

**KERALA STATE ELECTRICITY REGULATORY COMMISSION**  
Thiruvananthapuram

**Petition No.TP- 53 of 2008**

**ARR&ERC OF KINFRA EXPORT PROMOTION INDUSTRIAL PARKS LTD  
FOR THE YEAR 2008-09 to 2010-11**

August 30, 2008

Present : Shri. C.Balakrishnan, Chairman  
: Shri C. Abdulla, Member  
: Shri.M.P.Aiyappan, Member

Kinfra Export Promotion Industrial  
Parks Ltd  
Kakkanad, Kochi : Petitioner

**ORDER**

The Kerala State Electricity Regulatory Commission having scrutinized the Petition on ARR&ERC for 2008-'09 to 2010-11 filed by Kinfra Export Promotion Industrial Parks Ltd *vide* their letter No.KEPIP/ERC/165/2008 DATED 18-02-08,heard the views of the petitioner and public in Commission's proceedings on 17<sup>th</sup> June 2008 and having considered other documents and materials on record, passes the following order in exercise of the powers vested in it under the Electricity Act, 2003 in this behalf.

Sd/-  
M.P.Aiyappan  
Member

Sd/-  
C.Abdulla  
Member

Sd/-  
C.Balakrishnan  
Chairman

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Secretary (in charge)

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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Preamble**

Government of Kerala had granted a license for distribution of power to KINFRA Export Promotion Industrial Parks Limited to supply electricity to various establishments within the park area vide G.O. (P) No: 18/2003/PD dated 8.5.2003. Accordingly, KINFRA Export Promotion Industrial Parks Limited (KEPIP) is a deemed distribution Licensee under the first proviso of Section 14 of Electricity Act, 2003.

Presently, the Park receives power at 110 kV with Contract Demand of 7250 kVA from the Kerala State Electricity Board (KSEB) and supplies to the establishments/industrial units within the park area.

KINFRA Export Promotion Industrial Parks Limited had forty-two HT consumers and seventy seven LT consumers and sixteen temporary consumers during FY 2007-08.

During the year 2007-08, KEPIP projected a purchase of 50.73 MU of electrical energy from KSEB and in turn projected a supply of 49.2 MU to the ultimate consumers. During the year 2008-09 to 2010-11, the intake of energy is expected to become 42.52 MU , 62.86 MU and 98.79 MU respectively. The reason for reduction of consumption in 2008-09 has been attributed to the exit of one major consumer (M/s.Koyenco). Sales during the same period is expected to be 41.52 MU, 62.27 MU and 96.16 MU respectively.

#### **1.2 Procedural History**

KEPIP filed a petition for ARR and ERC for the financial year 2008-09 to 2010-11 on 18<sup>th</sup> February 2008, and a tariff proposal on 20.03.08 which was placed before the

Commission after initial scrutiny for the procedural requirements and was admitted and registered as TP 53 of 2008.

Clarification on certain points were sought from KEPIP vide letters dated 28<sup>th</sup> March 2008.

Replies to the clarifications were furnished by KEPIP vide letter dated 26<sup>th</sup> April 2008.

Commission held proceedings for public hearing at Kakkanad on 17th June 2008.

The Commission has thus ensured that the due process contemplated under the governing Act and Regulations were followed and adequate opportunity was provided at every stage to all individuals and organizations concerned, to express their views.

In finalizing the order on the ARR & ERC for the FY 2008-'09 to 2010-11, Commission has taken into consideration the materials filed by the Licensee the clarifications furnished by the Licensee in the meeting with the Commission, and further views expressed by the Stakeholders during the proceedings held for hearing their objections if any.

## **Chapter II**

### **ENERGY REQUIREMENT PROJECTIONS FOR 2008-09 to 2010-11**

#### **2.1 Methodology**

In estimating the demand and energy requirement for 2008-09 to 2010-11, Licensee has divided the requirement into two parts viz. based on current pattern and based on future demand.

#### **2.2 Projections by the Licensee**

The energy requirement projections for 2008-09 to 2010-11 made by Licensee are summarized below:

Sl No	Category	2008-09		2009-10		2010-11	
		No of consumers	Energy Sold-MU	No of consumers	Energy Sold-MU	No of consumers	Energy Sold-MU
1	HT	30	36.59	35	56.15	45	91.04
2	LT	70	4.69	75	4.88	75	4.88
3	Temporary	15	0.24	15	0.24	15	0.24
4	Total	115	41.52	125	61.27	135	96.16

*The Licensee has assumed increase in the number of consumers as detailed below.*

Sl No	Category	2008-09		2009-10		2010-11	
		Increase in No of consumers	Increase in Energy Sold-MU	Increase in No of consumers	Increase in Energy Sold-MU	Increase in No of consumers	Increase in Energy Sold-MU
1	HT	21	20.82	5	19.56	10	34.89
2	LT	6	-3.18	5	0.19	0	0
3	Temporary	1	0.45	0	0	0	0
4	Total	28	18.09	10	19.75	10	34.89

*The increase in consumption is attributed to the steep increase in the number of HT consumers. Commission is not proposing any changes in the figures.*

## **CHAPTER III T&D LOSSES**

### **3.1 Introduction**

The T&D loss for 2007-08 has been given as 3%. The loss for 2008-09 to 2010-11 has also been estimated as follows.

Year	Energy sold-MU	Energy Input-MU	Loss-%
2008-09	41.52	42.52	2.41

2009-10	61.27	62.86	2.60
2010-11	96.16	98.79	2.74

No reduction in T&D loss has been proposed for the period from 2009-10. Commission is of the view that the Licensee should conduct energy audit and reduce losses further. In the case of HT consumers check meters outside the consumer's premises should be installed. However Commission does not propose any change in the figure for T&D losses.

## CHAPTER IV

### AGGREGATE REVENUE REQUIREMENT FOR 2008-09 to 2010-11

#### 4.1 Introduction

The ARR& ERC submitted by the Licensee gives the following details.

Rs lakh

Sl No	Particulars	2008-09	2009-10	2010-11
1	Power Purchase Cost	1434.04	2125.17	3331.35
2	Operation & Maintenance Cost	61.15	65.92	67.31
3	Employee cost	31.5	34.55	37.91
4	A&G Expenses	66.97	70.72	74.85
5	Depreciation	70.92	99.72	99.72
6	Interest & Finance Charges	123.19	153.19	153.19
7	Total	1784.77	2549.27	3764.33

#### 4.2 Purchase of Power

The ARR submitted by the Licensee has projected the purchase requirement as follows.

Year	Purchase-MU
------	-------------

2008-09	42.52
2009-10	62.86
2010-11	98.79

As no changes in T&D losses are proposed, the figures are accepted. Licensee has given the cost for purchase of power as follows.

Year	Energy Purchased-MU	Cumulative MD - kVA	Energy charge-Rs lakh	Demand charge-Rs lakh	Total - Rs lakh
2008-09	42.52	106798	1169.39	261.66	1430.96
2009-10	62.86	161867	1728.65	396.57	2125.22
2010-11	98.79	250836	2716.80	614.55	3331.28

### 4.3 Interest and Finance Charges

4.3.1 The figures given are as follows.

2008-09	Rs 123.19 lakh
2009-10	Rs 153.19 lakh
2010-11	Rs 153.19 lakh

Commission accepts the figure for interest and finance charges. However Commission would like to suggest that the Licensee should explore the possibility of availing funds under APDRP instead of going in for loan from Govt. Thus Licensee can receive some amount as grant and also as incentive.

### 4.3 Depreciation

The figures given are as follows.

SI No	Item	2007-08	2008-09	2009-10	2010-11
1	Sub Stations	39.68	39.31	68.71	68.71
2	11 kV works	3.8	22.32	22.32	22.32
3	Metering equipment	3.31	3.6	3.6	3.6
4	Others	1.45	5.09	5.09	5.09
5	Total	48.24	70.32	99.72	99.72

Asset addition during 2007-08 to 2009-10 are as follows.

		Rs lakh		
Sl No	Item	2007-08	2008-09	2009-10
1	Sub Stations	456	0	800
2	11 kV works	90	525	0
3	Metering equipment	30	0	0
4	Total	576	525	800

Increase in depreciation due to asset addition will be as follows.

		Rs lakh		
Sl No	Item	2008-09	2009-10	2010-11
1	Sub Stations	16.41	0	28.8
2	11 kV works	3.24	18.9	0
3	Metering equipment	1.98	0	0
4	Total	21.63	18.9	28.8

Depreciation allowed for 2007-08 is as given below.

		Rs lakh
Sl No	Item	2007-08
1	Sub Stations	39.68
2	11 kV works	3.8
3	Metering equipment	3.31
4	Others	1.45
5	Total	48.24

Thus depreciation for 2008-09 to 2010-11 will be as follows.

2008-09	Rs 69.86 lakh
2009-10	Rs 88.76 lakh



2010-11                      Rs 117.56 lakh

#### **4.5 Employee Cost**

**4.5.1** The figures furnished by Licensee are as follows.

2007-08	Rs 26.25 lakh (approved)
2008-09	Rs 30.50 lakh
2009-10	Rs 33.55 lakh
2010-11	Rs 36.91 lakh

The percentage increase is as follows.

Year	Employee cost- Rs lakh	% increase
2007-08	26.25	
2008-09	31.5	20.00
2009-10	34.55	9.68
2010-11	37.91	9.73

*Commission* is of the opinion that the figures are very much on the higher side. Licensee had explained during the public hearing that when SCADA is implemented more technical staff will be necessary and hence the increase in employee cost. Commission made a visit to the 110 KV S/S after the public hearing deliberations and found that the SCADA was ready for commissioning. No change in the employee cost is proposed.

#### **4.6 Repair and Maintenance Charges**

**4.6.1** The figures furnished are as follows.

2007-08	Rs 82.28 lakh ( approved)
2008-09	Rs 61.15 lakh
2009-10	Rs 65.92 lakh

2010-11                      Rs 67.31 lakh

No changes are proposed.

#### **4.7 Administration & General Expenses**

4.7.1 The figures projected by Licensee are as follows.

2007-08	Rs 59.56 lakh ( approved)
2008-09	Rs 66.97 lakh
2009-10	Rs 70.72 lakh
2010-11	Rs 74.85 lakh

The percentage increase in A&G expenses are as follows.

Year	A&G Expense- Rs lakh	% increase
2007-08	59.56	
2008-09	66.97	12.44
2009-10	70.72	5.60
2010-11	74.85	5.84

Licensee has clarified that the estimate for insurance costs was made for the purpose of taking comprehensive insurance policy for the entire Licensee operations as most of the installatins are getting old. No change in the figures is proposed.

#### **4.6 OVERALL POSITION REGARDING AGGREGATE REVENUE REQUIREMENT FOR 2008-09 to 2010-11**

Based on the above discussion, the overall position regarding the Aggregate Revenue Requirement for 2008-09 to 2010-11 would be as given below:

Rs lakh

SI No	Particulars	2008-09	2009-10	2010-11
1	Power Purchase Cost	1430.96	2125.22	3331.27
2	Operation & Maintenance Cost	61.15	65.92	67.31
3	Employee cost	30.5	33.55	36.91
4	A&G Expenses	66.97	70.72	74.85
5	Depreciation	69.86	88.76	117.56

6	Interest & Finance Charges	123.19	153.19	153.19
7	Total	1782.63	2537.36	3781.09

## CHAPTER V

### REVENUE RECEIPTS DURING 2008-09 to 2010-11

#### 5.1 Revenue from Tariff Income

Revenue from Tariff for 2008-09 to 2010-11 is stated to have been projected by the Licensee on the basis of the anticipated consumption by various categories of consumers under different slabs at the prevailing tariff under each slab and each category. Details in this connection have been furnished in Data Form G attached to the ARR & ERC for 2008-09 to 2010-11 filed by the Licensee, which is summarized below.

Rs lakh

Sl No	Particulars	2008-09	2009-10	2010-11
1	HT	1464.45	2260.45	3668.96
2	LT	167.66	176.45	176.45
3	Temporary	29.33	28.33	26.33
4	Total	1661.44	2465.23	3871.74

Demand collection efficiency is given as 100 %. But accuracy of energy meters can affect the revenue. Hence, Licensee should conduct a survey of accuracy of energy meters of at least the high consumption group. Check meters with remote monitoring facility can be introduced for the high consumption group.

#### 5.2 Revenue from Non Tariff Income

The revenue from Non-Tariff income for 2008-09 to 2010-11 has been projected as follows.

2008-09	Rs 25 lakh
2009-10	Rs 20 lakh

### 5.3 Expected Revenue From Charges

Based on the above cited deliberations, the Commission would place the expected revenue from charges for 2008-09 to 2010-11 as follows.

Rs lakh

Sl No	Particulars	2008-09	2009-10	2010-11
1	Revenue from tariff	1661.44	2465.23	3871.74
2	Non-tariff income	25	20	5
3	Total	1686.44	2485.23	3876.74

## CHAPTER VI

### ARR ERC GAP

The ARR and ERC for the years 2008-09 to 2010-11 and the gap/surplus for the same period will be as follows.

Year	ARR-Rs lakh	ERC-Rs lakh	Gap(-) /Surplus(+)
2008-09	1782.63	1686.44	-96.19
2009-10	2537.36	2485.23	-52.13
2010-11	3781.09	3876.74	95.65

## CHAPTER VII

### COMMISSION'S DIRECTIVES

1. On finalization of the accounts for the FY2007-08, KEPIP shall submit the actual audited accounts for the electricity distribution business .
2. Licensee shall conduct energy audit and take loss reduction measures to bring down T&D losses by 0.5 % in 2008-09 to 2010-11 from the projected figure.
3. Licensee should explore the possibility of availing loan under APDRP for capital works

6. The assessment of present performance level and suggestion for better performance standards may be submitted early.

## **CHAPTER VIII TARIFF**

### **8.1 Brief History**

KEPIP has vide letter No. KEPIP/ERC/275/2008 dated 20-03-08 filed a petition for approval of ARR&ERC including a tariff proposal. Licensee submitted the required fees vide draft dated 18-03-08. Public hearing on the tariff petition was held at Kakkanad on 17<sup>th</sup> June 2008.

### **Salient Features of the KEPIP Tariff Petition**

A summary of the tariff revision petition submitted by the KEPIP is as given below:

#### **HT Industrial**

Demand Charge	Rs.270 per kVA per month
Energy Charge	Rs. 3 per kWh

#### **HT Commercial**

Demand Charge	Rs.350 per kVA per month
Energy Charge	Rs. 3.70 per kWh

#### **Deemed HT Industrial**

Demand Charge	Rs.275.40 per kVA per month
Energy charge	Rs.3.09 per kWh

#### **Deemed HT Commercial**

Demand Charge	Rs.357 per kVA per month
Energy charge	Rs.3.81 per kWh

#### **LT-IV Industry**

Fixed charge	Rs.45 per KW of connected load
Energy charge	Rs. 3.25 per kWh

## **LT VII Commercial**

Fixed charge                      Rs. 100 per kw

Energy charge

Up to 100 units - Rs.5.45 per kWh  
Up to 200 units - Rs.6.05 per kWh  
Up to 300 units - Rs.6.75 per kWh  
Up to 500 units - Rs. 7.30 per kWh  
Above 500 units - Rs. 8.05 per kWh

## **LT- Temporary**

Fixed charge                      Rs. 10 per kw

Energy charge                      Rs 8.05 per kWh

## **8.2 Public Hearing**

The Commission conducted Public hearing at the Conference Hall of KEPIP on 17<sup>th</sup> June 2008. Annexure I gives the list of persons who attended the hearing. During the Public Hearing, KEPIP, presented the salient features of Tariff petition.

## **8.3 Response from Stake Holders**

L&T Infopark and Leela Infopark stated that for common facilities provided by them to IT companies, Licensee is charging at Commercial rates. L&T Infopark pointed out that for Muthoot Technopolis under CSEZ, only industrial tariff is being applied by KEPIP

KEPIP in reply pointed out that the tariff proposal has been modified so that only Industrial tariff will be applicable for common facilities at Infoparks.

L&T infopark wanted supply at 11 kV for contract demand up to 6kVA as is being allowed in Karnataka.

Commission pointed out that the public hearing is to hear on the tariff only.

#### **8.4 Decision of the Commission**

The Commission has considered the tariff petition and the objections filed by various stakeholders. There is considerable cross subsidy existing at present, especially in the LT commercial category, which has to be brought down in a phased manner. However, it is also difficult to enhance tariff of other categories and has to be carried out only in stages. The tariff policy has necessary directions for deciding the tariff in the longer horizon, ie by 2011. The Commission is of the view that these directions are to be followed as a benchmark for arriving at a tariff in the stipulated period, at the same time minor deviations may be required considering the practical implications.

In the present order the Commission has weighed the factors such as balancing among different category of consumers, limiting the tariff increase to a minimum for majority of the consumers, reduction in cross subsidy among the highly skewed category of consumers etc. This is apparent in the case of LT commercial category. Hence the Commission seeks to reduce the tariff for LT Commercial.

Based on the above, the Commission estimates that the changes in tariff would result in reduction in revenue to the extent of Rs 37.40 lakh for the next 12 months. The Licensee shall submit the actual accounts for truing up.

The detailed schedule of terms and conditions of tariff for Retail supply to be effective from 1-10-2008 is given as a schedule. The Commission directs that the schedule of terms and conditions shall be published by KEPIP as provided under Section 45(2) (b) of the Electricity Act 2003.

Approved for issue

Secretary(in charge)

**KERALA STATE ELECTRICITY REGULATORY COMMISSION  
THIRUVANANTHAPURAM**

**SCHEDULE OF TARIFF AND TERMS AND CONDITIONS  
FOR RETAIL SUPPLY BY KINFRA EXPORT PROMOTION INDUSTRIAL PARKS  
(KEPIP) WITH EFFECT FROM 01-08-2008**

Unless the context otherwise requires words and expressions used in this schedule and defined in the Electricity Act, 2003 or the Regulations specified by the Kerala State Electricity Regulatory Commission and the Terms and Conditions of Supply approved by the Commission shall have the meaning respectively assigned to them in the Act or Regulations mentioned above.

The tariff mentioned in this schedule shall apply to Consumers to whom Kinфра Export Promotion Industrial Parks (KEPIP) has undertaken or undertakes to supply electricity notwithstanding anything to the contrary contained in any agreement entered into with any consumer earlier by KEPIP/Government or any of the Tariff Regulations or rules and/or orders previously issued.

The rates specified in this schedule are exclusive of Electricity Duty and/or surcharge and/or any other cesses, taxes, minimum fees, duties and other impositions existing or that may be levied or imposed in future by the Government or the Commission, which are payable in addition to the charges as per the tariff mentioned in this Schedule.

**PART A - HT TARIFF**

General conditions for HT and Deemed HT

1. This tariff shall be applicable to all High Tension/Deemed HT consumers to whom KEPIP has undertaken or undertakes to supply energy. The expression High



Tension (HT) consumer means a consumer who is supplied with electrical energy at a voltage of either 33,000 Volts, 22,000 Volts or 11,000 Volts under normal conditions, subject however to the percentage variation indicated in the agreement with the KEPIP or allowed under the Kerala Electricity Supply Code, 2005 specified by the Kerala State Electricity Regulatory Commission. Deemed HT consumers are consumers with a connected load more than 100 KVA but metered at LT.

2. For the purpose of conversion from kVA to kW or vice versa, an average power factor of 0.9 shall be taken.
3. Billing demand shall be the recorded maximum demand for the month in kVA or 75% of the Contract demand (as per the agreement) whichever is higher.
4. When the actual maximum demand in a month exceeds the Contract demand as per the agreement the excess demand shall be charged at a rate of 150 percent of the demand charges applicable.
5. All HT/Deemed HT consumers shall install Time of Day (ToD) meters at their cost. They shall undertake maintenance and replacement of the defective meters, CT/PT, and other equipments owned by them at their cost. If they fail to do so within two months from the date of intimation they will be charged 50% extra over the prevailing rates applicable to them for both Demand and Energy.
6. All HT/Deemed HT consumers shall be billed on differential pricing system as per the formula indicated in the Annexure A to this Schedule.
7. In the case of factory lighting and colony supply of HT (Industrial)/Deemed HT consumers, the applicable tariff shall be subject to the following:
  - a. Factory lighting – When the total connected lighting load of the factory is less than or equal to 5% of the connected load for power, it can be tapped off the power mains without segregation. When the above lighting load exceeds this limit, the whole lighting load should be segregated and metered by a sub-meter and lighting consumption in excess over 10% of

the bulk supply consumption for power shall be charged at 25 paise extra per kWh for HT/Deemed consumers.

- b. If no segregation is made as specified in (a) above, the bill amount of the consumer shall be increased for demand and energy charges by 20% for HT/Deemed consumers.

8. Power factor incentives/penalties as per Annexure B shall be applicable to HT / Deemed HT consumers.

**a. HIGH TENSION INDUSTRIAL**

Tariff applicable to HT industrial consumers.

Normal Rates	
Demand Charge (Rs./kVA of Billing Demand/Month)	270
Energy Charge (Paise/kWh)	300

**b. HIGH TENSION COMMERCIAL**

Tariff applicable to HT consumers such as Hotels/Restaurants, freezing units, cold storages.

Normal Rates	
Demand Charge (Rs./kVA of Billing Demand/Month)	350
Energy Charge (Paise/kWh)	370

**c. DEEMED HIGH TENSION (DEEMED HT) INDUSTRIAL**

**Industrial Consumers including common infrastructure service providers in industrial area/IT Parks with more than 100 kVA connected load supplied at LT**

Rates
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Demand Charges (Rs./kVA of Billing Demand/Month)	278
Energy Charge (Paise/kWh)	310

**d. DEEMED HIGH TENSION (DEEMED HT) COMMERCIAL**

**Consumers such as Hotels/Restaurants , freezing units, cold storages. with more than 100 kVA connected load supplied at LT**

Rates	
Demand Charges (Rs./kVA of Billing Demand/Month)	360.50
Energy Charge (Paise/kWh)	380

**PART B - LOW TENSION ( LT ) TARIFF**

The expression 'Low Tension Consumer' (LT) means a consumer who is supplied with electrical energy at low or medium voltage by the KEPIP. The voltages however being subject to percentage variations allowed under Kerala Electricity Supply Code, 2005.

**General Conditions**

1. The tariff minimum payable by all LT consumers shall be the fixed charge of respective category.
2. All LT Industrial consumers shall install ISI approved static capacitors for power factor improvement, for their inductive load as recommended in Annexure C attached and obtain permission of KEPIP.
3. LT Industrial consumers who have not installed ISI approved capacitors of recommended value, the rate applicable shall be higher by 20% (both on fixed and energy charges) applicable to the respective categories.
4. For welding sets without ISI approved capacitors of recommended value the fixed charge and energy charge shall be higher by 30%.
5. In the event of static capacitor becoming faulty or unserviceable the consumer shall forthwith intimate the matter to KEPIP and the consumer shall make immediate arrangements for repairing the same.
6. If the capacitor is not put back into service duly repaired and to the satisfaction of the KEPIP within one month, enhanced charges as per item 3 or 4 above shall be payable for the whole period during which the capacitor was faulty.

7. Tariff for lighting LT industrial premises: The lighting load and power load shall be segregated, and metered by separate meters. The lighting consumption in excess over 5% of the bulk energy consumption for power proper shall be charged at 50 paise per kWh extra over and above the specified rate. Where segregation is not done the entire charges (fixed and energy charges) shall be increased by 50%.

**(i) LOW TENSION – I**

**LOW TENSION – I (LT- I) – INDUSTRY**

Tariff applicable for general purpose industrial loads.

Tariff for general purpose industrial loads (single or 3 phase) namely cold storage, workshops using power mainly for production, pumping water for non-agricultural purpose, Diamond cutting, Garment making, Computer consultancy services with SSI registration engaged in Software services and data processing activities, Software development, Software Technology/Information Technology and tissue culture shall be:

<b>LT - I Industrial</b>	
Fixed Charge Rs. per kW or part thereof of connected load per month	45
Energy Charge (Paise/kWh)	325

Note:

- a. Industries engaged in software development technology and tissue culture units need not segregate industrial load, lighting load and load for air conditioners. No Penalty shall be levied by the KEPIP for non-segregation of the load by these units. However, such consumer shall install static capacitors having ISI certification to improve the power factor of the load of air conditioners if any.
- b. If ISI approved static capacitors are not installed by such consumers to compensate the inductive load of air conditioners, 25% extra shall be charged on the total fixed charge inclusive of entire connected load

- c. Software technology industries requiring new connection shall be provided connection only if they install ISI approved static capacitors to compensate the inductive load of air conditioners if any.
- d. The entire consumption and connected load of above consumers shall be charged at industrial tariff (LT I).

**(ii) LOW TENSION -II (LT- II) Commercial**

Tariff applicable for Commercial consumers such as Commercial premises, hotel and restaurant, offices/telephone exchanges of telecom companies shall be:

<b>LT - II Commercial</b>	
Fixed Charge (Rs./kW)	100
Energy Charge (Paise/kWh)	Upto 100 units Rs. 5.45 Upto 200 units Rs.6.05 Upto 300 units Rs.6.75 Upto 500 units Rs.7.30 Above 500 units Rs. 8.05

**(iii) LOW TENSION –III (LT- III) TEMPORARY CONNECTION**

Tariff applicable to temporary connections shall be:

<b>LT - III Temporary Connection</b>
<b>Energy charges (paise/kWh) - 1000</b>

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**Annexure - A**  
**Differential Pricing Method**

Billing will be the highest of the following

Recorded Maximum Demand between  
Normal Time (6.00 hrs – 18 hrs) Or Peak Time (18 hrs- 22 hrs) Or 75% of the Contract Demand

- 1. Demand Charge** = Normal Demand Charge + Time of use charge - Incentive
- (a) Normal Demand Charge = Billing Demand x Ruling Demand Charge/kVA
- (b) Time of use Charge = Demand during peak time in excess of 60% of Demand during normal time x Ruling Demand Charge/ kVA x 0.8 x 4/24
- (c) Incentive = Demand during off peak time in excess of 60% of the Demand during normal time (up to 120% of the Contract Demand) x Ruling Demand Charge/kVA x 0.25 x 8/24.
- 2. Excess Demand Charge** = Excess Billing Demand x Demand charge/kVA x 0.5  
(only if the recorded Maximum Demand during normal/peak time exceeds the contract demand)
- 3.** The recorded Maximum Demand during Off peak hours in excess of 120% of the Contract Demand shall be charged only at the ruling tariff.  
Note:- This will be applicable only when the recorded maximum demand during off peak hours exceeds billing demand. Normal ruling tariff only shall be charged for recorded maximum demand in excess of billing demand.
- 4. Energy Charge** = Normal energy charge + Time of use charge - Incentive.

(a) Normal Energy Charge = (Normal Consumption + Peak Consumption+ Off peak consumption) x ruling energy charges/unit.

(b) Time of use charge (Only if the consumption during peak period exceeds 10% of energy consumption during the month) = (Peak consumption – 10% of the energy consumption during the month) X Ruling energy charge/unit X 0.80

(c) Incentive (Only if the consumption during Off-peak period exceeds 27.5% of energy consumption during the month) = (Off peak consumption – 27.5% of the total consumption) x ruling energy charges/Unit x 0.35

**5. Total Monthly Charges = (1) +(2) + (3) + (4).**

**6.** In respect of HT/Deemed HT consumers having only one shift during day time and if they shift the working time to off peak time, they will not be eligible for incentive

**7. (a)** The ruling Demand Charge is the normal ruling rate applicable to Billing Demand.

(b) The ruling energy charge is the normal ruling rate applicable to energy

**Annexure – B**  
**Power factor incentive and penalty**

The following incentive / penalty shall be applicable to HT/ Deemed HT consumers for power factor improvement as the case may be

<b>Power factor range</b>	<b>Incentive</b>
Power factor between 0.9 to 1.00	0.15% of energy charges for each 0.01 unit increase in power factor from 0.9
<b>Power factor range</b>	<b>Penalty</b>
Power factor below 0.90	1% energy charge for every 0.01 fall in power factor from 0.90



## ANNEXURE – C

**Recommended values of Static capacitor in kVAR for power factor improvements**

### A. Induction Motors (LT)

Sl.No.	Total Motor Rating (HP)	KVAR rating of capacitors insisted	Sl.No.	Total Motor Rating (HP)	KVAR rating of capacitors insisted
1	Upto 3	1	8	Above 25 upto 30	10
2	Above 3 upto 5	2	9	Above 30 upto 40	12
3	Above 5 upto 7.5	3	10	Above 40 upto 50	14
4	Above 7.5 upto 10	4	11	Above 50 upto 60	18
5	Above 10 upto 15	5	12	Above 60 upto 80	22
6	Above 15 upto 20	6	13	Above 80 upto 100	25
7	Above 20 upto 25	7.5	14	Above 100 upto 130	35

### B. WELDING TRANSFORMERS (LT)

Sl.No.	Rating of welding transformers in KVA	KVAR rating of capacitors insisted	Sl.No.	Rating of welding transformers in KVA	KVAR rating of capacitors insisted
1	1	1	16	16	12
2	2	2	17	17	13
3	3	2	18	18	13
4	4	3	19	19	14
5	5	4	20	20	15
6	6	4	21	Above 20 upto 22	16

7	7	5	22	Above 22 upto 24	17.5
8	8	6	23	Above 24 upto 26	18
9	9	7.5	24	Above 26 upto 28	20
10	10	7.5	25	Above 28 upto 30	21
11	11	8	26	Above 30 upto 35	24
12	12	9	27	Above 35 upto 40	27.5
13	13	10	28	Above 40 upto 45	32.5
14	14	10	29	Above 45 upto 50	35
15	15	11			