		
	Three Phase	5 kW-Rs.250/	101-200 units	350
	5 kW and above	connection /month or part		
		thereof.	201-300 units	420
		Additional kW-Rs.15 per		
		kW per month or part	Above 300 units	530
		thereof.		

Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra.

#### **OPTIONAL**

## Domestic - DS-II (D) - Demand Based

All consumers under DS-II category opting for demand based tariff shall be required to pay at the rates indicated below:

SI.	Category of	Demand charge	Energy charges	
	consumer	(Rs./kW/month)	Consumption in a	Rate
			month (Units)	Ps/unit
1.3.1	DS-II (D)-(OPTIONAL	) Demand Based Tariff		
	Single Phase	First kW- Rs. 60/ kW per		
	contract demand up	month or part thereof.	1-100 units	285
	to 7 kW	Additional kW- Rs. 20 per kW		
		per month or part thereof on	101-200 units	350
		recorded demand or contract		
		demand whichever is higher.	201-300 units	420
	Three Phase	Rs. 60/kW per month or part		
	contract demand of	thereof on recorded demand	Above 300 units	530
		or contract demand		
		whichever is higher.		

## Subject to

Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra.

SI.	Category of	Fixed charge	Energy charges		
	consumer	(Rs.)	Consumption in a month (Units)	Rate (Ps/unit)	
			(Offics)	(1 3) utility	
1.4	DS – III (Metered)				
		Rs. 55 per kW per			
		month or part	All units	420	

<sup>(</sup>i) If in any month the recorded maximum demand exceeds 110% of the contract demand, that portion of the demand in excess of the contract demand will be billed at twice the normal rate.

	thereof		
		Subject to monthly minimum charge 1 <sup>st</sup> kW - 40 units / flat per m	
		Additional kW or part there units/flat per month	201–20

FPPCA as applicable will be charged extra.

## 2.0 NON-DOMESTIC SERVICE (NDS)

## **Applicability**

This is applicable for supply of electrical energy for non-domestic consumers having sanctioned load up to 70 kW, using electrical energy for light, fan and power loads for non – domestic purposes like shops, hospitals, nursing homes, clinics, dispensaries, restaurants, hotels, clubs, guest houses, marriage houses, public halls, show rooms, centrally airconditioning units, offices, commercial establishments, cinemas, X-ray plants, nongovernment schools, colleges, libraries and research institutes, boarding/lodging houses, libraries, railway stations, fuel/oil stations, service stations, All India Radio/T.V. installations, printing presses, commercial trusts, societies, banks, theatres, circus, coaching institutes, common facilities in multistoried commercial office/buildings Government and semigovernment offices, public museums and other installations not covered under any other tariff schedule. Government educational institutions, their hostels and libraries, Government hospitals and government research institutions and non–profitable government aided educational institutions their hostels and libraries, non-profitable recognized charitable cum public institutions, places of worship like temples, mosques, gurudwaras, churches etc. and burial/crematorium grounds.

## 2.1 Non – Domestic Service (NDS-I)

Applicable to loads up to 2 kW in rural areas not covered by areas indicated under NDS – II and not being fed from urban/town feeders.

**TARIFF RATES - NDS - I** 

SI.	Category of	Fixed charge (Rs.)	Energy charges	
	consumer		Consumption in a	Rate
			month (Units)	Ps/unit

SI.	Category of	Fixed charge (Rs.)	Energy charges	
	consumer		Consumption in a	Rate
_	_		month (Units)	Ps/unit
2.1	NDS- I			
	Unmetered	Rs.220/connection/ per	X	X
		month		
	Metered	Х	1-100 units	230
		x	101-200 units	270
		х	Above 200 units	310
		х	Subject to monthly	, minimum
			charge of 50 units per kW	

FPPCA charges as applicable will be charged extra.

## 2.2 Non – Domestic Service – NDS – II (Metered)

Applicable to loads up to 70 kW in urban areas covered by Notified Area Committees / Municipalities/Municipal Corporations/Regional Development Authorities/District and Subdivisional towns/Block headquarters/Industrial areas/contiguous sub urban areas getting power from urban/town feeders, except those covered under NDS-III.

Rural consumers having sanctioned load above 2 kW will also come under this category.

**TARIFF RATES - NDS - II** 

SI.	Fixed charge	Energy cha	irges
	(Rs.) Per month	Consumption in a month	Rate Ps/unit
		(Units)	
2.2	NDS – II		
	Single phase	1-100 units	500
	Rs.180 /kW or part thereof up		
	to 7 kW	101-200 units	530
		Above 200 units	570
	Three Phase		
	Rs.200/kW or part thereof for		
	loads of 5 kW and above		
		Subject to a monthly minir	mum charge of 50
		units/kW or part thereof	

FPPCA charges as applicable will be charged extra.

## **OPTIONAL**

## 2.2.1 Non-Domestic Service - NDS - II (D) - Demand Based

All those consumers under NDS-II with 3 phase supply and contract demand between 5 kW and 70 kW opting for demand based tariff shall be required to pay at the rates indicated below:

SI.	Category of	Demand charge	Energy charges	
	consumer	(Rs./kW/month)	Consumption in a	Rate
			month (Units)	Ps/unit
2.2.1	NDS-II (D) – (OPTIOI	NAL) Demand Based Ta	ariff	
	Contract demand	Rs. 250/kW per	1-100 units	500
	of 5 kW to 70 kW	month or part	101-200 units	530
		thereof on recorded	Above 200 units	570
		demand or contract		
		demand whichever is		
		higher.		

## Subject to

- (i) Monthly minimum charge of 70 units per month/kW on recorded demand or contract demand, whichever is higher.
- (ii) If in any month the recorded maximum demand exceeds 110% of contract demand, that portion of the demand in excess of the contract demand will be billed at twice the normal rate.

Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra.

## 2.3 Non-Domestic Service - NDS - III (Metered)

This is applicable for places of worship like temples, mosques, gurudwaras, churches etc. and burial / crematorium grounds. If any portion of the premises is used for commercial purposes, a separate connection shall be taken for that portion and NDS- II tariff schedule shall be applicable for that service.

**TARIFF RATES - NDS - III** 

SI.	Fixed charge (Rs.)	Energy cha	rges
		Consumption in a month	Rate
		(Units)	Ps/unit

2.3	NDS - III		
	Rs.80 /kW with minimum of	1-100 units	300
	Rs.165 per connection /	101-200 units	380
	month	Above 200 units	470
	For load up to 30 KW.	Subject to monthly m	inimum charge of 50
		units/kW or part ther	eof.

FPFCA charges as applicable will be charged extra.

#### **OPTIONAL**

## 2.3.1 Non-Domestic Service - NDS - III (D) - Demand Based

All those consumers under NDS-III category with 3 phase supply and with contract demand between 5 kW and 30 kW opting for demand based tariff shall be required to pay at the rates indicated below:

	Category of	Demand charge	Energy charges	
SI.	consumer	(Rs./kW)	Consumption in a month (Units)	Rate Ps/unit
2.3.1	NDS-III (D) – (OPTIC	NAL) Demand Based T	ariff	•
	Contract demand of 5 kW to 30 kW	Rs. 80/kW per month or part thereof on recorded demand or contract demand whichever is higher.  Rs. 80/kW per month or 1-100 units 101-200 units Above 200 units		300 380 470

#### Subject to

- (i) Monthly minimum charge of 70 units per month/kW on recorded demand or contract demand, whichever is higher.
- (ii) If in any month the recorded maximum demand exceeds 110% of contract demand, that portion of the demand in excess of the contract demand will be billed at twice the normal rate.

Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra.

## 3.0 IRRIGATION and AGRICULTURE SERVICE (IAS) Applicability

This is applicable for supply of electrical energy for bonafide use for agricultural purposes including processing of Agricultural Produce, confined to chaff - cutter, thrasher, cane crusher and rice Huller when operated by the agriculturist in the field or farm and does not include rice mills, flour mills, oil mills, dal mills or expellers. This is also applicable to

hatcheries, poultries (with more than 1000 birds) and fisheries (fish ponds).

#### 3.1 IAS - I

This is applicable for all purposes indicated above including private tube wells.

#### **Tariff Rates**

## **Unmetered Supply**

Rural feeder - Rs.120 / HP per month

Urban feeder - Rs.160 /HP per month

Note: Hatcheries, poultries and fisheries are not covered under unmetered supply they have to be metered only.

## **Metered supply**

Rural feeder

Energy Charges-110 Ps/unit

Urban feeder

Energy Charges - 170 Ps/unit

Subject to monthly minimum energy charges of

Rural feeder - Rs. 85/HP per month

Urban feeder - Rs.130/HP per month

Fuel and Power Purchase cost Adjustment (FPPCA) charges as applicable will be charged extra however the same shall be provided by the State Government support to consumers and will not be recovered from consumer.

## 3.2 IAS - II

This is applicable to state tube wells / state lift irrigation pumps / state irrigation pumps up to 100 HP.

## **Unmetered Supply**

Rural feeders - Rs.900 /HP per month

Urban feeders - Rs.1000/HP per month

## **Metered supply**

Rural feeder

Energy Charges – 600 Ps/unit

Urban feeder

Energy Charges - 700 Ps/unit

Subject to a monthly minimum energy charge of 225 units /HP per month.

FPPCA charges as applicable will be charged extra.

## 4.0 LOW TENSION INDUSTRIAL SERVICE (LTIS) Applicability

This is applicable for supply of electricity to low tension industrial consumers with a connected load up to 99 HP and below including incidental lighting for industrial processing or agro – industries purposes, arc welding sets, flour mills, oil mills, rice mills, dal mills, atta chakki, Huller, expellers etc.

## 4.1 LTIS-I (Connected load upto 25 HP)

#### **TARIFF RATES for LTIS - I**

SI.	Fixed charge (Rs.)	Energy charges		
		Consumption in a month (Units)	Rate (Ps/unit)	
4.1	LTIS-I (Connected load up	ted load up to 25 HP)		
	Rs.85/HP or part thereof	All units	535	
	/ per month			
	Subject to monthly minimum charge of 70 units/HP or part thereof.			

FPPCA charges as applicable will be charged extra.

#### **OPTIONAL**

## 4.1.1 LTIS-I (D) Contracted demand 5 kW to 15 kW - Demand Based Tariff

All those consumers under LTIS-I category with 3 phase supply and with contract demand 5 kW to 15 kW opting for demand based tariff shall be required to pay at the rates indicated below:

SI.	Category of	Demand charge	Energy charges	
	consumer	(Rs./kW)	Consumption in a month (Units)	Rate Ps/unit
4.1.1	LTIS-I (D) (Demand	Based Tariff) (OPTIONA	AL)	-
	Contract demand	Rs. 170/kW per		
	5 kW to 15 kW	month or part thereof		
		on recorded demand	All units	535
		or contract demand		
		whichever is higher.		

## Subject to

- (i) Monthly minimum charge of 125 units per month/kW on recorded demand or contract demand, whichever is higher.
- (ii) If in any month the recorded maximum demand exceeds 110% of contract demand, that portion of the demand in excess of the contract demand will be billed at twice the normal rate.

Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra.

## 4.2 LTIS-II (Connected load above 25 HP and upto 99 HP)

SI.	Fixed charge	Energy charges		
	(Rs.)	Consumption in a month (Units)	Rate (Ps/unit)	
4.2	LTIS-II (Connected loa	oad above 25 HP and upto 99 HP)		
	Rs.110/HP or part	All units 5		
	thereof per month			
		Subject to monthly minimum charge of 100 units/HP		
		or part thereof.		

FPPCA charges as applicable will be charged extra.

Consumers with a connected load above 79 HP and upto 99 HP have option to avail power under LTIS / HTS category.

#### **OPTIONAL**

## 4.2.1 LTIS-II (D) (Contract demand above 15 kW and up to 70 kW – Demand Based Tariff

All those consumers under LTS-II category with 3 phase supply and with contract demand above 15 kW and up to 70 kW opting for demand based tariff shall be required to pay at the rates indicated below:

	*	*	
SI.	Category of	Demand charge	Energy charges

	consumer	(Rs./kW)	Consumption in a month (Units)	Rate Ps/unit
4.2.1	LTIS-II (D) (Demand	Based Tariff) (OPT	TIONAL)	·
	Contract demand above 15 kW and up to 70 kW	Rs. 195/kW per month or part thereof on recorded demand or contract demand whichever is higher.	All units	570

## Subject to

- (i) Monthly minimum charge of 180 units per month/kW on recorded demand or contract demand, whichever is higher.
- (ii) If in any month the recorded maximum demand exceeds 110% of contract demand, that portion of the demand in excess of the contract demand will be billed at twice the normal rate.

Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra.

## **5.0 PUBLIC WATERWORKS (PWW)** (Connected load upto 99 HP)

## **Applicability**

This is applicable to public water works, sewerage treatment plant and sewerage pumping stations functioning under state government and state government under takings and local bodies.

SI.	Fixed charge (Rs.)	Energy charges			
		Consumption in a month (Units)	Rate (Ps/unit)		
5.0	<b>PUBLIC WATERWORKS (PWW</b>	) (Connected load upto 99 H	IP)		
	Rs. 205/HP or part thereof per month	All units	700		
	Subject to monthly minimum charge of 165 units / HP or part thereof.				

FPPCA charges as applicable will be charged extra.

Consumers with a connected load above 79 HP and up to 99 HP have the option to avail power under PWW / HTS category.

### 6.0 STREET LIGHT SERVICES (SS) Applicability

This is applicable for supply of electricity for street light system including signal system in corporation, municipality, notified area, committees, panchayats etc. and also in areas not covered by municipality and notified area committee provided the number of lamps from a point of supply is not less than five. Also applicable for Traffic Lights, Mast lights / Blinkers etc.

#### **Tariff Rates**

## 6.1 SS-I Metered Supply

All units - 700 Ps. /unit

Subject to monthly minimum charge of:-

- i) Gram Panchayats 160 units / kW or part thereof
- ii) For Nagar Palika / NAC / Municipality 220 units / kW or part thereof
- iii) For Municipal Corporations 250 units / kW or part thereof

FPPCA charges as applicable will be charged extra.

## 6.2 SS-II Unmetered Supply

**Fixed Charges** 

- i) Gram Panchayats Rs. 270 per 100 W/month or part thereof
- ii) For Nagar Palika / NAC / Municipality Rs. 360 per 100 W/month or part thereof
- iii) For Municipal Corporations Rs. 440 per 100 W/month or part thereof

FPPCA charges as applicable will be charged extra.

#### TERMS AND CONDITIONS OF LOW TENSION TARIFF

The foregoing tariffs are subject to the following conditions:

## 1. Rebate for prompt payment

The due date for making payment of energy bills or other charges shall be 15 days from the date of issue of the bill. Rebate will be allowed for making payment of energy bills on or before due date specified in the bill as given below:

i.	Kutir Jyoti (Unmetered)	Rs.2/- per connection per month.
ii.	DS-I and NDS-I (Unmetered)	Rs.3/- per connection per month.
iii.	Agricultural and Irrigation pump sets (Unmetered)	Rs.5/- per HP/month
iv.	Street Lights (Unmetered)	Rs.3/- per connection/month
V.	All metered categories	10 paise per unit, on units billed

In case a consumer makes full payment after due date but within 10 days after the due date, no DPS shall be leviable for this period but rebate for prompt payment will not be admissible.

## 2. Accounting of Partial payment

All payment made by consumers in full or part shall be adjusted in the following order of priority:

Statutory taxes and duties on current consumption

Arrear of Statutory taxes and duties

Delayed payment surcharge

Balance of arrears

Balance of current bill

## 3. Delayed Payment Surcharge (DPS)

In case a consumer does not pay energy bills in full within 10 days grace period after due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding principal amount of bill will be levied from the due date for payment until the payment is made in full without prejudice to right of the

licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003. The licensee shall clearly indicate in the bill itself the total amount, including DPS, payable for different dates after the due date after allowing for the grace period of 10 days. No DPS shall be charged on DPS arrear. The bill shall indicate the energy charges for the month, arrears of energy charges and DPS separately.

#### 4. Duties and Taxes

Other statutory levies like electricity duty or any other taxes, duties etc., imposed by the State Government / Central Government or any other competent authority, shall be extra and shall not be part of the tariff as determined under this order.

## 5. Defective / Damaged / Burnt meters supply

In case of meter being defective / damaged / burnt the licensee or the consumer as the case may be, shall replace it within the specified period prescribed in "Standards of Performance for Distribution Licensee", Regulations issued by the Commission.

Till defective / damaged / burnt meter is replaced, the consumption will be assessed and billed on an average consumption of last 12 months from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes including calculation of electricity duty until the meter is replaced/ rectified.

In cases of newly installed meter of a consumer becoming defective/ damaged/ burnt after installation of the meter prior to completion of 12 months since its installation, the billing for the period for such defective/ damaged/ burnt meter, till it is not replaced, shall be done on the basis of average monthly consumption of the consumer or the MMC whichever is higher.

## 6. Shunt Capacitor Installation

- (a) Every LT consumer including irrigation pump set consumers whose connected load includes induction motor (s) of capacity 3 HP and above and other low power factor consuming appliances shall arrange to install low tension shunt capacitors of appropriate capacity at his cost across terminals of his motor (s). The consumer shall ensure that the capacitors installed by him are properly matched with the actual rating of the motor so as to ensure power factor of 90%.
- (b) All LT consumers having welding transformers will be required to install suitable shunt

capacitor(s) of adequate capacity so as to ensure power factor of not less than 90%.

- (c) The capacitor shall be of standard manufacture and meet the Bureau of Indian Standards specification.
- (d) Consumers not complying to above shall be liable to pay a surcharge of 5% (five percent) of the billed amount excluding DPS till the capacitors are installed.
- (e) Any LT consumer in whose case, the meter installed has power factor recording feature and who fails to maintain power factor of 90% in any month shall pay a surcharge of 5% (five percent) of the billed amount excluding DPS till the defective capacitors are replaced and power factor of 90% is maintained.
- (f) No new supply to LT installations having low power factor consuming equipment such as induction motor of 3 HP and above or welding transformers etc., will be released unless shunt capacitors are installed to the satisfaction of the licensee.
- (g) The ratings of shunt capacitor to be installed on the motors of different ratings are provided in the "Electric Supply Code" notified by the Commission.

## 7. Charges to Tatkal Connections (Optional)

If any consumer (other than High Tension and Railway) opts for availing connection under Tatkal scheme, the licensee shall release the Tatkal connection to such consumer with the following conditions:

- The Tatkal connections shall be released by licensee in half the time limit prescribed in the Supply code for that consumer category.
- Two (2) times of the following charges approved under head miscellaneous and general charges will be taken from the consumers willing to avail Tatkal connection.
- Application fees for new connection, and;
- Supervision, labor and establishment charge for service connection
- In case licensee fails to release connection within this time limit, licensee will
  refund the additional amount claimed to the consumer in the first energy bill.

## 8. Contract Demand for billing under Domestic Tariff:

- i) For computation of the connected load of a domestic consumer either load of coolers/ fans or room heaters whichever is higher shall be considered. For the premises having Air conditioner (without heater) and that of geysers, the computation of connected load shall be as per the provision of Bihar Electricity Supply Code, 2007.
- ii) The contract demand of those consumers for the monthly billing purpose in the premises who have opted for demand based tariff, the recorded demand or the contract demand, whichever is higher, shall be considered.
- iii) Subject to the minimum load of 1 kW, the fraction of the load below 500 W shall be rounded to its nearest lower level of whole number and 500 W and above shall be rounded to its nearest higher level of whole number, as specified in the Bihar Electricity Supply Code, 2007.
- iv) In case of demand based tariff, verification of connected load is not required.

#### **PART - B: HIGH TENSION SUPPLY**

## 7.1 HTS - I (11 kV/6.6 kV)

Applicable for supply of electricity for use in installations with a minimum contract demand of 75 kVA and maximum contract demand of 1500 kVA.

Character of service: AC, 50 cycles, 3 phase at 11 kV or 6.6 kV.

#### **TARIFF RATES**

Demand charge	Energy charges
Rs./ kVA / Month of billing demand	Paise / kWh
270	All units – 570

The billing demand shall be the maximum demand recorded during the month or 85% of the contract demand whichever is higher.

Surcharge of 7.5% will be levied on the demand and energy charges for supply at 6.6 kV.

If in any month the recorded maximum demand exceeds 110% of contract demand, that portion of the demand in excess of the contract demand will be billed at twice the normal charges.

FPPCA charges as applicable shall be charged extra.

### 7.2 HTS – II (33 kV)

This is applicable for use in installations with a minimum contract demand of 1000 kVA and maximum contract demand of 15,000 kVA.

Character of service: AC, 50 cycles, 3 phase at 33 kV.

**TARIFF RATES** 

Demand charge Rs. / kVA / Month of billing demand	Energy charges (Paise / unit)	
270	All units - 550	

The billing demand shall be the maximum demand recorded during the month or 85% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 110% of contract demand, that portion of the demand in excess of the contract demand will be billed at twice the normal charges.

FPPCA charges as applicable shall be charged extra.

#### 7.3 HTS – III (132 kV)

This is applicable for installations with a minimum contract demand of 7.5MVA. Character of service: AC, 50 cycles, 3 phase at 132 kV

#### **TARIFF RATES**

Demand charge Rs. / kVA / Month of billing demand	Energy charges (Paise / unit)
270	All units – 540

The billing demand shall be the maximum demand recorded during the month or 85% of the contract demand whichever is higher.

If in any month the recorded maximum demand of the consumer exceeds 110% of the contract demand, that portion of the demand in excess of the contract demand will be billed at twice the normal charges.

FPPCA charges as applicable shall be charged extra.

### 7.4 HTSS (33 kV/11 kV)

This is applicable for supply of electricity to all consumers who have contract demand of 300 kVA and more for induction furnace including Ferro Alloy loads. This tariff will not apply to casting units having induction furnace of melting capacity of 500 Kg and below.

The capacity of induction furnace shall be 600 kVA per metric ton as existing for determining the contract demand of induction furnace in the existing HTSS service connections. However, for new connection and if the furnace is replaced with a new one for the existing connections, the contract demand shall be based on total capacity of the furnace and equipment as per manufacturer technical specifications, and in case of difference of

opinion, the provisions of clause Nos. 6.39 and 6.40 of the Bihar Electricity Supply Code shall apply.

Those consumers who are having rolling/re-rolling mill in the same premises will take additional contract demand for the rolling/re-rolling mill over and above the contract demand required for induction furnace. The consumer will have the option to segregate the rolling/re-rolling mill and take separate new connection following all prescribed formalities with a separate transformer. This new connection, if taken by the consumer will be allowed to be billed in appropriate tariff schedule. Such rolling/re-rolling mill will be allowed to avail power at 33 kV.

Character of service: AC, 50 cycles, 3 phase at 33 kV or 11kV.

#### **TARIFF RATES**

Demand charge	Energy charges
Rs. / kVA / Month of billing demand	(Paise / unit)
700	All units 310

The billing demand shall be the maximum demand recorded during the month or the contract demand whichever is higher.

If in any month the recorded maximum demand of the consumer exceeds 110% of contract demand that portion of the demand in excess of the contract demand will be charged at twice the normal charges.

If the power is availed at 11 kV a surcharge of five (5) % will be charged extra on demand and energy charges.

FPPCA charges as applicable shall be charged extra.

## 8.0 Railway Traction Service (RTS)

Applicable to Railway Traction loads only.

Tariff rates at 132 kV

Demand charge	Energy charges
Rs. / kVA / Month of billing demand	(Paise / unit)
240	All units 555

i. 15 Ps/unit of rebate will be provided for availing supply at voltages higher than
 132 kV

- ii. 15 Ps/unit of surcharge will be billed for availing supply at lower voltages than 132 kV.
- iii. The billing demand shall be the maximum demand recorded during the month or 85% of the contract demand whichever is higher.

FPPCA charges as applicable shall be charged extra.

### Time of Day tariff (ToD)

All HT consumers other than Railway traction have the option to take TOD tariff instead of the normal tariff given in the schedule.

Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter. The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Time of use	<b>Demand Charges</b>	Energy Charges
(i) Normal period	Normal Rate	Normal rate of energy charges
(5:00 a.m. to 5:00 p.m)		
(ii) Evening peak load period	Normal Rate	120% of normal rate of energy
(5:00 p.m to 11.00 p.m)		charges
(iii) Off-peak load period	Normal Rate	85% of normal rate of energy
(11:00 p.m to 5:00 a.m)		charges

Applicability and Terms and Conditions of TOD tariff:

- TOD tariff will be optional for all HT consumers having contract demand below 200 kVA. TOD tariff will be mandatory for all HT consumers having contracted demand of 200 kVA and above.
- ii. The facility of aforesaid TOD tariff shall not be available to HT consumers having captive power plants and/or availing supply from other sources through wheeling of power.
- iii. The HT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.
- iv. After electing TOD tariff, if any industrial HT consumer on account of some reasons wants to go back to the earlier tariff according to the agreement, this facility shall be available to him only once in two years.
- v. If the actual monthly consumption of such HT consumer, whose monthly

minimum charges are based on units, is less than minimum consumption, then the difference (deficit) of units between the minimum consumption and actual consumption shall be billed at normal rate of energy charge prescribed for "Normal Period".

- vi. In the event of applicability of TOD tariff to a consumer, the terms and conditions of the applicable tariff (such as monthly tariff minimum charge, etc.) shall continue to apply.
- vii. In case, the consumer exceeds 110% of the contract demand, the demand in excess of contract demand shall be billed at twice the normal tariff applicable for the day time i.e. 5:00 a.m. to 5.00 p.m. irrespective of the time of use.

#### TERMS AND CONDITIONS OF HT TARIFF

## The foregoing tariffs are subject to the following conditions:

#### 1 Rebate for Prompt Payment

The due date for making payment of energy bills or other charges shall be 15 days from the date of issue of the bill.

The tariff rates are subject to prompt payment rebate of 1 (one) paise per unit on units billed provided the bill is paid by due date specified therein. If the consumer makes full payment after due date but within 10 days after due date, no DPS shall be leviable for this period but rebate for prompt payment will not be admissible.

#### 2 Delayed Payment Surcharge (DPS)

In case of consumer does not pay energy bills in full within 10 days grace period after due date specified in the bill, a delayed payment surcharge of one and half (1.5) % per month or part thereof on the outstanding principal amount of bill will be levied form the original due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003. The licensee shall clearly indicate in the bill itself the total amount, including DPS, payable for different dates after the due date after allowing for the grace period of 10 days. No DPS shall be charged on DPS arrear.

#### 3 Duties and Taxes

Other statutory levies like electricity duty or any other taxes, duties etc., imposed by the State Government / Central Government or any other competitive authority, shall be extra and shall not form part of the tariff as determined under this order.

#### 4 Power Factor Surcharge

The average power factor (monthly) of the supply shall be maintained by the consumer not less than 0.90.

If the monthly average power factor falls below 90% (0.9) he shall pay a surcharge in addition to his normal tariff at the following rates:

(i) For each fall of 0.01 in power factor	One percent on demand and energy
Up to 0.80	charge
(ii) For each fall of 0.01 in power	1.5 (one and half) percent on demand and
factor	energy charge (Actual Recorded)
below 0.80	

If the average power factor falls below 0.70 consecutively for 3 months, the Licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.

#### 5 Power Factor Rebate

In case the average power factor (monthly) of the consumer is more than 90% (0.90) a power factor rebate at the following rates shall be allowed.

For each increase of 0.01 in power	0.5 (half) percent on demand and energy
factor above 0.90 up to 0.95	charge (Actual Recorded)
For each increase of 0.01 in power	1.0 (one) percent on demand and energy
factor above 0.95	charges. (Actual Recorded)

### 6 Accounting of Partial payment

All payment made by consumers in full or part shall be adjusted in the following order of priority:

- a) Statutory taxes and duties on current consumption
- b) Arrear of Statutory taxes and duties
- c) Delayed payment surcharge
- d) Balance of arrears
- e) Balance of current bill

### 7 Transformer Capacity

The transformer capacity of HT consumer shall not be more than 150% of the contract demand, consumer found to be utilizing transformer of higher capacity than admissible for his contracted load, will fall under malpractice.

If standard capacity is not available for exact requirement then relaxation in transformer capacity up to 10% extra can be allowed in individual cases on request.

All HT/EHT consumers having contract demand of 200 kVA and above may be allowed to have a stand by transformer, whose capacity shall not be more than the main transformer. The technical/physical arrangement shall be approved by the Licensee's officer before it is installed. If any consumer violates the condition, then line will be disconnected and standby facility shall be withdrawn.

Considering the special need of the Railway, the RTS consumer may be allowed to have 100% extra i.e. 200% of the contract demand. Stand by transformer may also be allowed, which should not be more than the capacity of the main transformer.

### 8 Defective / Damaged / Burnt meter replacement

In case of meter being defective / damaged / burnt the Licensee or the consumer as the case may be shall replace the same within the period specified in "Standards of Performance for Distribution Licensee" Regulations issued by the Commission. Till defective meter is replaced the consumption will be assessed and billed on an average consumption of last 12 months from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes including calculation of electricity duty until the meter is replaced/ rectified.

In cases of newly installed meter of a consumer becoming defective/ damaged/ burnt after installation of the meter prior to completion of 12 months since its installation, the billing for the period for such defective/ damaged/ burnt meter, till it is not replaced, shall be done on the basis of average monthly consumption of the consumer or the MMC whichever is higher.

- 9 If the actual recorded demand of a consumer exceeds 110% consecutively for three months Licensee may issue a notice and inform the consumer to get additional contract demand sanctioned or to limit their drawal as per their contract. Otherwise Licensee will take action as per provisions of the Act/Rules/Regulations.
- 10 The prevailing practice will continue for determining the contract demand of induction furnaces in the existing services connections. However, for new connections and where the furnaces are replaced in existing connections, contract demand shall be based on the total capacity of the furnace and equipment as per manufacturer technical specifications and in case of difference of opinion, the

provisions of clause No.6.39 and 6.40 of Bihar Electricity Supply Code shall apply.

#### 9.0 Temporary Supply (LT and HT)

#### 9.1 Applicability

This tariff is for connection of temporary in nature for period of less than one year. The applicability shall be as given in the respective category tariff rate schedule. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the Licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.

#### 9.2 Tariff

Fixed charge and energy charge shall be chargeable at one and half times the normal tariff as applicable to the corresponding appropriate tariff category.

## 9.3 Terms of Supply

- a) Temporary supply under any category of service may be given for a period not exceeding 30 days in the first instance, the duration of which, however may be extended on month-to-month basis subject to maximum of one year.
- b) In addition to the charges mentioned above, the consumer shall have to deposit the following charges before commencement of the temporary supply:
  - i. Estimated cost of erection of temporary service line and dismantling.
  - ii. Cost of irretrievable materials which cannot be taken back to service.
  - iii. Meter rent for the full period of temporary connection as per appropriate Tariff Schedule and miscellaneous charges.
  - iv. Rental on the cost of materials as per estimate framed but not payable by the consumer shall be payable at the rate of Rs. 15/- per month on every Rs. 100/- or part thereof.
  - v. Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.

- (c) The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including the energy consumption charges estimated for full period on the basis of connected load. This will however, be adjusted against the final bill that will be rendered on disconnection of supply month to month basis.
- (d) If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill for the previous period, as well.
- (e) The temporary supply shall continue as such and be governed by the terms and conditions specified above until the supply is terminated or converted into permanent supply at the written request of the consumer. The supply will be governed by the terms and conditions of permanent supply only after the consumer has duly completed all the formalities like execution of agreement, deposit of security money, cost of service connection and full settlement of the account in respect of the temporary supply etc.

## 10.0 Seasonal Supply (LT and HT)

(1) Seasonal supply shall be given to any consumer on written request to the Licensee subject to the following conditions.

Period of Supply	Tariff Rate
Upto 3 consecutive months in a year	Appropriate tariff plus 30 percent
More than 3 consecutive months and	Appropriate tariff plus 20 percent
upto 6 consecutive months in a year	
More than 6 consecutive months and	Appropriate tariff plus 15 percent
upto 9 consecutive months in a year	
More than 9 consecutive months but	Appropriate tariff plus 5 percent.
less than one year	

(2) The meter rent and other charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.

- (3) The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.
- (4) Consumer proposing to avail seasonal supply shall sign an agreement with the Licensee to avail power supply for a minimum period of 3 years in the case of HT, and 2 years in the case of LT category of supply.
- (5) The consumers must avail supply in terms of whole calendar month continuously.
- (6) The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.
- (7) The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.

#### **PART - C: MISCELLANEOUS AND GENERAL CHARGES**

**11.0** The Miscellaneous and General charges approved by the Commission are as below:

#### 11.1 Meter Rent

Particulars	Applicable Charges
Kutir Jyoti	Rs. 10/month
a) Single Phase LT except Kutir Jyoti	Rs. 20/month
b) Three Phase LT up to 100 Amps	Rs. 50/month
c) LT meter with CT	Rs. 500 / month
d) 6.6 kV and 11 kV HTS-I	
(i) Metering at low voltage	Rs. 500 / month
(ii) Metering at 6.6/11 kV	Rs. 700 / month
e) 33 kV HT metering equipment for HTS-II and HTSS	Rs. 3000 / month
f) 132 kV EHT metering equipment for HTS-III	Rs. 15000 / month
g) 25 kV RTS	Rs.3000/month
h) 132 kV RTS	Rs.15000/month

Note: For those consumers who are prepared to pay the entire cost of metering arrangement are allowed to pay the cost estimated by the DISCOM and no meter rent shall be collected from such consumers.

# 11.2 Application fee for new connection / reduction of load / enhancement of load /request for permanent disconnection/ request for tatkal connection:

No.	Category / class	Rate
(i)	Kutir Jyoti	Rs.20.00
(ii)	LT Single phase except Kutir Jyoti	Rs. 75.00
(iii)	LT Three phase	Rs. 200.00
(iv)	LT Industrial	Rs. 300.00
(v)	HT Connection	Rs. 750.00
(vi)	For tatkal connection	Two (2) times the normal rate

## 11.3 Testing / Inspection of consumer's installation:

No.	Category / class	Rate
(i)	Initial Test / Inspection	Free of cost
(ii)	·	Rs. 100.00 for single phase
	necessitated by fault in	connection
	installation or by not complying	Rs. 200.00 for three phase LT
	with terms and conditions of	connection
	supply	Rs.800 for HT connection.

## 11.4 Meter Testing Fee:

The meter testing fee at the following rates will be charged from the consumers opting to provide their own meters

No.	Category / class	Rate
(i)	Single Phase meter (L.T.)	Rs. 100.00
(ii)	Three Phase meter (L.T.)	Rs. 200.00
(iii)	Three Phase meter with CT	Rs. 300.00
(iv)	Tri-vector and special type meter	Rs. 1800.00
(v)	33 kV or 11 kV metering equipment	Rs. 5000.00
(vi)	132 kV/220 kV metering equipment	Rs. 8000.00

#### Note:

- 1) No meter testing fee shall be charged from the consumers if the meter has been provided by the licensee.
- 2) If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory will be payable by the consumer.

## 11.5 Removing / Re-fixing / Changing of Meter / Meter Licensee at consumer's request:

No.	Category / class	Rate	
(i)	Single Phase meter	Rs. 200.00	Cost of material, as
(ii)	Three Phase meter	Rs. 400.00	required, will be
(iii)	Three Phase meter with CT	Rs. 500.00	borne by the
(iv)	Trivector and special type meter	Rs. 600.00	consumer
(v)	High tension metering equipment	Rs. 1200.00	

## 11.6. Reconnection charge:

Sl.No .	Category/class	Rate
(i)	Single Phase supply, LT	Rs. 100.00
(ii)	Three Phase supply other than LT industrial	Rs. 200.00
(iii)	Three Phase LT industrial supply	Rs. 900.00
(iv)	HT supply	Rs. 3000.00

## 11.7 Supervision, Labour and Establishment charge for service connection:

SI.No.	Category/class	Rate
(i)	Single Phase LT	Rs. 400.00
(ii)	Three Phase LT other than industrial	Rs. 900.00
(iii)	Three Phase industrial	Rs. 1500.00
(iv)	HT	As per approved estimate
(v)	For tatkal connection	Two (2) times the normal rate

## 11.8 Security Deposit:

- a) The consumer (except Kutir Jyoti rural and Kutir Jyoti urban) shall pay initial security deposit equivalent to the estimated energy charges including fixed / demand charges for a period of two months or as per the provisions of Bihar Electricity Supply Code notified by the Commission.
- b) All Central Government and State Government departments are exempted from payment of security deposit. However all public sector undertakings and local bodies shall pay security deposit, as applicable.
- c) The amount of security deposit obtained from the consumer is liable to be enhanced every year, in April-May of next year on the basis of consumption during previous years or as specified in clause 7.15 of Bihar Electricity Supply Code. In default of payment of additional security deposit, wherever payable after review, the service line may be disconnected on serving thirty days notice and connection thereafter can be restored only if the deposit is made in full along with the prescribed reconnection charges and surcharge @1.5% per month or part thereof on the amount of outstanding.

#### 11.9 Interest on Security Deposit

Security deposit made by a consumer shall bear interest as specified in Bihar Electricity Supply Code, payable at Bank rate notified by RBI from time to time. The interest will be calculated for full calendar months only and fraction of a month in which the deposit is received or refunded, shall be ignored. The interest for the period ending 31<sup>st</sup> March shall be adjusted and allowed to the consumer in the energy bill for May issued in June and in subsequent month(s), if not adjusted completely against the bill for the month of May.

**12.0** The other terms and conditions of supply of electricity not specially provided in this tariff order will continue to be regulated by the provisions specified in the Bihar Electricity Supply Code notified by the Commission.

## 9. Fuel and Power Purchase Cost Adjustment

## 9.0 Background

- 9.1 Section 62 sub-section 4 of the Electricity Act, 2003 provides that no tariff or part of any tariff may ordinarily be amended, more frequently than once in every financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified. This provision of the Act requires the Commission to specify the formula for fuel surcharge.
- 9.2 Accordingly, the Commission has been specifying the formula for working out the Fuel and Power Purchase Cost Adjustment (FPPCA) charges and other terms and conditions of FPPCA in each of its tariff orders starting from FY 2006-07 to FY 2012-13. Accordingly, the Commission had allowed erstwhile BSEB/distribution licensees to recover the FPPCA charges from the consumers in terms of the formula specified in the respective tariff orders of the Commission from time to time.
- 9.3 Now, the Commission has issued the BERC (Terms and Conditions for determination of Tariff) (First Amendment) Regulations, 2012 dated 31.08.2012.

As per these Regulations, the amount of Fuel and Power Purchase Cost Adjustment (FPPCA) charges shall be computed as under:

FPPCA (Paise / kWh) = 
$$\frac{Qc(Rc_2-Rc_1)+Qo(Ro_2-Ro_1)+Qpp(Rpp_2-Rpp_1)+Vz+A}{(Qpg_1+Qpp_1+Qpp_2) \times (1- L) \atop 100} \times 100$$

#### Where,

Qc = Quantity of coal consumed during the adjustment period in Metric Tons (MT)

= (SHR x QPg) (1+TSL)x1000 / GCV, or actual whichever is less

Rc<sub>1</sub> = Weighted average base rate of coal supplied ex-power station coal yard as approved by the Commission for the adjustment period in

Rs. / MT

Rc<sub>2</sub> = Weighted average actual rate of the coal supplied ex-power station coal yard for the adjustment period in Rs. / MT

Qo = Actual Quantity of oil (in KL) consumed during the adjustment period or normative oil consumption as per Tariff order whichever is less.

Ro<sub>1</sub> = Weighted average base rate of oil ex-power station (Rs./KL) approved by the Commission for the adjustment period.

Ro<sub>2</sub> = Weighted average actual rate of oil ex-power station supplied (Rs. / KL) during the adjustment period.

Qpp = Total power purchased from different sources (kWh) =  $Qpp_2+Qpp_3$ 

 $Qpp_1 = Qpp_3 \left( \begin{array}{c} 1 - \underline{TL} \\ 100 \end{array} \right) \text{ in kWh}$ 

TL = Transmission loss (CTU) (in percentage terms).

Qpp<sub>2</sub> = Power purchase from sources with delivery point within the state transmission or distribution system (in kWh)

Qpp<sub>3</sub> = Power purchase from sources on which CTU transmission loss is applicable (in kWh)

Rpp<sub>1</sub> = Average rate of power purchase as approved by the Commission (Rs. / kWh)

Rpp<sub>2</sub> = Average rate of power purchased during the adjustment period (Rs. / kWh)

Qpg = Own power generation (kWh)

Qpg<sub>1</sub> = Own power generation (kWh) at generator terminal – approved auxiliary consumption

 Percentage T&D loss as approved by the Commission or actual, whichever is lower.

SHR = Station Heat Rate as approved by the Commission (Kcal / kWh)

TSL = Percentage Transit and Stacking Loss as approved by the Commission.

GCV = Weighted average gross calorific value of coal as fired basis during the adjustment period (Kcal / Kg).

VZ = Amount of variable charges on account of change of cost of unknown factors like water charges, taxes or any other

unpredictable and unknown factors not envisaged at the time of tariff fixation subject to prior approval of the Commission (Rs.)

A = Adjustment, if any, to be made in the current period to account for any excess / shortfall in recovery of fuel or power purchase cost in the past adjustment period, subject to the approval of the Commission (Rs.)

If there are more than one power stations owned by the Licensee Qc, Rc<sub>1</sub>, Rc<sub>2</sub>, Qo, Ro<sub>1</sub>, Ro<sub>2</sub>, Qpg and Qpg<sub>1</sub> will be computed separately for each power station and sum of the increase/decrease of cost of all power stations shall be taken into consideration.

9.4 In case of the two distribution companies, there is no generation of their own.

Therefore, Qc, Qo and Qpg<sub>1</sub> will be zero in this case.

Accordingly, the the two distribution licensees namely, North Bihar Power Distribution Company and South Bihar Power Distribution Company and the Generating Company can levy FPPCA charges with the prior approval of the Commission. Levy of FPPCA charges shall be subject to the following terms and conditions specified in the BERC (Terms and Conditions for determination of Tariff) (First Amendment) Regulations, 2012 dated 31.08.2012.

#### Terms and conditions for application of the FPPCA formula

- The basic nature of FPPCA is 'adjustment' i.e. passing on the increase or decrease in the fuel costs and power purchase cost, as the case may be, compared to the approved fuel costs and power purchase costs in this Tariff Order.
- 2) The operational parameters / norms fixed by the Commission in the Tariff Regulations / Tariff Order shall be the basis of calculating FPPCA charges.
- The FPPCA will be recovered every month in the form of an incremental energy charge (Rs/kWh) in proportion to the energy consumption and shall not exceed 10% of the approved avg. cost of supply in the Tariff order and balance amount, if any, in the FPPCA over and above this ceiling shall be

- carried forward to be billed in subsequent month.
- 4) Incremental cost of power purchase due to deviation in respect of generation mix or power purchase at higher rate shall be allowed only if it is justified to the satisfaction of the Commission.
- Any cost increase by the licensee by way of penalty, interest due to delayed payments, etc. and due to operational inefficiencies shall not be allowed.
- 6) FPPCA charges shall be levied on all categories of consumers.
- 7) Distribution licensee shall file detailed computation of actual fuel cost in Rs./kWh for each month for each of power stations of the state generators as well as cost of power purchase (Fixed and Variable) from each source/station and a separate set of calculations with reference to permitted level of these costs.
- The data in support of the FPPCA claims shall be duly authenticated by an officer of the licensee, not below the rank of Chief Engineer on an affidavit supported with the certified copy of energy bills of power purchase, transmission and RLDC charges, bill for coal purchase and its transportation cost, oil purchase bill and the quantity of coal and oil consumed during the month.
- 9) Levy of FPPCA charge will be allowed only when it is ten (10) paise or more per unit. If it is less than 10 (ten) paise/unit, the same may be carried forward for adjustment in the next month.
- The incremental cost per kWh due to this FPPCA arrived for a month shall be recovered in the energy bill of the month subsequent to the order of the Commission approving FPPCA with full details of rate and unit(s) on which FPPCA charges have been billed. The Generating Company and the Distribution Companies shall provide along with the proposal of FPPCA (as applicable to them) for a month, a compliance report of the previous order of the commission in respect of FPPCA.

# 10. Wheeling Charges and Open Access Charges

### 10.1 Background

The Commission has computed the wheeling charges for both the DISCOMs combinedly in the MYT order dated 15<sup>th</sup> March, 2013. Further, the Wheeling and Open Access charges are common/uniform to all the consumers across State of Bihar. Accordingly, the Commission has determined the Wheeling and Open Access charges for FY 2014-15.

## 10.2 Wheeling Charges

The net distribution ARR for both the distribution licensees as approved in chapter 5 is Rs. 6327.86 crore. The distribution ARR approved is segregated into wires business and retail supply business in the percentages given below:

Table 10.1: Allocation matrix for segregation of expenses between Distribution Wire Business and Retail Supply Business

SI. No.	Particulars	Wire Business (%)	Retail Supply Business (%)
1	Power purchase expenses		100%
2	Employee expenses	60%	40%
3	Administration and General expenses	50%	50%
4	Repair and Maintenance expenses	90%	10%
5	Depreciation	90%	10%
6	Interest and finance charges	90%	10%
7	Interest on working capital	10%	90%
8	Contribution to RPO fund	-	100%
9	Return on equity	90%	10%
10	Non-tariff income	10%	90%
11	Interest during construction	90%	10%

The total fixed costs (net ARR excluding power purchase cost is segregated into wire business and retail supply business as per the above matrix.

Table 10.2: Segregation of Wires and Retail supply costs

(Rs. crore)

SI. No.	Particulars	Total Fixed Cost	Wire Cost	Retail Supply
1	Employee cost	470.35	282.21	188.14
2	A&G expenses	60.07	30.04	30.04

3	R&M Cost	87.56	78.80	8.76
4	Holding Company expenses	23.80	11.90	11.90
5	Depreciation	191.42	172.28	19.14
	Interest and finance			
6	charges	273.51	246.16	27.35
7	Interest on working capital	155.36	15.54	139.82
8	RPO fund	20.25	0.00	20.25
9	Return on equity	123.06	110.75	12.31
10	Less: Non-tariff income	(171.68)	(17.17)	(154.51)
11	Less: IDC	(101.70)	(91.53)	(10.17)
12	Total	1132.00	838.98	293.02

The wheeling charges have been computed on the basis of approved costs of the DISCOMs for its distribution wire business and the total energy expected to be wheeled through their distribution networks. In the absence of segregated data on costs of operation of 33 kV and 11 kV networks, it has been assumed that the two costs are equal. The Commission would revisit this assumption when reliable and concrete data on operating costs (voltage wise) becomes available to it during review/true up. The wheeling charges worked out for 33 kV voltage level are given in the table below:

Table 10.3: Wheeling charges at 33 kV Voltage Level

SI.	Details	Units	Approved wheeling Charges
1	Energy input into 33 kV system	MU	11314
2	Total distribution cost	Rs. Cr.	838.98
3	Distribution cost for 33 kV voltage levels (assuming 50% of item 2)	Rs. Cr.	419.49
4	Wheeling charges for 33 kV voltage level (item 3÷1)	Ps./kWh	37.00

The wheeling charges determined for 11 kV voltage level are as given in table below:

Table 10.4: Wheeling charges for 11 kV Voltage Level

SI. No.	Details	Units	Approved wheeling Charges
1	Energy input into 33 KV system	MU	11314
2	Energy sales in 33 kV system as approved by the	MU	883

SI. No.	Details	Units	Approved wheeling Charges
	Commission		
3	Losses in 33 KV	MU	566
4	Energy input into 11 kV system [1-(2+3)]	MU	9865
5	Total distribution cost	Rs. Cr.	410.49
6	Distribution cost for 11 kV voltage levels (assuming 50% of item 5)	Rs. Cr.	419.44
7	Wheeling charges for 11 kV voltage level (item 6÷4)	Ps./kWh	42.00

The Commission approves wheeling charges at 37 paise/kWh for 33 kV voltage level and at 42 paise/kWh for 11 kV voltage level for the FY 2014-15.

## 10.3 Open Access Charges

The Commission feels that the HT consumers should be provided a facilitative open access framework for procurement of power from sources other than that available within the State. For Open access to become a feasible option for HT consumers open access charges should be rational so that the cost of delivered power (from sources other than within the State) is comparable to retail tariff.

Pursuant to Section 39, 40 and 42 and all other enabling provisions of the Electricity Act, 2003, the Commission notified the "Terms and Conditions for open access" Regulations on 20th May 2006. The Commission through these regulations has introduced open access in phases in Bihar as given below, having regard to operational constraints, and other relevant factors.

Table 10.5: Phase Category of Consumers Open Access to be allowed from

SI.	Phase	Category of Consumers	Open Access to be allowed from
1.	Phase-I	Consumers with demand of 15 MW and above	1-Jun-06
2.	Phase-II	Consumers with demand of 10 MW and above	1-Dec-06
3.	Phase-III	Consumers with demand of 5 MW and above	1-Dec-07
4.	Phase-IV	Consumers with demand of 1 MW and above	1-Dec-08

The consumer who seeks open access in accordance with these regulations will have to pay transmission charges, wheeling charges, cross subsidy surcharge, additional surcharge and charges to SLDC. The applicability of these charges to any open access consumer shall be as provided in the regulations for open access. In the following section all the charges to be paid by consumer seeking open access are being determined.

## 10.4 Transmission Charge

The Commission has computed the transmission tariff as provided in clause 75 of the BERC (Terms and conditions for determination of Tariff) Regulations, 2007. The Petitioner has considered the allocated capacity (MW) to all long term customers at the same capacity of 2736 MW considered for FY 2013-14 in the MYT order. The DISCOMs in its petition have mentioned that they will be getting power from the following new sources during FY 2014-15.

Station	Expected CoD	New capacity after PLF (MW)
KBUNL	Apr 14	160
BTPS-I	Jun 14	80
BTPS-II	Dec 14	80
Barh Stage 2 U #1	Dec 13	280
Essar	Jul 14	450
Nabinagar	May 14	21
Total		1071

The sum of allocated capacity (in MW) to all long term transmission customers of the state transmission system is considered for FY 2014-15 at 3807 MW (2736 + 1071).

Based on the transmission cost worked out earlier the approved transmission charge for open access consumers for the FY 2014-15 is as given in table below:

**Table 10.6: Transmission Charge** 

Particulars	
Transmission ARR	270.60 (Rs. Crore)
Average transmission capacity (MW) –	
Total capacity (MW) allocated to long term	3807 MW
customers of the State	
Transmission charges for long term open	Transmission ARR ÷ (Average
access customers (Rs./MW/Month)	transmission capacity X 12) = Rs. 59,233
Transmission charges for short term open	Transmission ARR x 0.25) ÷ (Average
access customers (Rs./MW/Day)	transmission capacity X 365) = Rs.487

The Commission decides that the transmission charges in cash will be Rs. 59,233/MW/ month or part thereof for long term open access consumers and Rs. 487/MW/ day or part thereof for short term consumers. In addition transmission losses of 4% will be reduced in kind from the energy input (i.e. energy injected at the point of injection) at the point of delivery.

## 10.5 Wheeling Charges

For the energy input at 33 kV the wheeling charge shall be at 37 paise/kWh. In addition 5% of energy in kind will be deducted from the energy input, towards assumed losses in 33 kV network.

For energy input at 11 kV the wheeling charges shall be 42 paise /kWh. In addition, 6% of energy in kind will be deducted from the energy input towards assumed losses in 11 kV network.

### 10.6 Open Access Charges

The Open access charges shall be paid as per the table given below if the injection and drawl points of the open access customer are at different voltage levels.

**Table 10.7: Open Access Charges** 

Tubic 10.7. Open Access charges			
Drawl Injection	Transmission	33 KV	11 KV
Transmissio n	Transmission Charges plus transmission losses	Transmission charges plus wheeling charges of 33 kV. Losses of both transmission and 33 kV network shall be payable	Transmission Charges plus wheeling charges of 33 and 11 kV network shall be payable. The losses of transmission, 33 and 11 kV network shall be payable
33 KV	Transmission Charges plus transmission losses	Wheeling charges of 33 kV plus losses of 33 kV network	Wheeling Charges of 33 and 11 kV network. Losses for 33 and 11 kV shall also be payable
11 KV	Transmission Charges plus transmission losses	Transmission charges and Wheeling Charges of 33 kV. The losses of transmission and 33 kV network will have to be borne	Wheeling Charges of 11 kV plus losses of 11 kV network

## 10.7 SLDC Charges

Open access consumer shall pay all charges payable to the State Load Dispatch Centre (SLDC), as determined by the Commission under section 32 of the Act and as per the Regulation 19 (1) of "Terms and Conditions for Open Access" Regulations, 2006 of BERC.

The Annual SLDC and Operating charges for the present have not been determined separately as till date SLDC is not an independent entity but continues to be a part of Transmission Company with no separate accounts. The Commission believes that expenses incurred by the SLDC are a part of the transmission expenses of Transmission Company. The Commission has determined the revenue requirement for transmission function of company and consequently the revenue requirement of SLDC are a part of the revenue requirement of the transmission function. Charges payable to SLDC are a part of the transmission charges determined by the Commission. Till the time separate accounts are established by Transmission

Company for SLDC these charges shall continue to be determined as a part of the Transmission Charges of Transmission Company.

## 10.8 Cross Subsidy Surcharge

The open access consumers are liable to pay cross subsidy surcharge to compensate the distribution utility for any loss of revenue due to shifting of its consumer to the open access system.

In the MYT order dated 15<sup>th</sup> March 2013, the Commission has computed the cross subsidy surcharge for open access consumers as per the formula recommended in the Tariff Policy. In view of the prevailing power shortages in the state at that time, to encourage the HT consumers to seek power purchase options from the sources outside the states and to make the cost of delivered power comparable with the retail tariff approved, the cross subsidy surcharge was approved at 50% of the charge computed for FY 2013-14.

The Commission has noted that the HT consumers have not availed this facility and are not coming forward to purchase the power under open access. The Commission decided to further continue the concessional cross subsidy surcharge approved for FY 2013-14 during FY 2014-15 as given below:

For 132 kV consumers = 22 Ps/kWh.

For 33 kV consumers (other than HTSS) = 53 Ps/kWh.

For 11 kV consumers (other than HTSS) = 44 Ps/kWh

For HTSS consumers (33 kV & 11 kV) = Nil

#### 10.9 Additional Surcharge

The Commission is not in favour of levy of any additional surcharge, in the absence of the necessary data. The same shall be leviable only if it is conclusively demonstrated by BSPHCL that open access will lead to stranding of its fixed cost. BSPHCL should indicate the quantum of such stranded cost and the period over which it would be stranded for determination of additional surcharge.

## 10.10 Reactive Energy charges

The open access consumers should pay a reactive energy charge to Transmission and Distribution companies as the case may be for drawal / injection of reactive energy. The Commission in its last tariff order had directed erstwhile BSEB to conduct a study to determine the reactive energy charge and submit a proposal in the next tariff application. However the Petitioner has not submitted any such proposal and till the time the Petitioner submits a proposal in this regard, the reactive drawal shall continue to be charged at

4 paise/kVAR as determined by the Commission in its tariff order for FY2012-13.

### 10.11 Information to be put on the web site

The Commission directs the Petitioner to put all information related to open access facilities/charges on its web site. The information should include open access regulations, procedure for obtaining open access and details of all charges payable by an open access consumer.