



**THE HUKKERI RURAL ELECTRIC CO-OPERATIVE  
SOCIETY LTD., HUKKERI - 591 309.**

Dist.:BELGAUM. [Karnataka State]

**ಹುಕ್ಕೇರಿ ಗ್ರಾಮೀಣ ವಿದ್ಯುತ್ ಸಹಕಾರಿ ಸಂಘ, ನಿಯಮಿತ.**

**ಹುಕ್ಕೇರಿ - ೫೯೧೩೦೯.**

ಜಿಲ್ಲೆ : ಬೆಳಗಾವಿ (ಕರ್ನಾಟಕ ರಾಜ್ಯ)

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Licence No.PWD/115/EIG/69 dt.19-11-69  
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Ref. No.: Accts/2013-14/

Date:

To,

The Reciving Officer

Karanataka Electricity Regulatory Commission

6<sup>th</sup> & 7<sup>th</sup> Floor, Mahalaxmi Chambars,

No-9/2, M.G.Road,

Bangalore – 56001,

Sir,

Sub:- Submission of ERC & Retail Tariff Application for FY-15

We are herewith submitting the ERC & Retail Tariff application for FY-15 of our Society in six sets with Affidavit supporting the same & one soft copy of the same for kind consideration & approval of the commission

The necessary fees paid by the society through DD/RTGS.

Yours faithfully

Managing Director

**BEFORE THE KARNATAKA ELECTRICITY REGULATORY COMMISSION  
AT BANGALORE**

**FILE NO.** \_\_\_\_\_

**CASE NO.** \_\_\_\_\_

**IN THE MATTER OF:**

**APPLICATION UNDER SECTION 62 OF THE ELECTRICITY ACT, 2003 READ WITH KERC (TARIFF) REGULATIONS, 2000 AND REGULATION 2.3 OF KERC (TERMS AND CONDITIONS FOR DETERMINATION OF TARIFF FOR DISTRIBUTION AND RETAIL SALE OF ELECTRICITY) REGULATIONS, 2006 FOR REVISION OF AGRIGATE REVENUE REQUIREMENT (ARR) FOR FY15 AND TARIFF FILLING FOR THE PERIOD COMMENSING FROM 01-04-2014.**

**AND**

**IN THE MATTER OF:**

**HUKERI RURAL ELECTRIC CO-OPERATIVE  
SOCIETY LIMITED**

**Hukeri Taluk, Belgaum District - 591 309**

**...APPLICANT**

**AFFIDAVIT**

I, Revappa Boragi, son of Basappa Boragi, aged about 61 years working as Managing Director of the Applicant and residing at Hukeri, do hereby solemnly affirm and state on oath follows.

1. I am the Managing Director of the Applicant HRECS and I am duly authorized by the said Applicant to make this affidavit. I am conversant with the facts of the matter and hence I am competent to depose to this Affidavit.
2. The averments made in paragraphs 1 to 25 of the Application accompanying this Affidavit, herein now marked with letter "A" are true to the best of my knowledge, information and belief.
3. I further say that the statements made and data presented in the aforesaid Application are true to the best of my knowledge, as per records of the Applicant Society and based on estimations. Further, to

my knowledge and belief, no material information has been concealed in the aforesaid Application.

Solemnly affirmed at Hukeri on this 18<sup>th</sup> December-2013 that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed therefrom.

Place: BANGALORE

DEPONENT

Date : 20 -12-2013

Identified by me:

**BEFORE THE KARNATAKA ELECTRICITY REGULATORY COMMISSION  
AT BANGALORE**

**FILE NO.**\_\_\_\_\_

**CASE NO.**\_\_\_\_\_

**IN THE MATTER OF:**

**APPLICATION UNDER SECTION 62 OF THE ELECTRICITY ACT, 2003 READ WITH KERC (TARIFF) REGULATIONS, 2000 AND REGULATION 2.3 OF KERC (TERMS AND CONDITIONS FOR DETERMINATION OF TARIFF FOR DISTRIBUTION AND RETAIL SALE OF ELECTRICITY) REGULATIONS, 2006 FOR REVISION OF AGRIGATE REVENUE REQUIREMENT (ARR) FOR FY15 AND TARIFF FILLING FOR THE PERIOD COMMENSING FROM 01-04-2014.**

**AND**

**IN THE MATTER OF:**

**HUKERI RURAL ELECTRIC CO-OPERATIVE  
SOCIETY LIMITED**

**Hukkeri Taluk, Belgaum District - 591 309**

**...APPLICANT**

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**MEMORANDUM OF APPLICATION UNDER SECTION 62 OF THE ELECTRICITY ACT, 2003 READ WITH KERC (TARIFF) REGULATIONS, 2000 AND REGULATION 2.3 OF KERC (TERMS AND CONDITIONS FOR DETERMINATION OF TARIFF FOR DISTRIBUTION AND RETAIL SALE OF ELECTRICITY) REGULATIONS, 2006 FOR TARIFF FILING FOR FY 2014-15**

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The Applicant above-named most respectfully submits as under:-

**1. Introduction**

**1.1.** The address of the Applicant for the purposes of summons and notices and like purposes is as per the cause title.

**2.0 Statutory Adherence**

- 2.1. Hukkeri Rural Electric Co-operative Society Limited (hereinafter called as the “**Applicant**” or “**HRECS**”) is submitting this application for revision of Annual Revenue Requirement (ARR) for FY 15 and tariff filing for the period commencing from 01-04-2014 under Section 62 of the Electricity Act, 2003 (hereinafter called as the “**Act**”) read with KERC (Tariff) Regulations, 2000 and Regulation 2.3 Of KERC (Terms and Conditions for Determination of Tariff for Distribution and Retail Sale of Electricity) Regulations, 2006 (hereinafter called as the “**MYT Regulations**”) read with KERC (Tariff) Regulations, 2000, for the kind consideration and approval of the Hon’ble Commission.
- 2.2. In this Application, the Applicant has sought to diligently follow the principles and guidelines laid down in the conditions of License for Distribution and Retail Supply of Electricity granted to the Applicant by the Hon’ble Commission, the Electricity Act, 2003, MYT Regulations, Tariff Orders and various directions issued by the Hon’ble Commission from time to time. The Applicant is filing for the revision of ARR approved for FY -15, in its Tariff Order dated 20-06-2013, before the Hon'ble Commission for the second year of the control period between FY 2014 to FY 2016, and Tariff filing for FY -15, under the MYT Regime, for the kind consideration and approval of the Hon'ble Commission.
- 2.3. The projected numbers are based on actual audited accounts for FY -12, FY -13, the provisional and projected period for FY -14 and revised numbers for FY-15, respectively; and they have been duly adjusted for growth in income, changes in expenses and also changes in assets and liabilities as per the expectations of the HRECS. In the course of validation by the Hon'ble Commission, the HRECS will provide the necessary updated information, if required.
- 2.4. A draft copy of this Application along with proposal for modification of tariff is placed before the Board of the HRECS, in its meeting held on 17<sup>th</sup> December 2013 and the Board of the HRECS approved the same. The Board of HRECS has also authorised the Managing Director of the HRECS to sign and submit the same before the Hon’ble Commission, in accordance with the applicable Regulations

of the Hon'ble Commission. The Board of the HRECS also authorised the Managing Director of the HRECS to take such steps as may be necessary and to sign and execute all deeds, applications, documents and writings that may be required, on behalf of the HRECS and also delegated all above powers to the Managing Director and generally to do all acts, deeds and things that may be necessary, proper, expedient or incidental for the purpose of implementing the same.

- 2.5. The Applicant submits that even though the HRECS has to submit the present application before 30-11-2013, it could not do so, due to the reasons beyond its control, which has been explained to the Hon'ble Commission, vide HRECS letter dated 4-12-2013. After considering the same, the Hon'ble Commission was pleased to extend the time for filing this application till 31<sup>st</sup> December 2013.

### **3.0 Brief set of Facts**

The HRECS is a holder of Retail Supply License granted by the Hon'ble Commission, under Section 14 of the Act, for carrying out the business of retail supply of electrical energy, within Hukeri Taluk of Belgaum District of Karnataka State.

### **4.0. Tariff Data**

The data for the years from FY- 12 to FY - 13 are based on audited accounts. The data for the FY 2014 are based on the actuals up to 30<sup>th</sup> September 2013 and estimation from 1<sup>st</sup> October 2013 to 31<sup>st</sup> March 2014. The projections for the control period for FY-15 have been arrived based on the historical data from FY - 12 to FY - 13 and expectations of the Applicant. The projections for the control period for FY -15 are provided based on the historical data from FY 12 to FY 13 and expectations of the Applicant. However, the income on sale of power has been estimated at the current tariff structure.

During the course of the validation by the Hon'ble Commission, the Applicant will provide the necessary updated information, if sought by this Hon'ble Commission.

## 5.0. Profile

The applicant HRECS is the only Rural Electric Cooperative Society in the State of Karnataka serving about 81,910 members spread over about 991.49 sq. km under the license granted to the HRECS by the Hon'ble Commission, under Section 14 of the Act and catering the needs of 99507 installations.

### 5.1. Consumer Profile as on 31<sup>st</sup> March, 2013

**TABLE 1: Consumer Profile**

<b>Sl. No.</b>	<b>Tariff Category</b>	<b>Number of Installations</b>
<b>1.</b>	LT - 2 (a)	<b>68706</b>
<b>2.</b>	LT - 2 (b)	<b>68</b>
<b>3.</b>	LT - 3	<b>5164</b>
<b>4.</b>	LT - 4 (a)	<b>22711</b>
<b>5.</b>	LT - 4 (b)	<b>09</b>
<b>6.</b>	LT-4 (c)	<b>02</b>
<b>7.</b>	LT - 5	<b>1875</b>
<b>8.</b>	LT - 6 (Street Lights)	<b>354</b>
<b>9.</b>	LT -6 (Water Supply)	<b>558</b>
<b>10.</b>	LT -7 (Temporary)	<b>39</b>
	<b>LT Sub Total</b>	<b>99486</b>
<b>11.</b>	HT-1	<b>4</b>
<b>12.</b>	HT-2 (a)	<b>6</b>
<b>13.</b>	HT - 2 (b)	<b>7</b>
<b>14.</b>	HT - 3	<b>4</b>
	<b>HT Sub Total</b>	<b>21</b>
	<b>GRAND TOTAL</b>	<b>99507</b>

### 5.2 Brief History of the Applicant HRECS

The Applicant HRECS is incorporated under the provisions of the Karnataka Co-operative Societies Act, 1959, as a Co-operative Society and was one of the five pilot Rural Electric Co-operative Societies established on 21-07-1969 through Rural Electrification Corporation Limited (REC), New Delhi, as per the decision of the Government of India and based on sponsorship from United States Agency for International Development (USAID) in collaboration with National Rural Electric Cooperative Association (NRECA), of the United States of America.

**5.2.1.** HRECS was the first Rural Electric Cooperative Society to be registered in India and is the only one working in Karnataka State.

**5.2.2.** Initially, the Government of Karnataka (GoK) granted the license for distribution of electricity to the HRECS on 12-10-1970. Since then, the HRECS is engaged in the distribution of electricity to Hukkeri Taluka. Thereafter, KERC was constituted under the Karnataka Electricity Reforms Act, 1999 (hereafter referred to as '**the KER Act**'). The HRECS was granted the license initially for a period of five years, in October, 2001. After coming into force of the Act in 2003, KERC, by its order No. L/1/06 dated 14<sup>th</sup> November, 2006, granted the licence for distribution of electricity within its licenced area for a period of twenty five (25) years from 19<sup>th</sup> October, 2006, under the provisions of the Act.

### **5.3. Assets**

The HRECS at the time of its constitution (in 1970) purchased assets worth Rs. 45.77 Lakhs from the then Karnataka Electricity Board (KEB). The present assets, as on 31<sup>st</sup> March, 2013 held by the HRECS are worth about Rs. 36.88 crores.

### **5.4. Membership**



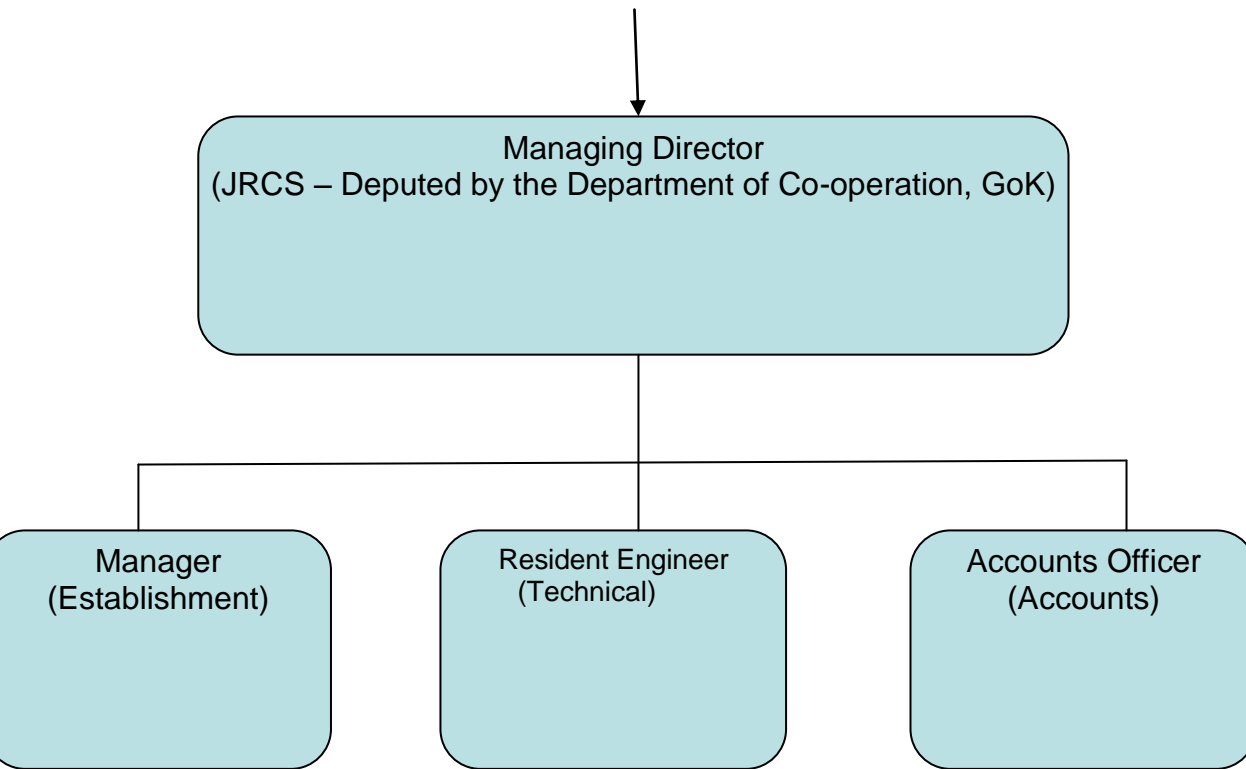
As per the Bye-laws of the HRECS, every consumer should be a member of the HRECS by holding at least one fully paid up equity share of face value of Rs.100/- each. Presently, as on 31<sup>st</sup> March 2013 there are 81,910 members who have paid the share amount of Rs. 4.50 crores including the State Government share amounting to Rs. 41.70 Lakhs.

### **5.5. Work Division**

Hukkeri Taluka, the distribution area of the HRECS is divided in the following divisions each headed by a Section Officer:

1. Hukkeri East
2. Hukkeri West
3. Sankeshwar
4. Yamakanamaradi
5. Hidakal Dam

Chairman – Vice  
Chairman and  
Board of Directors  
(12 Nos)  
Directly Elected by  
the Members



## 5.6. Master Unit Sub Stations (MUSS)

The total connected load of the HRECS is around 169MW. To meet this demand the following Sub Stations are functioning at Hukkeri:-

1. Hukkeri - 2 Nos. x 10 MVA Transformers – 110 / 11 kV Sub-station
2. Hidakal Dam - 2 x 10 MVA Transformers – 110 / 11 kV Sub-station
3. Sankeshwar - 2 Nos. x 10 MVA Transformers – 110 / 11 kV Sub-station
4. Hattaragi - 2 Nos. x 10 MVA Transformers – 110 / 11 kV Sub-station

5. Shiragaon-2 Nos. x 10 MVA Transformers – 110 / 11 kV Sub-station
6. Kanagala - 2 No. x 5 MVA Transformers – 33 / 11 kV Sub-station
7. Hebbal - 2 No. x 5 MVA Transformers – 33 / 11 kV Sub-station

**5.7. Distribution Transformer Centres (DTCs)**

There are about 1740 number of DTCs with various capacities as on 31<sup>st</sup> March, 2013.

**5.8. Consumer Friendly Measures**

- a) The Applicant is having a website of its own ([www.hrecs.com](http://www.hrecs.com)) and established email communication facilities with its email id [hukeriruralele@yahoo.co.in](mailto:hukeriruralele@yahoo.co.in) / [hukeri.recs@gmail.com](mailto:hukeri.recs@gmail.com) .
- b) Consumers can approach the Section Officers of the HRECS at the following phone numbers, which are made available to the consumers:

<b>Sl. No</b>	<b>Name of the Section</b>	<b>Phone Number</b>
1.	Hukkeri East and West	08333 – 265030
2.	Sankeshwari	08333 – 273396
3.	Yamakanamaradi	08333 - 276245
4.	Hidkal Dam	08333 - 263230

**5.9. Employees Strength**

**5.9.1.** In 1986, the Joint Registrar of Co-operative Society (JRCS) of the Government of Karnataka sanctioned 227 permanent posts for HRECS, besides temporary staffs. The present permanent Working Staff strength HRCES is about 193 and Temporary staff numbering 35, as on 31<sup>st</sup> March 2013.

**5.9.2.** It is submitted that in 1986, there was only one 110 kV sub-station and only 2 sub-stations of 33 kV capacity. Presently, the power requirements of the HRECS have been catered by five 110 kV and two 33 kV substations. The total number of consumers in 1986 was about 30,000, which is nearly tripled over last 27 years. The system of the HRECS demands recruiting of many more staff, for further

improvements in the working of HRECS. The appended list at Form - D6A shows the particulars of sanctioned and working employees comprehensively.

### **5.10 Collection, Billing and Vigilance**

The HRECS has an efficient collection and billing mechanism. The Society has established 25 Bill Collection centres for facilitating the consumers. This mechanism has improvised with introduction of Spot Billing System. All Time Payment (ATP) machines are installed in Hukkeri, Sankeshwar Town and Yamakanmardi and Paschapur villages. Besides all these bill collection facilities, the HRECS has also introduced mobile bill collection facility.

#### **5.11 Vigilance Activity:**

The Hon'ble Commission vide its Notification, notified in Part III of Karnataka Gazette dated 3-6-2010 at page 2279 and issued under Section 135(1-A) of the Act authorised the officials of ESCOMS only to disconnect the supply of electricity to any premises upon detection of theft of electricity. Hence, the HRECS is handicapped from executing the vigilance activities effectively. Hence, the HRECS prays the Hon'ble Commission to authorise the officials of the HRECS also to disconnect the power supply upon detection of theft.

### **6 Power Purchase Agreement :**

The HRECS is paying the Bulk Supply Tariff to Hubli Electricity Supply Company Limited (hereafter referred to as '**HESCOM**') as decided by the Hon'ble Commission, from time to time. The Society has already in the process of entering into a long term power purchase arrangement with HESCOM, for which a draft Power Purchase Agreement has already been submitted before the Hon'ble Commission for approval. In this application, the power purchase cost from HESCOM is assumed as Rs.

3.33 per unit assumed for FY 14 in Tariff Order dated 20-6-2013. This assumption is subject to the approval of the Hon'ble Commission.

- 6.1** Transmission charges are being included in the bulk supply tariff of HESCOM as approved by the Hon'ble Commission, from time to time.

**7 Government of Karnataka (GoK) Support**

- a) Of the total power consumption within the HRECS service area, about 74% of power is consumed by IP Sets (Agriculture). The cross subsidy element has also very less compared to consumer profiles of State owned ESCOMs. The actual tariff for IP Sets are as decided by KERC in its MYT Order dated 20<sup>th</sup> June, 2013. In the said tariff order, the Hon'ble Commission determined tariff for IP Sets below 10 HP as Rs. 4.61 per each unit supplied to IP Sets, below 10 HP. Accordingly, the Society has been claiming Rs. 4.61 per each unit of power supplied to IP Sets, as subsidy from GoK. GoK is releasing IP Set Subsidy on monthly basis, as per the provisional claims of the Society. The GoK has been releasing the balance of IP Set power supply cost as subsidy to the Society only after the annual performance review of the Society is carried out by the Hon'ble KERC, based on the audited accounts, audited earlier by the auditors of the Department of Co-operation, Government of Karnataka and from FY 13 onwards by the Chartered Accountants approved by the Department of Co-operation, Government of Karnataka.
- b) At present, a sum of Rs. 24.2355 crores is due from Gok towards IP Set subsidy and Rs. 0.20 lakhs towards BJ/KJ Installations and Rs. 6.10 lakhs towards weavers, which were all accounted in the books of accounts of the HRECS, in its accounts for FY 13. This amount is subject to the APR by the Hon'ble Commission, for FY 13. The GoK is also yet to release a sum of Rs. 3.5812 crores on account of reimbursement of amount refunded to IP Set consumers who paid

the same before 31<sup>st</sup> March 2003, as per the GoK Policies, pertaining to the year 2001 to 2003, which is also accounted in the books of the HRECS.

**8. DIRECTIVES OF THE HON'BLE COMMISSION AND STATUS OF THEIR COMPLIANCES.**

- a) Time bound action plan immediately to implement the HVDS programme in its entire jurisdiction as per the guidelines issued by the Commission without any further delay as the area of operation of the society is a compact one and furnish the compliance thereof to the Commission early.**

**COMPLAINCE:**

The Hon'ble Chief Minister of Karnataka in his budget speech for FY 2013-14 has announced the GoK intension to support the HVDS programme and in that regard the GoK has also issued an Order bearing No EN-53-PSR-2013 dated 03-10-2013 and asked every ESCOMs to implement HVDS during the current year in one division of every ESCOM in the state. The HRECS submits that if the intended support of GoK is extended to the HRECS, the HRECS will also faithfully implement the scheme.

- b) As an effective measure to contain commercial losses in its area of operation, the Hukeri RECS to enhance its vigilance activities.**

**COMPLAINCE:**

The HRECS is doing its best to contain commercial losses in its operation. The Hon'ble Commission vide its Notification, notified in Part III of Karnataka Gazette dated 3-6-2010 at page 2279 and issued under Section 135(1-A) of the Act authorised the officials of ESCOMS only to disconnect the supply of electricity to any premises upon detection of

theft of electricity. Hence, the HRECS is handicapped from executing the vigilance activities effectively. Hence, the HRECS prays the Hon'ble Commission to authorise the officials of the HRECS also to disconnect the power supply upon detection of theft.

**c) Expedite the replacement of inefficient irrigation pump sets by energy efficient pumps and complete it in a time bound manner.**

COMPLAINCE:

In the opinion of the HRECS, the Directive requires separate man power to access the capacity of the IP set required for replacing the existing IP sets, capital outlay, fund required etc. The said task can't be completed at the present man power and financial capacity of HRECS, unless external support is given to the HRECS, in these fronts. Hence, the HRECS seeks the guidance of the Hon'ble commission for successful implementation of this direction.

**d) The Hukeri RECS to complete all the NJY Feeders and commission them before August 15, 2013 positively so as to arrange uninterrupted power supply to the villages.**

COMPLAINCE:

The HRECS faced difficulty in implementing the Niranthara Jyothi due to heavy rain in mansoon period and the completion of the project has been delayed. The HRECS is expecting to complete the project before 31<sup>st</sup> March 2014.

**e) To ensure that the distribution transformers installed in its area are of optimum capacity to reduce losses in the system and to furnish the results of the same to the Commission immediately.**

COMPLAINCE:

Being implemented

**f) Establish service centers immediately in each O & M section to effectively deal with consumer complaints.**

COMPLAINCE:

The HRECS has entrusted all section officers to deal with specific consumer grievances, immediately, on being brought to their notice, and the same are being monitored at the head office level. Since the area of operation of the HRECS is only a Taluk, the HRECS is of the opinion that this arrangement is sufficient at present.

**g) Initiate action to create a Consumer Grievance Redressal Cell to effectively address all the grievances of the consumer so far the society**

**without any further delay and report the compliance thereof to the Commission early.**

**COMPLAINCE:**

The HRECS has recently sent the names of two of its officials to function in CGRF to be constituted by the Hon'ble Commission and requested the Hon'ble Commission to constitute the CGRF, by nominating an independent person, in accordance with the KERC Regulations. The HRECS assures that the CGRF will start functioning immediately after due constitution of CGRF by the Hon'ble Commission.

**9. ANNUAL PERFORMANCE REVIEW (APR) FOR FY -13.**

A separate application for Annual Performance Review (APR) is being filed by the HRECS, for FY – 13, for the consideration of the Hon'ble Commission.

**10 Energy Input at interface points:**

**TABLE 2: Quantum of input energy at interface points**

<b>Year</b>	<b>Actual quantum of Input at Interface points (MU)</b>	<b>Percentage Growth over previous year</b>
2009-10	183.24	2.78
2010-11	205.93	12.38
2011-12	228.21	10.82
2012-13	257.19	12.70
2013-14 (Upto 30-09-2013 ) actual	121.97	10.76
2013-14 (From 1-10-2013 Estimated	162.90	

**TABLE 3:**

**Quantum of input energy for FY 15:**

<b>quantum of Input at Interface points (MU)AS approved BY the Hon'ble Commission</b>	<b>Proposed revised quantum of Input at Interface points (MU)</b>	<b>Percentage Growth</b>
297.45	312.87	5.18

The quantum of energy input and sales for the previous years are depicted in the above tables. When compared to the previous year for FY 10, the percentage growth of energy input for FY -11 and FY-



12, FY -13 and FY-14 at 11 KV interface points are 2.78%, 12.38% and 10.82% and 12.70% and 10.76% respectively.

The HRECS is anticipating growth in power demand in FY 15, based on the power demand experienced during this year and calculated as per CAGR. The estimated power purchase cost at the rate of Rs. 3.33 per unit is Rs. 10418.57 lakhs. The HRECS prays the Hon'ble Commission to revise the quantum of power purchase and the cost power purchase, for FY 15, as proposed here in the ARR of FY -15, approved in the order dated 20-6-2013, accordingly.

**TABLE 4: Quantum of energy sales**

<b>Year</b>	<b>Actual quantum of Sales (MU)</b>	<b>Percentage Growth over previous year</b>
2009-10	155.40	3.01
2010-11	174.23	12.11
2011-12	193.28	10.92
2012-13	218.85	13.23
2013-14	241.32	10.27

**11 SALE FORECAST FOR FY 15:**

Based on the Growth Rate of sale of previous years, the sale forecast for FY-15 is 265.47 MU, which is against 242.171 MU approved by the Hon'ble Commission. The revenue realizable to this sale is Rs. 12457.72 lakhs at the current tariff rate. The HRECS prays the Hon'ble Commission to revise the quantum of sale of power and revenue, as proposed here in the ARR of FY -15, approved in the order dated 20-6-2013.

**12 Number of installations:**

12.1 As per Regulation No. 2.5.2 of the MYT Regulations, the Annual Revenue Requirement (ARR) for Retail Supply Business shall be on the expected revenue from charges at the existing tariff. In order to estimate ERC, the accurate sale forecast is necessary. The energy sale for control period depends upon the population, policies of the

Government, the various schemes under implementation, the number of hours of supply available to consumers etc. These facts have an impact on growth of installations. Hence the HRECS has analyzed the growth of installations in the area of supply for the period from FY-10 to FY-13. Due to various reasons, some of the installations across the categories are being dismantled. This fact is also considered in estimation of sale forecast. In order to have accurate sale forecast, year-end number of installations and total energy sold across the categories during respective year is reviewed to ascertain the growth. The number of installations and growth rate for the period from FY-10 to FY-13 were as follows:

**Table 5: Number of Installations and Growth Rate**

Tariff	FY09-10 in No's	FY10-11 in No's	Actual % of Growth	FY11-12 in No's	Actual % of Growth	CAGR	FY12-13 in No's
LT-1-BJ	0	0	0	0	0	0	533
LT-2(a)(i) U	11627	11996	3.17	12182	1.55	2.36	12614
LT-2(a)(ii) V	51847	53398	2.99	54408	1.89	2.44	55559
LT -2(b) (i) U	26	33	26.92	34	3.03	14.35	39
LT -2(b) (ii) V	28	28	0.00	27	-3.57	-1.80	29
LT-3(i) U	2232	2286	2.42	2285	-0.04	1.18	2332
LT-3(ii) V	2720	2772	1.91	2778	0.22	1.06	2832
LT-4(a)	18382	19397	5.52	21752	12.14	8.78	22711
LT-4(b)	9	9	0.00	9	0.00	0.00	9
LT-4©	3	2	-33.33	2	0.00	-18.35	2
LT-5	1593	1686	5.84	1760	4.39	5.11	1875
LT-6(a)WS	535	548	2.43	551	0.55	1.48	558
LT-6(b)STL	240	249	3.75	254	2.01	2.88	354
LT-7	156	160	2.56	107	-33.13	-17.18	39
<b>LT Total</b>	<b>89398</b>	<b>92564</b>	<b>24.19</b>	<b>96149</b>	<b>25.78</b>	<b>2.31</b>	<b>99486</b>
HT-1WS	3	3	0.00	3	0.00	0.00	4
HT- 2(a) (ii)	5	5	0.00	5	0.00	0.00	6
HT-2(b) (ii)	5	5	0.00	6	20.00	9.54	7
HT-2(c) (i)	0	0	0.00	0	0.00	0.00	0
HT-2(c) (ii)	0	0	0.00	0	0.00	0.00	0
HT-3(a)(i)	4	4	0.00	4	0.00	0.00	4
<b>HT total</b>	<b>17</b>	<b>17</b>	<b>0.00</b>	<b>18</b>	<b>20.00</b>	<b>9.54</b>	<b>21</b>
<b>LT+HT</b>	<b>89415</b>	<b>92581</b>	<b>24.19</b>	<b>96167</b>	<b>45.78</b>	<b>11.86</b>	<b>99507</b>

12.2 It can be observed that the average growth rate of installations is 24.19, 45.78, 89.81 for the year FY-11, FY-12, and FY-13 respectively. The CAGR for three years is 43.62%. On the basis of percentage growth rate of installations, the number of installations for the control period is estimated as follows. (The abnormal

variations in growth such as minus growth are avoided/not taken into account, for further estimation.) The installations for the control period are as follows:

**Table 6: No. of installations for control period**

Tariff	FY10-11 in No's	FY11-12 in No's	% of Growth (Actual)	FY12-13 in No's	% of Growth (Actual)	CAGR	FY13-14 in No's	% of Growth (Projected)	CAGR	FY14-15 in No's (Projected)
LT-1-BJ	0	0	0	533	0	0	14811	0.00	0	14811
LT-2(a)(i) U	11996	12182	1.55	12614	3.55	2.54	13061	3.54	3.54	13524
LT-2(a)(ii) V	53398	54408	1.89	55559	2.12	2.00	56734	2.11	2.12	57934
LT -2(b) (i) U	33	34	3.03	39	14.71	8.71	45	15.38	15.04	52
LT -2(b) (ii) V	28	27	-3.57	29	7.41	1.77	31	6.90	7.15	33
LT-3(i) U	2286	2285	-0.04	2332	2.06	1.00	2380	2.06	2.06	2429
LT-3(ii) V	2772	2778	0.22	2832	1.94	1.08	2887	1.94	1.94	2943
LT-4(a)	19397	21752	12.14	22711	4.41	8.21	23712	4.41	4.41	24757
LT-4(b)	9	9	0.00	9	0.00	0.00	9	0.00	0.00	9
LT-4©	2	2	0.00	2	0.00	0.00	2	0.00	0.00	2
LT-5	1686	1760	4.39	1875	6.53	5.46	1998	6.56	6.55	2129
LT-6(a)WS	548	551	0.55	558	1.27	0.91	565	1.25	1.26	572
LT-6(b)STL	249	254	2.01	354	39.37	19.23	493	39.27	39.32	687
LT-7	160	107	-33.13	39	-63.55	50.63	40	2.56	-38.86	41
LT Total	92564	96149	25.78	99486	19.81	0.28	116768	86	37.99	119923
HT-1WS	3	3	0.00	4	33	15.47	5	25.00	29.10	5
HT- 2(a) (ii)	5	5	0.00	6	20	9.54	6	0.00	9.54	7
HT-2(b) (ii)	5	6	20.00	7	17	18.32	5	0.00	-8.71	5
HT-2(c) (i)	0	0	0.00	0	0	0.00	1	0.00	0.00	1
HT-2(c) (ii)	0	0	0.00	0	0	0.00	2	0.00	0.00	2
HT-3(a)(i)	4	4	0.00	4	0	0.00	4	0.00	0.00	4
HT total	17	18	20.00	21	70	43.34	23	25	29.93	24
LT+HT	92581	96167	45.78	99507	89.81	43.62	116791	111	67.92	119947

### 13 Energy Sale:

In order to arrive at the estimated energy sale for the entire control period, HRECS has made assumption that the number of consumers will increase as estimated in the above Tables and power supply will be available to consumers in all years as follows:

- 1) 24 hours supply will be available to urban consumers;
- 2) 6 hours 3 phase and 11 hours single phase supply will be available to consumers in rural areas;

3) Energy sale is closely linked with number of live installations in each category. HRECS has considered consumption pattern for a period of previous 3 years and growth rate of each category has been arrived. The growth of the energy sales for the period from FY-09 to FY-13 are as follows:

**Table 7: Energy sale and growth rate**

Tariff	FY-09-10 in Units	FY-10-11 in Units	% of Growth (Actual)	FY-11-12 in Units	% of Growth (Actual)	CAGR	FY12 -13 in Units (Projected)
LT-1-BJ	0	0	0	0	0	0	2897
LT-2(a)(i) U	5506063	5911902	7.37	6360461	7.59	7.48	6748782
LT-2(a)(ii) V	12038345	13609304	13.05	14031257	3.10	7.96	14245250
LT-2(b) (i) U	36995	47195	27.57	92368	95.72	58.01	94557
LT-2(b) (ii) V	43283	43661	0.87	48905	12.01	6.30	32040
LT-3(i) U	1804126	2192388	21.52	2202676	0.47	10.49	2239785
LT-3(ii) V	1837896	2121956	15.46	2362494	11.34	13.38	2684085
LT-4(a)	112694601	125794473	11.62	142371539	13.18	12.40	165011051
LT-4(b)	56009	57749	3.11	106563	84.53	37.93	85128
LT-4©	2451	2505	2.20	2169	-13.41	-5.93	9729
LT-5	3786805	4034415	6.54	4436728	9.97	8.24	4461852
LT-6(a)WS	4240229	4746706	11.94	5019284	5.74	8.80	5121311
LT-6(b)STL	2151020	2689975	25.06	2178213	-19.02	0.63	2116835
LT-7	95754	46919	-51.00	25614	-45.41	-48.28	101021
LT Total	144293577	161299148	95.31	179238271	165.79	117.42	202954323
HT-1WS	3910944	4143218	5.94	4140601	-0.06	2.89	4223722
HT-2(a) (i)	5224209	6648812	27.27	6803686	2.33	14.12	8508254
HT-2(b) (ii)	520859	563037	8.10	699791	24.29	15.91	940099
HT-2(c) (i)	0	0	0.00	0	0.00	0.00	0
HT-2(c) (ii)	0	0	0.00	0	0.00	0.00	0
HT-3(a)(i)	1455396	1582743	8.75	2398429	51.54	28.37	2227310
HT Total	11111408	12937810	50.06	14042507	78.09	61.30	15899385
LT+HT	155404985	174236958	145.37	193280778	243.88	178.71	218853708

**Table 8: Energy Sale for Control Period:**

Tariff	FY10-11 in Units	FY11-12 in Units	FY-12-13 in Units	% Growth (Projected)	CAGR	FY-13-14 in Units (Projected)	% of Growth (Projected)	CAGR	FY 14-15 in Unit (Projected)
LT-1-BJ	0	0	2897	0.00	0.00	133299	4501.28	0	199949
LT-2(a)(i) U	5911902	6360461	6748782	6.11	6.84	6860750	1.66	3.86	6974576
LT-2(a)(ii) V	13609304	14031257	14245250	1.53	2.31	14462507	1.53	1.53	14683077

<b>LT -2(b) (i) U</b>	47195	92368	94557	2.37	41.55	96798	2.37	2.37	99092
<b>LT -2(b) (ii) V</b>	43661	48905	32040	-34.49	-14.34	20991	-34.49	-34.49	13752
<b>LT-3(i) U</b>	2192388	2202676	2239785	1.68	1.08	2277519	1.68	1.68	2315889
<b>LT-3(ii) V</b>	2121956	2362494	2684085	13.61	12.47	2748350	2.39	7.86	2814154
<b>LT-4(a)</b>	125794473	142371539	165011051	15.90	14.53	185918783	12.67	14.27	208569401
<b>LT-4(b)</b>	57749	106563	85128	-20.11	21.41	68005	-20.11	-20.11	54326
<b>LT-4(c)</b>	2505	2169	9729	348.55	97.07	9829	1.03	112.88	9930
<b>LT-5</b>	4034415	4436728	4461852	0.57	5.16	4487118	0.57	0.57	4512527
<b>LT-6(a)WS</b>	4746706	5019284	5121311	2.03	3.87	5225412	2.03	2.03	5331629
<b>LT-6(b)STL</b>	2689975	2178213	2116835	-2.82	-11.29	2057187	-2.82	-2.82	1999220
<b>LT-7</b>	46919	25614	101021	294.40	46.73	102023	0.99	99.58	103035
<b>LT Total</b>	161299148	179238271	202954323	629.33	227.40	224468571	4470.78	189.20	247680557
<b>HT-1WS</b>	4143218	4140601	4223722	2.01	0.97	4308512	2.01	2.01	4395004
<b>HT- 2(a) (i)</b>	6648812	6803686	8508254	25.05	13.12	9461626	11.21	17.93	10521826
<b>HT-2(b) (ii)</b>	563037	699791	940099	34.34	29.22	732940	-22.04	2.34	571430
<b>HT-2(c) (i)</b>	0	0	0.00	0.00	0.00	47634	0.00	0.00	47634
<b>HT-2(c) (ii)</b>	0	0	0.00	0.00	0.00	328980	0.00	0.00	328980
<b>HT-3(a)(i)</b>	1582743	2398429	2227310	-7.13	18.63	2068400	-7.13	-7.13	1920828
<b>HT Total</b>	12937810	14042507	15899385	54.27	61.93	16948092	-15.96	15.14	17785702
<b>LT+HT</b>	174236958	193280778	218853708	683.59	289.34	241416663	4454.82	204.34	265466259

The classification maintained in the DCB statements for the month of April-12 to March-13 are taken into account for classification of Urban and Rural categories.

#### 14 Energy requirement:

14.1 On the basis of energy sale estimated above and considering distribution loss/transmission loss, the energy requirement of the HRECS, for the Control Period is estimated as follows:

**Table 9: Energy requirement for the previous period**

Particulars	FY-11		FY-12		FY-13	
	KERC approved	Actual	KERC approved	Actual	KERC approved	Actual
Energy Purchase from HESCOM (MU) including	Nil	205.94	217.34	228.20	248.70	257.19

Transmission loss						
LESS Trans. Loss (MU)	Nil	31.70	-	34.93	-	38.71
LESS Trans. Loss %	Nil	15.39%	-	15.30%	-	14.91%
Energy Sold (MU)	Nil	174.23	-	193.82	-	218.85
Distribution Loss (%)	Nil	15.39%	14.25%	15.30%	14.00%	14.91%

**Table10: Estimation of Energy requirement for control period**

Particulars	FY-15
Energy Purchase from HESCOM (MU)	312.87
LESS Trans Loss (MU)	47.40
LESS Trans Loss %	15.15
Energy Available (MU)	265.47

14.2 Energy Requirement of the HRECS for the year FY-15 as per CAGR will be 312.87 MUs.

**TABLE 11: The recorded consumption for FY 13**

Urban consumption	12.48 MU	5.70 %
Rural consumption	206.37 MU	94.30 %
<b>Total</b>	<b>218.85 MU</b>	<b>100 %</b>

14.3 Based on this, the energy requirements for control period have been worked out on pro-rata basis, for the hours of supply as noted above.

**Table 12:**

Sl. No.	Financial year	Urban consumption in Units	Rural consumption in Units	Total in Units
1	FY-2014	13760750	227655913	241416663
2	FY-2015	15131577	250334682	265466259

## 15 Revenue from sale of power:

### 15.1. Table 13: Revenue details:

SL. No.	Category of consumer	Actual Revenue for FY11	Actual Revenue for FY12	Actual Revenue for FY13
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	<b>LT Installations</b>			
1	BhagyaJyothi / KutirJyothi	Nil	Nil	19794.00
2	Domestic (All electric home & domestic lighting)	55102998.00	59426858.00	70701640.00
3	Private professional institutions	518395.00	822931.00	905490.00
4	Commercial and Non residential	27162457.00	29765993.00	35483525.00
5	Irrigation Pumpsets	340747949.00	543116047.00	652788359.00
6	LT Industry	17576692.00	20112137.00	23152075.00
7	Public Water Supply	16588201.00	18167732.00	19775220.00
8	Public Lighting	8104111.00	8389048.00	9822839.00
9	Temporary Supply	469516.00	338346.00	895487.00
	<b>LT Total</b>	<b>466270319.00</b>	<b>680139092.00</b>	<b>813544429</b>
	<b>HT Installations</b>			
8	HT – 1 Public Water Supply	14597153.00	15214444.00	17682810.00
9	HT – 2(a) Industrial, Non Commercial and Non Industrial including Railways	30487132.00	32741752.00	48409043.00
10	HT – 2(b) Commercial	3490151.00	4550365.00	6994076.00
11	HT – 3 Irrigation & Agriculture farms, list includes societies etc.	2681542.00	3310054.00	3790975.00
12	HT – 4 Private residential apartments			
	<b>HT Total</b>	<b>51255978.00</b>	<b>55816615.00</b>	<b>76876904.00</b>
	<b>Total (LT + HT)</b>	<b>517526297.00</b>	<b>735955707.00</b>	<b>890421333.00</b>
	<b>Inter ESCOM Sales</b>			
	<b>Grand Total</b>			

**15.2 Table 14: Abstract of Sales and Revenue for FY-11, FY-12 and FY -13**

<b>Particulars</b>	<b>Actual FY-11</b>	<b>Actual FY-12</b>	<b>Actual FY-13</b>
<b>Sales in MU</b>	174.24	193.28	218.85
<b>Revenue incl. of misc. charges inRs. Lakhs.</b>	5451.47	7501.35	9096.32

**16 O &M Costs:**

The Details of the calculations of O & M Expenditure are shown below:

**O&M Expenses for FY-11, FY-12, FY-13 and Estimation for FY-14, FY-15 :**

Rs. In Lakhs

<b>Particulars</b>	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
R&M Expenses	97.66	135.02	221.64
Employee Cost	330.52	320.84	631.94
A&G Expenses	58.29	97.17	92.31
<b>Total</b>	<b>486.47</b>	<b>553.03</b>	<b>945.89</b>

**Estimation for FY-14 and FY-15.**

<b>Particulars</b>	<b>FY-14</b>	<b>FY-15</b>
R&M Expenses	249.90	271.66
Employee Cost	695.81	759.27
A&G Expenses	100.02	231.89
<b>Total</b>	<b>1045.73</b>	<b>1262.82</b>

- 16.2 For FY-14, the R&M Expense is computed as Rs. 249.90 Lakhs after 12.75% increase over the previous year of FY-13. In Employees Cost, the basic salary is shown an increase of 10.11% over the previous year, in FY -13, with increase in DA and payment of statutory bonus.
- 16.3 For FY-15, the R&M Expense is computed as Rs. 271.66 Lakhs after 8.71% increase over the previous year of FY-14. In Employees Cost, the basic salary is shown an increase of 9.11% over the previous year, in FY -14, with increase in DA and payment of statutory bonus.
- 16.4 The Administration and General Expenses (A&G) for FY-13 stands at Rs. 92.31 Lakhs as against 97.17 lakhs in FY -12. The HRECS estimates an expenditure of Rs. 100.02 lakhs in FY -14, Rs. 231.89 lakhs in FY - 15. The increase in expenditure on this head in FY -15 is due to general body meeting of the HRECS and election to the Board of the HRECS.



- 16.5 For FY-14 and FY-15, the O&M expenses are computed as Rs. 1045.73 lakhs and Rs. 1246.1262.82 lakhs respectively, as per estimation.
- 16.6 The HRECS submits that during the past year the HRECS has regularized 1536 Number of IP Sets, under regularization of unauthorized IP Sets scheme of the GoK (Akram - Sakrama), which should be supported by 160 numbers of transformers and other allied infrastructure costing nearly Rs. 10.75 crores at the present rate. Since, the GoK contribution towards infrastructure development required for regularization of unauthorized IP Sets amounting to Rs. 3.84 crores has not yet been released, the entire work on infrastructure development is pending. Due to such pendency, transformer failure has increased, which is beyond the control of the HRECS.
- 16.7 For the above reasons, the HRECS prays for upward revision of O & M expenses inclusive of employee cost, R & M expenses and A & G expenses.

**17 Depreciation:**

**17.1. TABLE 16:**

**(Rs. In Lakhs)**

<b>Particulars</b>	<b>FY-13 (Actual)</b>	<b>FY-14 (Actual + Estimation)</b>	<b>FY-15</b>
Opening GFA	3577.90	3687.84	3927.22
Add Additions during the year	109.94	239.38	249.34
Less Retirement of assets	Nil	Nil	Nil
Closing GFA	3687.84	3927.22	4176.56
Avg. Depreciation Rate	1.81	1.96	2.04
<b>Depreciation</b>	<b>64.59</b>	<b>72.36</b>	<b>80.99</b>

The Depreciation on assets created out of consumer contribution and depreciation on assets created by Government grants have been charged on account of cost of capital assets. The net Depreciation on assets is computed.

- 17.2 The Gross Depreciation for FY-13 was Rs. 87.39 lakhs, as per actual accounts. However, the net depreciation was Rs. 64.59 Lakhs after charging the depreciation to an extent of Rs. 22.80 Lakhs incurred on account of assets created out of 'Consumer Contribution towards Cost of Capital Assets', to the said account in FY -13. The depreciation is calculated on the basis of MYT Regulations and CERC Notification No.L-7/145(160)/2008-CERC, dated 19th January, 2009, amending the rates of depreciation from year FY-10, by considering an average depreciation rate of 2.11%.
- 17.3 The Gross Depreciation for FY-14 is estimated as Rs. 96.51 lakhs, as per actual accounts. However, the net depreciation will be Rs. 72.36 lakhs after charging the Depreciation to an extent of Rs. 24.15 Lakhs to be incurred on account of assets created out of 'Consumer Contribution towards Cost of Capital Assets', to the said account, in FY -14. The depreciation is projected on the basis of MYT Regulations and CERC Notification No. L-7/145 (160)/2008-CERC, dated 19th January, 2009, amending the rates of depreciation from year FY-10, by considering an average depreciation rate of 2.63%.
- 17.4 The Gross Depreciation for FY-15 is estimated as Rs. 107.89 lakhs, as per actual accounts. However, the net depreciation will be Rs. 80.99 lakhs after charging the Depreciation to an extent of Rs. 26.90 Lakhs to be incurred on account of assets created out of 'Consumer Contribution towards Cost of Capital Assets', to the said account, in FY -15. The depreciation is projected on the basis of MYT Regulations and CERC Notification No. L-7/145(160)/2008-CERC, dated 19th January, 2009, amending the rates of depreciation from year FY-10, by considering an average depreciation rate of 2.97%.
- 17.5 The HRECS has not shown any charges towards Advance against Depreciation in all three years of the control period.

17.6 The proposed additions to Gross Fixed Assets (GFA) are subject to prudence check on the availability of provisional/audited accounts.

## 18 Interest Charges

### 18.1 Interest on Consumer Security Deposit:

**TABLE 17:**

**(Rs. In Lakhs)**

	<b>FY -13</b>	<b>FY -14</b>	<b>FY -15</b>
Consumer Security Deposit at the beginning of the year	974.95	952.36	1154.74
Interest per annum	75.31	80.35	85.90

18.2 As per KERC (Interest on Security Deposit) Regulations, 2005, the Applicant HRECS is liable to pay interest on Consumer Security Deposit at 'Bank Rate' prescribed by the Reserve Bank of India (**RBI**) from time to time. At present, for the purpose of this filing RBI Rate is taken as 9.50% which is subject to the RBI Bank Rate prevailing as on 1-4-2014.

### 18.3 Interest charges on Working Capital:

**TABLE 18:Interest charges on working capital**

**Rs. in Lakhs.**

<b>Particulars</b>	<b>FY 14</b>	<b>FY 15</b>
One-twelfth of the amount of O&M Exp.	86.81	102.39
Stores, materials and supplies 1% of Opening balance of GFA	39.28	41.77
One-sixth of the receivables	1862.19	2076.28
<b>Total Working Capital</b>	<b>1988.28</b>	<b>2220.44</b>
Rate of Interest (% p.a.)	11.81	10.96
<b>Interest charges on Working Capital</b>	<b>234.83</b>	<b>243.41</b>

18.4 The HRECS has estimated the total working capital requirement, for the control period, in accordance with the provisions in MYT Regulations. Further, the said Regulations stipulate that the Rate of

Interest on working capital shall be on normative basis and equal to the short-term Prime Lending Rate of State Bank of India as on 1<sup>st</sup> April of the year.

- 18.5 Banks in India have switched to Base Rate system from Benchmark Prime Lending Rate (BPLR) system from July 01, 2010. Banks may determine their actual lending rates on loans and advances with reference to the Base Rate and by including such other customer specific charges as considered appropriate. Short-term Prime Lending Rate of State Bank of India is no longer in existence. However, the HRECS has considered the interest rate at 10.96% for estimating the interest charges on working capital, for FY -15.

#### 18.6 Interest and Finance Charges

**TABLE 19:**

Rs. In Lakhs.

<b>Particulars</b>	<b>Projected in FY 14</b>	<b>Projected in FY 15</b>
Interest on Working Capital	234.83	243.41
Interest payable on consumer deposits	80.35	89.58
Other Interest and finance charges	9.32	244.88
<b>Total Interest &amp; Finance Charges</b>	<b>324.50</b>	<b>577.87</b>

The Hon'ble Commission may consider the proposed capital investment in the ARR for the control period for allowing interest & finance charges.

The Commission may approve interest charges to an extent of Rs. 577.87 Lakhs for FY -15,, subject to verification at APR.

#### 18.7 Other Debits:

The HRECS is of the view that other debits & prior period expenses cannot be estimated over a two-year period. The Applicant hereby

seeks the liberty to file suitable proposal for consideration of such expenses as per actuals based on audited accounts during the Annual Performance Review.

**19 Return on Equity (RoE)/(RoR):**

19.1 The HRECS has considered Share capital and Reserves & Surplus for the purpose of computation of RoE/RoR and the estimated figures are as below;

**TABLE 20:**

**TABLE CALCULATING RoE/RoR**

<b>Particulars</b>	<b>FY-14</b>	<b>FY-15</b>
Paid Up Share Capital	469.98	493.40
Reserves and surplus	3391.26	4230.74
Closing Balance of Equity at the beginning of the year	<b>3861.24</b>	<b>4724.14</b>
RoE @ 22.22% on closing balance at the beginning of the year	<b>879.41</b>	<b>1049.70</b>

19.2 ROE is calculated at 22.22% considering corporate tax of 30% and 3% cess on RoE of 15.50% for FY 2014-15 . Only the RoE/RoR of the previous year has been included in the reserve and surplus. Any surplus/deficit for the previous year after considering RoE/RoR has not been taken into account, while calculating reserve, in view of the fact that such surplus/shortfall would be adjusted in the tariffs itself as the RoE/RoR is restricted to 22.22% of the capital and reserve of the HRECS.

**20. POWER PURCHASE FOR FY-15:**

20.1 The entire power requirement of the HRECS has been sourced from HESCOM. The estimated Power purchase cost of the HRECS for the FY 15 is as follows.

**TABLE 21: Power Purchase Cost**

<b>PARTICULARS</b>	<b>As approved by the Commission</b>	<b>As projected by the Society, for revision</b>
Units to be Purchased in MU	297.45	325.63
Price in paise per unit	3.21	3.33
<b>Total Power Purchase cost (Rs. in lakhs)</b>	<b>9545.49</b>	<b>10843.48</b>

- 19.2. The power Purchase cost have been based on projected weighted average cost. Transmission Charges and SLDC Charges have been included in the charges payable to Hubli Electricity Supply Company Limited (HESCOM).

## 21. ANNUAL REVENUE REQUIREMENTS FY -15

**Table 22: ARR for FY -15 : (Rs. in Lakhs.)**

	<b>Details</b>	<b>FY-15</b>
1	<b>Expenditure</b>	
	Power Purchase	10843.48
	R&M Expense	271.66
	Employee Expenses	759.27
	A&G Expense	197.82
	Depreciation	80.99
	Advance against depreciation	Nil
	Interest & Finance Charges	244.88
	Less: Interest & other expenses capitalised	Nil
	Interest on consumer Deposit	85.90
	Interest on working capital	243.41

	Other Debits (incl. Prov for Bad debts)	Nil
	Extraordinary Items	Nil
	Other (Misc.)-net prior period credit	Nil
2	<b>Total</b>	<b>12727.41</b>
3	<b>ROE 22.22%</b>	155.22
4	<b>Provision for taxes</b>	-
	<b>Sub Total</b>	<b>12382.63</b>
5	<b>Other Income</b>	0.00
	<b>Annual Revenue Requirement (2)+(3)+(4)-(5)</b>	12383.63

## **22        **SECTORIAL ENERGY FORECAST FOR FY-15****

### **22.1        **Basis****

The audited accounts of the Society for FY-11, FY -12 and FY -13 are available. The provisional accounts up to 30<sup>th</sup> of September in FY 14 are also available. For FY-15, the estimation of energy sale is based on the growth achieved in FY-12 over FY-13. For un-metered categories like IP Sets installations, the consumption figures for FY-15 is arrived at as per the assessment procedure in vogue. For street light installations, the consumption figures for the control period FY-15 is arrived based on the specific consumption per annum of FY - 13.

Number of installations as at the end of 31<sup>st</sup> March 2013, have been considered from the data available in the DCB statements. The HRECS has made every effort to project only live installations in the statements, which is now being filed before the Hon'ble Commission. The figures currently furnished are true reflection of the HRECS's operation and consumer base.

The forecast is dealt in detail in each category in the following paragraphs.

### **22.2        **LT CATEGORY:****

#### **22.2.1      **LT-1 category:****

Under this category, BhagyaJyothi /KutiraJyothi installations are coming under this category. After implementation of RGGY scheme

within the service area of the Society, 14811 installations will be serviced in this category, in FY- 14.

For FY-15 no additional installation is estimated. So for FY-15 14811 installation.

**Table 23: LT -1 Installations**

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	14811	14811
<b>Consumption (Units)</b>	133299	199949

**22.2.2. LT-2 (a) Installations:**

Growth of consumers and consumption

**TABLE 24: Rural Installations:**

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	53398	54408	55559
<b>Consumption (Units)</b>	13609304	14031257	14245250

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	56734	57934
<b>Consumption (Units)</b>	14462507	14683077

The number of installations based on DCB figures for FY-11, FY-12 and FY -13 are 53398, 54408 and 55559 respectively. For FY-14 and FY-15 the number of installations are estimated at 56734 and 57934 respectively.

For FY-14, 56734 No. of installations are estimated based on the one year growth rate of 2.11% of FY-14 over FY-13.

For FY-15, 57934 No. of installations are estimated based on the one year growth rate of 2.11% FY-15 over FY-14.



The energy sales for FY - 11, FY - 12 and FY -13 under this category are 13609304 Units, 14031257 units and 14245250 units respectively. For FY- 14 and FY- 15, the power consumption is estimated as 14462507 units and 14683077 Units respectively.

For FY-14, 14462507 units are estimated based on the one year growth rate of 1.53% FY-14 over FY-13.

For FY-15, 14683077 units are estimated based on the one year growth rate of 1.53% FY-15 over FY-14.

**TABLE 25: Urban Installations:**

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	11996	12182	12614
<b>Consumption (Units)</b>	5911902	6360461	6748782

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	13061	13524
<b>Consumption (Units)</b>	6860750	6974576

The number of installations based on DCB figures for FY-11, FY-12 and FY -13 are 11996, 12182 and 12614 respectively. For FY-14 and FY -15, the number of installations are estimated at 13061 and 13524 respectively.

For FY-14, 13061 No. of installations are estimated based on the one year growth rate of 3.54% FY-14 over FY-13.

For FY-15, 13524 No. of installations are estimated based on the one year growth rate of 3.54% FY-15 over FY-14.

The energy sales for FY-11, FY-12 and FY-13 under this category are 5911902 Units, 6360461 Units and 6748782 units respectively. For FY - 14 and FY - 16, the power consumption is estimated as 6860750 units and 6974576 Units respectively.

For FY-14 6860750 units are estimated based on the one year growth rate of 1.66% FY-14 over FY-13.

For FY-15, 6974576 units are estimated based on the one year growth rate of 1.66% FY-15 over FY-14.

### 22.2.3 LT-2 (b) Installations

**TABLE 26: LT-2 (b)(i) Urban Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	33	34	39
<b>Consumption (Units)</b>	47195	92368	94557

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	45	52
<b>Consumption (Units)</b>	96798	99092

The number of installations for FY-11, FY-12 and FY 13 are 33, 34 and 39 respectively. For FY-14 and FY- 15, the numbers of installations are estimated as 45 and 52 respectively.

For FY-14, 45 No. of installations are estimated based on the one year growth rate of 15.38% FY-14 over FY-13.

For FY-15, 52 No. of installations are estimated based on the one year growth rate of 15.55% FY-15 over FY-14.

The energy sales for FY-11, FY-12 and FY 13 stands at 47195 Units, 92368, and 94557 Units respectively. For FY-14 and FY-15, estimated energy sales are 96798 and 99092 Units respectively.

For FY-14, 96798 units are estimated based on the one year growth rate of 2.37% FY-14 over FY-13.

For FY-15, 99092 units are estimated based on the one year growth rate of 2.37% FY-15 over FY-14.

**TABLE 27: LT-2 (b)(ii) Rural Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	28	27	29
<b>Consumption (Units)</b>	43661	48905	32040

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	31	33
<b>Consumption (Units)</b>	20991	13752

The number of installations for FY-11, FY-12 and FY 13 are 28, 27 and 29 respectively. For FY-14 and FY- 15, the numbers of installations are estimated as 31 and 33 respectively.

For FY-14, 31 No. of installations are estimated based on the one year growth rate of 6.90% FY-14 over FY-13.

For FY-15, 33 No. of installations are estimated based on the one year growth rate of 6.45% FY-15 over FY-14.

The energy sales for FY-11, FY-12 and FY 13 stands at 43661 Units, 48905, and 32040 Units respectively. For FY-14 and FY-15, estimated energy sales are 20991 and 13752 Units respectively.

For FY-14, 20991 units are estimated based on the one year growth rate of -34.49% FY-14 over FY-13.

For FY-15, 13752 units are estimated based on the one year growth rate of -34.49% FY-15 over FY-14.

**22.2.4 LT-3 Installations****TABLE 28: LT-3(i) Urban Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	2286	2285	2332

<b>Consumption (Units)</b>	2192388	2202676	2239785
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	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	2380	2429
<b>Consumption (Units)</b>	2277519	2315889

The number of installations for FY-11, FY-12 and FY 13 are 2286, 2285 and 2332 respectively. The number of installations for FY- 14 and FY - 15 are estimated as 2380 and 2429 respectively.

For FY-14, 2380 No. of installations are estimated based on the one year growth rate of 2.06% FY-14 over FY-13.

For FY-15, 2429 No. of installations are estimated based on the one year growth rate of 2.06% of FY-15 over FY-14.

The energy sales are 2192388, 2202676 and 2239785 Units for FY-11, FY-12 and FY -13 respectively. The estimated energy sales for FY -14 are 2277519 Units and for FY-15 are 2315889 Units.

For FY-14, 2277519 units are estimated based on the one year growth rate of 1.68% of FY-14 over FY-13.

For FY-15, 2315889 units are estimated based on the one year growth rate of 1.68% of FY-15 over FY-14.

**TABLE 29: LT-3(ii) Rural Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	2772	2778	2832
<b>Consumption (Units)</b>	2121956	2362494	2684085

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	2887	2943
<b>Consumption (Units)</b>	2748350	2814154

The number of installations for FY-11, FY-12 and FY 13 are 2772, 2778 and 2832 respectively. The number of installations for FY- 14 and FY - 15 are estimated as 2887 and 2943 respectively.

For FY-14, 2887 No. of installations are estimated based on the one year growth rate of 1.94% FY-14 over FY-13.

For FY-15, 2943 No. of installations are estimated based on the one year growth rate of 1.94% of FY-15 over FY-14.

The energy sales are 2121956, 2362494 and 2684085 Units for FY-11, FY-12 and FY -13 respectively. The estimated energy sales for FY -14 are 2748350 Units and for FY-15 are 2814154 Units.

For FY-14, 2748350 units are estimated based on the one year growth rate of 2.39% of FY-14 over FY-13.

For FY-15, 2814154 units are estimated based on the one year growth rate of 2.39% of FY-15 over FY-14.

#### 22.2.5 LT-4(a) Installations:

Month wise IP set consumption as approved by KERC for FY-11, FY -12 and FY- 13 are as follows:

**TABLE 30: LT-4(a) Units:**

<b>In Units</b>				
<b>Sl.No.</b>	<b>Month</b>	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
1	April	12357177	11772088	13958649
2	May	12972770	12162985	16928886
3	June	8783559	8094956	13672803
4	July	8653355	9789798	14131404
5	August	8746409	9516523	14017952
6	September	7188220	7062258	12619035
7	October	7270751	9760196	13116822
8	November	9100117	13685216	11330600
9	December	13923149	14538077	13567364
10	January	12796770	14939522	14364464
11	February	11948038	14609260	13557606
12	March	12054158	16440660	13745466
	<b>Total</b>	<b>125794473</b>	<b>142371539</b>	<b>165011051</b>

## Growth of consumers and consumption in LT 4 Category

**TABLE 31:**

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	19397	21752	22711
<b>Consumption (Units)</b>	125794473	142371539	165011051

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	23712	24757
<b>Consumption (Units)</b>	185918783	208569401

The monthly assessed consumption of IP sets are being estimated, as directed by the Hon'ble Commission, through metering of predominantly IP sets feeding feeders, which are being furnished to the Hon'ble Commission regularly. A table showing the monthly consumption for FY-11, FY-12 and FY-13 are furnished above.

For FY -14, the specific consumption per H.P. per year is estimated as 1541 units. The specific consumption of 7841 units/annum/installation is considered for arriving at the IP Set consumption for FY-14.

Similarly, for FY-15, the specific consumption per H.P. per year is estimated as 1659 units. The specific consumption of 8433 units/annum/installation is considered for arriving at the IP Set consumption for FY-15.

### **22.2.6 :LT-4(b) & LT-4(c) Installations:**

**TABLE 32: LT-4(b) & LT-4(c) Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	11	11	11

<b>Consumption (Units)</b>	57959	108732	94857
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	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	11	11
<b>Consumption (Units)</b>	77834	64256

The HRECS estimated the number of installations for LT 4(b) for FY-14 at 0 as the first year growth rate of FY-14 over FY-13 is 0 % The consumption for FY-14 is arrived at 68005 units based on one year growth rate of -20.11%.

The HRECS estimated the number of installations for LT 4(b) for FY-15 at 0 as the first year growth rate of FY-15 over FY-14. The consumption for FY-15 is arrived at 54326 Units based on one year growth rate of -20.11%.

For LT 4(c) for FY-14, the two numbers of installations is arrived taking a growth rate of 0%. The consumption for FY-14 is estimated at 9829 Units, based as the one year growth rate is 1.03%.

For LT4(c) for FY-15, the two numbers of installations is arrived taking a growth rate of 0%. The consumption for FY-15 is retained at 9930 Units, based on the one year growth rate of 1.03%.

**22.2.7. LT-5 Installations:**

**TABLE 33: LT-5 Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	1686	1760	1875
<b>Consumption (Units)</b>	4034415	4436728	4461852

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	1998	2129
<b>Consumption (Units)</b>	4487118	4512527

The number of installations for FY-11, FY -12 and FY-13 are 1686 and 1760 and 1875 respectively. For the year FY-14 and FY-15, the numbers of installations are 1998 and 2129 respectively.

For FY-14, 1998 No. of installations are estimated based on the one year growth rate of 6.56% FY-14 over FY-13.

For FY-15, 2129 No. of installations are estimated based on the one year growth rate of 6.56% FY-15 over FY-14.

The energy sales for FY-11, FY-12 and FY-13 are 4034415, 4436728 and 4461852 Units respectively. For FY-14 and FY-15 are 4487118 and 45122527 Units respectively.

For FY-14, 4487718 units are estimated based on the one year growth rate of 0.57% FY-14 over FY-13.

For FY-15, 45122527 units are estimated based on the one year growth rate of 0.57% FY-15 over FY-14.

**22.2.8 LT-6: Water Supply Installations:**

**TABLE 34: LT-6 Water Supply Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	548	551	558
<b>Consumption (Units)</b>	4746706	5019284	5121311

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	565	572
<b>Consumption (Units)</b>	5225412	5331629

The number of installations under this category for FY-11, FY-12 and FY -13 are 548, 551 and 551 respectively. For FY-14 and FY-15, the number of installations are estimated 565 and 572 respectively.



For FY-14, 565 No. of installations are estimated based on the one year growth rate of 1.25% FY-14 over FY-13.

For FY-15, 572 No. of installations are estimated based on the one year growth rate of 1.24% FY-15 over FY-14.

The consumption figures in respect of this category of installation are 4746706, 5019284 and 5121311 Units for FY-11, FY-12 and FY-13 respectively. For FY-14 & FY-15 are estimated 5225412 and 5331629 respectively.

For FY-14, 5225412 units are estimated based on the one year growth rate of 2.03% FY-14 over FY-13.

For FY-15, 5331629 units are estimated based on the one year growth rate of 2.03% FY-15 over FY-14.

#### **22.2.9 LT-6 Public Lighting Installations:**

**TABLE 35: LT-6 Public Lighting Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
Consumers (Nos)	249	254	354
Consumption (Units)	2689975	2178213	2116835

	<b>FY-14</b>	<b>FY-15</b>
Consumers (Nos)	493	687
Consumption (Units)	2057187	199220

The number of installations under this category for FY-11, FY-12 and FY -13 are 249, 254 and 354, respectively and the number of installations is estimated at 493 for FY - 14. Number of installations is estimated at 68 for FY -15 .

For FY-14, 493 No. of installations are estimated based on the one year growth rate of 39.27 % FY-14 over FY-13.

For FY-15, 687 No. of installations are estimated based on the one year growth rate of 39.35% FY-15 over FY-14.

The consumption figures in respect of this category of installation are 2689975, 2178213 and 2116835 Units for FY-11, FY-12 and FY-13 respectively. The estimated power consumption for FY -14 will be 2057187 units; The estimated power consumption for FY-15 will be 199220 units.

For FY-14, 2057187 units are estimated based on the one year growth rate of -2.82% FY-14 over FY-13.

For FY-15, 2274308 units are estimated based on the one year growth rate of -2.82% FY-15 over FY-14.

#### 22.2.10 LT-7 Installations:

**TABLE 36: LT-7 Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	160	107	39
<b>Consumption (Units)</b>	46919	25614	101021

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	40	41
<b>Consumption (Units)</b>	102023	103035

The number of installation under this category for FY-11, FY-12 and FY-13 are 160, 107 and 39 respectively and the number of installations estimated for FY-14 and FY-15 are 40 and 41 respectively.

For FY-14, 40 No. of installations are estimated based on the one year growth rate of 2.56% FY-14 over FY-13.

For FY-15, 41 No. of installations are estimated based on the one year growth rate of 2.50% FY-15 over FY-14.

The consumption figures in respect of this category of installation are 46919 25614 and 101021 Units for FY-11, FY-12 and FY -13 respectively. The estimated consumption for FY-14 is 102023 units and for FY-15 is 103035 units.

For FY-14, 102023 units are estimated based on the one year growth rate of 0.99% FY-14 over FY-13.

For FY-15, 103035 units are estimated based on the one year growth rate of 0.99% FY-15 over FY-14.

### **22.3 HT CATEGORY**

#### **22.3.1 HT-1 INSTALLATIONS**

**TABLE 37: HT-1 Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	3	3	4
<b>Consumption (Units)</b>	4143218	4140601	4223722

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	5	5
<b>Consumption (Units)</b>	4308512	4395004

The number of installations under this category for FY-11, FY-12 and FY -13 are 3, 3 & 4 respectively. The number of installations is estimated at 5 for FY -14 at one year growth rate of 25% and FY-15 growth rate is 0.0%.

The consumption figures in respect of this category of installation are 4143218, 4140601 and 4223722 Units for FY-11, FY-12 and FY-13 respectively. The estimated consumption for FY -14 is 4308512 units and for FY-15 is 4395004 Units.

For FY-14, 4308512 units are estimated based on the one year growth rate of 2.01% FY-14 over FY-13.

For FY-15, 4395004 units are estimated based on the one year growth rate of 2.01% FY-15 over FY-14.

#### **22.3.2 HT-2 (a) Installations:**

**TABLE 38: HT-2 (a) Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	5	5	6
<b>Consumption (Units)</b>	6648812	6803686	8508254

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	6	7
<b>Consumption (Units)</b>	9461626	10521826

The number of installations under this category for FY-11, FY-12 and FY -13 are 5, 5 and 6 respectively and the number of installations is estimated at 6 for FY -14 and number of installations is estimated at 7 for FY -15 .

For FY-14, 6 installation is computed based on one year growth rate of 0% FY-14 over FY-13.

For FY-15, 7 installation is computed based on one year growth rate of 16.67% FY -15 over FY - 14.

The consumption figures in respect of this category of installations are 6648812, 6803686 and 8508254 Units for FY-11, FY-12 and FY-13 respectively. The estimated consumption for FY-14 is 9461626 Units and for FY-15 is 10521826 Units.

For FY-14, 9461626 Units is computed based on one year growth rate of 11.21% FY-14 over FY-13.

For FY-15, 10521826 Units is computed based on first year growth rate of 11.21% FY -15 over FY - 14.

### **22.3.3 HT-2 (b) Installations:**

**TABLE 39: HT-2 (b) Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	5	6	7
<b>Consumption (Units)</b>	563037	699791	940099

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	5	5
<b>Consumption (Units)</b>	732940	571430

The number of installations under this category for FY-11, FY-12 and FY -13 are 5, 6 and 7 respectively. The growth rate of 0% is considered and the number of installations is estimated at 5 for FY-14 and FY-15

The consumption figures in respect of this category of installation are 563037, 699791 and 940099 Units for FY-11, FY-12 and FY -13 respectively.

The consumption figures in respect of this category of installation are 732940 and 571430 Units for FY-14 and FY -15 respectively.

For FY -14, 732940 Units is computed based on first year growth rate of -22.04% FY-14 over FY-13.

For FY -15, 571430 Units is computed based on first year growth rate of -22.04% FY-15 over FY-14.

#### **22.3.4 HT-2 (c) Installations:**

**TABLE 40: HT-2 (c)(i) Installations:**

Growth of consumers and consumption

	<b>FY-13</b>	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	0	1	1
<b>Consumption (Units)</b>	0	47634	47634

The number of installations is estimated at 1 for FY-14 and FY-15

The consumption is estimated for this category of installation are 47634 for FY-14 and FY -15.

**TABLE 41: HT-2 (c)(ii) Installations:**

Growth of consumers and consumption

	<b>FY-13</b>	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	0	2	2
<b>Consumption (Units)</b>	0	328980	328980

The number of installations is estimated at 2 for FY-14 and FY-15

The consumption is estimated for this category of installation is 328980 for FY-14 and FY -15.

### 22.3.5 HT-3(a) Installations:

**TABLE 42: HT-3(a) Installations:**

Growth of consumers and consumption

	<b>FY-11</b>	<b>FY-12</b>	<b>FY-13</b>
<b>Consumers (Nos)</b>	4	4	4
<b>Consumption (Units)</b>	1582743	2398429	2227310

	<b>FY-14</b>	<b>FY-15</b>
<b>Consumers (Nos)</b>	4	4
<b>Consumption (Units)</b>	2068400	1920828

The number of installations under this category for FY-10, FY-11 and FY -12 are 4, 4 and 4 respectively.

The growth rate of 0% is considered and the number of installations is estimated at 4 for FY -14 and FY-15

The consumption figures in respect of this category of installation are 1582743, 2398429 and 2227310 Units for FY-11, FY-12 and FY-13 respectively.

The consumption figures in respect of this category of installation are 2068400 and 1920828 Units for FY-14 and FY-16 respectively.

For FY-14, 2068400 Units are estimated based on first year growth rate of -7.13% FY-14 over FY-13.

For FY-15, 1920828 Units are computed based on first year growth rate of -7.13% FY-15 over FY-14.

#### 22.4. Summary of Sale of Energy for FY-11, FY-12, FY-13 and FY-14.

**TABLE 43:**

SL. No.	Category of consumer	Actuals for FY11	Actuals for FY-12	Actuals for FY-13	Actuals and estimation for FY-14
	<b>LT Installations</b>				
1	BhagyaJyothi / KutirJyothi	0	0	2897	133299
2	Domestic (All electric home & domestic lighting)	19521206	20391718	20994032	21323258
3	Private professional institutions	90856	141273	126597	117789
4	Commercial and Non residential	4314344	4565170	4923870	5025869
5	Irrigation Pumpsets	125852432	142480271	165105908	185996617
6	LT Industry	4034415	4436728	4461852	4487117
7	Public Water Supply	4746706	5019284	5121311	5225412
8	Public Lighting	2689975	2178213	2116835	2057187
9	Temporary Supply	46919	25614	101021	102023
	<b>LT Total</b>	<b>161296853</b>	<b>179238271</b>	<b>202954323</b>	<b>224468571</b>
	<b>HT Installations</b>				
8	HT – 1 Public Water Supply	4143218	4140601	4223722	4308512
9	HT – 2(a) Industrial, Non Commercial and Non Industrial including Railways	6648812	6803686	8508254	9461626
10	HT – 2(b) Commercial	563037	699791	940099	732940
11	HT – 2(c) Education Inst., Hostels & Hospitals			0	376614
12	HT – 3 Irrigation & Agriculture farms, list includes societies etc.	1582743	2398429	2227310	2068400
	<b>HT Total</b>	<b>12937810</b>	<b>14042507</b>	<b>15899385</b>	<b>16948092</b>
	<b>Total (LT + HT)</b>	<b>174234663</b>	<b>193280778</b>	<b>218853708</b>	<b>241416663</b>

**Table 44:**

SL. No.	Category of consumer	% growth of FY-11 over FY-10	% growth of FY-12 over FY-11	% growth of FY-13 over FY-12	% growth of FY-14 over FY-13
	<b>LT Installations</b>				
1	BhagyaJyothi / KutirJyothi				4501.28
2	Domestic (All electric home & domestic lighting)	11.27	4.46	2.95	1.57
3	Private professional institutions	13.18	55.49	-10.30	-6.96
4	Commercial and Non residential	18.46	5.81	7.86	2.07
5	Irrigation Pumpsets	11.62	13.21	15.88	12.65
6	LT Industry	6.54	9.97	0.57	0.57
7	Public Water Supply	11.94	5.74	2.03	2.03
8	Public Lighting	25.06	-19.02	-2.82	-2.82
9	Temporary Supply	-51.00	-45.40	294.40	0.99
	<b>LT Total</b>	<b>47.06</b>	<b>30.26</b>	<b>310.57</b>	<b>4511.38</b>
	<b>HT Installations</b>				
8	HT – 1 Public Water Supply	5.94	-0.06	2.01	2.01
9	HT – 2(a) Industrial, Non Commercial and Non Industrial including Railways	27.27	2.33	25.05	11.21
10	HT – 2(b) Commercial	8.10	24.29	34.34	-22.04
11	HT – 2(c) Education Inst., Hostels & Hospitals	0	0	0	0
12	HT – 3 Irrigation & Agriculture farms, list includes societies etc.	8.75	51.54	-7.13	-7.13
	<b>HT Total</b>	<b>50.06</b>	<b>78.10</b>	<b>54.27</b>	<b>-15.95</b>
	<b>Total (LT + HT)</b>	<b>97.12</b>	<b>108.36</b>	<b>364.84</b>	<b>4495.43</b>

### 23. Annual Revenue Requirement and Tariff Revision for FY-15

The HRECS is furnishing the details of projections and Annual Revenue Requirement for FY – 15 and tariff revision proposals for FY - 15 in the following paragraphs;

#### 23.1 Energy Input at interface points projected for FY -15

**TABLE 45:**

Details	For FY -15
Power Purchase (MU)	312.87



Sale of Power (MU)	265.47
Loss %	15.15
Average Cost of Purchase (in paise)	333.00

### 23.2 Quantum of input energy at interface points

**TABLE 46:**

Year	Quantum of power purchase (MU)	Percentage Growth over previous year
2009-10 (Actuals)	183.24	2.78
2010-11 (Actuals)	205.93	12.38
2011-12 (Actuals)	228.21	10.82
2012-13 (Actual)	257.19	14.07
2013-14 (Projected)	284.87	10.76
2014-15 (Projected)	312.87	9.83

The energy available at interface points were 205.93 MU, 228.21 MU and 257.19 MU for FY 11, FY-12 and FY-13 respectively. It is proposed to draw 284.87 MU and 312.87 MU for FY-14 and FY-15 respectively. This represents an increase of 10.76% and 9.83 % growth for FY-14, FY-15 respectively. In the opinion of the HRECS, these modified projections are reasonable.

### 23.3. Quantum of energy sales

**TABLE 47:**

Year	Quantum of Sales (MU)	Percentage of Growth over previous year
2010-11 (Actual)	174.23	12.11
2011-12 (Actual)	193.28	10.92
2012-13 (Actual)	218.85	13.23
2013-14 (Projected)	241.32	10.27
2014-15 (Projected)	265.67	10.09

The quantum of energy input and sales for the previous years are depicted in the above tables. The sales figure for FY - 11, FY - 12 and FY -13 were 174.23 MU, 193.28 MU and 218.85 MU, respectively. The energy input and sales figures projected in ARR filing have been suitably modified taking into consideration the historical growth registered in the previous years.

## 23.4 Annual Revenue Requirement

**TABLE 48: In Rs. in Lakhs.**

Sl. No.	Details	FY-15
		Projected
	Power Purchase (MU)	325.63
	Sale of Power (MU)	265.47
	Loss %	19.07
	Average Cost of Purchase at I.F. (in Rs)	<b>3.33</b>
<b>1</b>	<b>Receipts</b>	
<b>a</b>	Revenue from tariffs & Miscell. Charges	12457.72
<b>b</b>	RE subsidy from Govt.	
	Revenue to wires business	
	<b>Total</b>	<b>12457.72</b>
<b>2</b>	<b>Expenditure</b>	
<b>a</b>	Power Purchase	10843.48
<b>b</b>	R&M Expense	271.66
<b>c</b>	Employee Expenses	759.27
<b>d</b>	A&G Expense	197.82
<b>e</b>	Depreciation	80.99
	Advance against depreciation	Nil
<b>f1</b>	Interest & Finance Charges	244.88
<b>f2</b>	Interest on consumer Deposit	85.90
<b>f3</b>	Interest on working capital	243.41
<b>g</b>	<b>Less:</b> Interest & other expenses capitalised	Nil
<b>h</b>	Other Debits	Nil
<b>i</b>	Extraordinary Items	Nil
<b>j</b>	Other (Misc.)-net prior period credit	Nil
	<b>Total</b>	<b>12727.41</b>
<b>3</b>	<b>ROE 22.22%</b>	<b>155.22</b>
<b>4</b>	<b>Other Income</b>	<b>50.71</b>
<b>5</b>	<b>Provision for taxes</b>	-
<b>6</b>	<b>Annual Revenue Requirement (2)+(3)+(5)-(4)</b>	<b>12831.92</b>
<b>7</b>	<b>Shortfall: (1)-(6)after tariff revision</b>	<b>-374.20</b>

Average cost of supply for FY -15 Rs. 4.69 respectively.

Note: In this filing, the revenue from tariff has been calculated on the basis of existing tariff proposed.

Taking into consideration that HRECS proposed tariff and projected demanded, the revenue realization from sale of power works out to Rs. 126,97,34,562/- for FY – 15, excluding Miscellaneous Income such as reconnection fee, Public lighting handling charges, delayed payment charges etc. of the respective years. Category wise revenue from sale of power is indicated in the following table:

**TABLE 49:****Category wise Revenue:**

<b>SL. No.</b>	<b>Category of consumer</b>	<b>Projected Revenue for FY-15 on existing tariff</b>
	<b>LT Installations</b>	
1	BhagyaJyothi / KutirJyothi	933762.00
2	Domestic (All electric home & domestic lighting)	93949373.00
3	Private professional institutions	952123.00
4	Commercial and Non residential	42263673.00
5	Irrigation Pumpsets	961716076.00
6	LT Industry	28544654.00
7	Public Water Supply	22423048.00
8	Public Lighting	11095614.00
9	Temporary Supply	943801.00
	<b>LT Total</b>	<b>1162822124.00</b>
	<b>HT Installations</b>	
8	HT – 1 Public Water Supply	21718518.00
9	HT – 2(a) Industrial, Non Commercial and Non Industrial including Railways	72998722.00
10	HT – 2(b) Commercial	5169096.00
11	HT-2(c ) (i)	414108.00
12	HT-2(c ) (ii)	2463007.00
13	HT – 3 Irrigation & Agriculture farms, list includes societies etc.	4148988.00
	<b>HT Total</b>	<b>106912439.00</b>
	<b>Total (LT + HT)</b>	<b>1269734563.00</b>
	<b>Misc. Charges</b>	<b>13456810.00</b>
	<b>Grand Total</b>	<b>1283191373.00</b>

This comprises income mainly from interest on delayed payment charges, reconnection fee etc. The HRECS has estimated this income at Rs. 134.57 Lakhs, for FY- 15.

**TABLE 50: Miscellaneous charges from consumers**

<b>Particulars</b>	<b>FY -15</b>
Reconnection Fee in lakh Rs.	0.09
Interest on belated Payment charges in lakhs Rs.	83.50
Other receipts	50.98
<b>Sub Total</b>	<b>134.57</b>
<b>Less</b>	
Withdrawal of Revenue Demand	Nil
<b>Sub Total</b>	Nil
<b>Grand Total (of Difference)</b>	<b>134.57</b>

**23.7 Surplus /deficit:**

The Society may incur a cash loss of Rs. 3.74 crore on account of sale of power to consumers including IP sets in FY-15. The Society is proposing to make good of this loss by way of revision of tariff.

**24 TARIFF PROPOSALS For FY -15**

**24.1. LT CATEGORY WISE TARIFF REVISION**

The detailed tariff proposal for the FY-15 is furnished in Format D - 21.

**24.1.2. LT - 1 Bhagyajyothi / Kutirjyothi**

The electricity consumption for this category of consumers is estimated at 18 units per month per installations. The entire cost of supply to this category of consumers will be met by GoK. The Society is proposing tariff at the cost of supply rate arrived at, through these exercise, which will be Rs. 4.67 per unit up to 18 units subjected to monthly minimum of Rs. 30 per installation per month. If any consumer consumes power above the stipulated 18 units per month per installation, such installations will be billed as per the tariff

applicable to LT-2(a) category consumers for their entire consumption of that month.

**24.1.3. LT 2(a) Domestic Lighting& AEH**

The estimated specific consumption of this category of consumers of the HRECS is 303 units per month per consumer for FY-15..

The energy charges proposed to be increased as indicated in the table below.

**TABLE 51:**

**Proposed Tariff for LT 2(a)(i)**

**(in Rs.)**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff For FY-15</b>
<b>Fixed Charges per month</b>		
First KW	25	25
Additional KW	35	35
<b>Energy Charges per month</b>		
Cons.< 30 units	2.50	3.16
Cons.>30, <= 100 units	3.70	4.36
Cons.>100, <= 200 units	4.85	5.51
Cons.>200, units	5.85	6.51

**TABLE 52:**

**Proposed Tariff for LT 2(a)(ii)**

**(in Rs.)**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff For FY-15</b>
<b>Fixed Charges per month</b>		
First KW	15	15
Additional KW	25	25
<b>Energy Charges per month</b>		
Cons.< 30 units	2.40	3.06
Cons.>30, <= 100 units	3.40	4.06

Cons.>100, <= 200 units	4.55	5.21
Cons.>200 units	5.35	6.01

#### 24.1.4 LT – 2(b) Private Professional Institutes

These categories of consumers constitute private, professional educational institutes. The Energy Charges for all the existing slab consumptions for FY -15, as indicated in the table below.

#### Proposed Tariff for LT 2(b) (i) (in Rs.)

**TABLE 53:**

Particulars	Existing Tariff	Proposed tariff For FY-15
<b>Fixed Charges</b> Rs. 35/- Per KW per month subject to a minimum of Rs. 65/-	65	65
<b>Energy Charges per month</b>		
Cons.< =200 units	5.70	6.36
Cons. >200 units	6.70	7.36

#### Proposed Tariff for LT 2(b) (ii) (in Rs.)

**TABLE 54:**

Particulars	Existing Tariff	Proposed tariff For FY-15
<b>Fixed Charges</b> Rs. 25/- Per KW per month subject to a minimum of Rs. 50/-	50	50
<b>Energy Charges per month</b>		
Cons.< =200 units	5.20	5.86
Cons.> 200 units	6.20	6.86

#### 24.1.5 LT 3: Commercial

TABLE 55:

Proposed Tariff for LT 3(i) (in Rs.)

Particulars	Existing Tariff	Proposed tariff For FY-15
<b>Fixed Charges</b> Per KW per month	40	40
<b>Demand based Tariff (Optional)</b>		
Fixed Charges Per KW per month	55	55
<b>Energy Charges per month</b>		
For the first 50 units	6.45	7.11
For the balance units	7.45	8.11

TABLE 56:

Proposed Tariff for LT 3 (ii) (in Rs.)

Particulars	Existing Tariff	Proposed tariff For FY-15
<b>Fixed Charges</b> per KW Per Month	30	30
<b>Demand based Tariff (Optional)</b>		
Fixed Charges Per KW per month	45	45
<b>Energy Charges per month</b>		
For the first 50 units	5.95	6.61
For the balance units	6.95	7.61

#### 24.1.6 LT 4 Agricultural I P Sets

As at the end of FY-14, there are 23712 registered IP Set consumers. Energy consumption under this category for FY-14 are 185.92 MUs based on assessed consumption. For FY -15, taking

into consideration the specific consumption of 8433 units/I P set/year and the figure of 24757 IP set installations, the consumption is expected to grow up to 208.57 MUs during FY - 15.

The HRECS is proposing to fix IP Set tariff up to 10 HP at the cost of supply price adjusted after cross subsidy, which will be Rs. 4.61 per unit, for FY -15. The said prices are subject to the determination of cost of supply to IP Set consumers, by this Hon'ble Commission.

**Table 57:**

<b>Particulars</b>	<b>Existing tariff</b>	<b>Proposed Tariff for FY 15</b>
Monthly Fixed Charges	Nil	Nil
Energy Charges per unit per month	4.61	4.61

**Proposed Tariff for LT4 (b)**

The difference between the cost of supply and each unit charged to the consumer shall be either born by cross subsidy or by government subsidy, as determined by the Hon'ble Commission.

**TABLE: 58**

**Applicable to IP sets above 10 HP**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY 15</b>
Monthly Fixed Charges per HP	30	30
Energy Charges per unit per month	1.75	2.41

**Proposed Tariff for LT 4(c)(i): Applicable to Private Horticultural Nurseries, coffee and Tea plantations upto 10 HP sanctioned load.**



The difference between the cost of supply and each unit charged to the consumer shall be either born by cross subsidy or by government subsidy, as determined by the Hon'ble Commission.

**TABLE : 59**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY 15</b>
Monthly Fixed Charges per HP	20	20
Energy Charges per unit per month	1.75	2.41

**Proposed Tariff for LT 4(c)(ii): Applicable to Private Horticultural Nurseries, coffee and Tea plantations above 10 HP sanctioned load.**

The difference between the cost of supply and each unit charged to the consumer shall be either born by cross subsidy or by government subsidy, as determined by the Hon'ble Commission.

**TABLE :60**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY 15</b>
Monthly Fixed Charges per HP	30	30
Energy Charges per unit per month	1.75	2.41

**24.1.7 LT 5: Industrial, Non-Industrial Heating and Motive Power**

The proposed tariff, the slab wise rates are given below.

**TABLE 61:**

**Proposed Tariff for LT - 5 (in Rs )**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY -15</b>
<b>Fixed Charges per HP per Month</b>		
< 5 HP	25	25
5 - 40 HP	30	30

40 – 67 HP	35	35
> 67 HP	100	100
<b>Energy Charges per month</b>		
Cons.< 500 units	4.25	4.91
Cons.> 500, <= 1000 units	4.95	5.61
Cons.> 1000 units	5.25	5.91

**TABLE 62:**

**Demand based Tariff (per KW)**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY -15</b>
<b>Fixed Charges per month per KW</b>		
> 5 HP, < 40 HP	45	45
>40 HP, < 67 HP	60	60
> 67 HP	150	150
<b>Energy Charges per month</b>		
Cons.< 500 units	4.25	4.91
Cons.< 500, <= 1000 units	4.95	5.61
Cons.> 1000 units	5.25	5.91

**24.1.8 LT 6(a) : Water Supply, Sewerage, Pumping, etc.**

The proposed tariff, the slab wise rates are given below

**TABLE 63:**

**Proposed Tariff for LT – 6(a) (in Rs )**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY- 15</b>
<b>Water Supply Installations</b>		
Fixed Charges (Rs per HP per Month)	35	35
Energy Charges (Rs per unit)	3.20	3.86

**24.1.9 LT 6(b) : Street light****TABLE 64:Street light**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY- 15</b>
Fixed Charges (Rs per kW per Month)	50	50
Energy Charges (Rs per unit)	4.45	5.11

**24.1.10 LT – 7: Temporary Power Supply**

The proposed tariff, the slab wise rates are given below

**TABLE 65:****Proposed Tariff for LT – 7****(in Rs.)**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY- 15</b>
<b>Fixed Charges for sanctioned Load of 67 HP and below</b>		
Weekly Minimum Per KW	160	160
<b>Energy Charges per month</b>	8.50	9.16

**24.2. HT CATEGORY WISE TARIFF REVISION**

The details of tariff proposal are furnished in Tariff Format D-21 of ERC & Tariff Filing Formats for FY-15

**24.2.1 HT – 1: Public Water Supply and Sewage Pumping Installations**

Minimum charges for this category is Rs. 180 per kVA per month. Proposed to increase the Energy charges to per unit i.e. Rs. 4.46 per unit for FY-15.

**24.2.2 HT - 2(a) Industrial, Non Industrial and Non Commercial**

The proposed tariff, the slab wise rates are given below

**TABLE 66:**

**Proposed Tariff for HT 2(a)****(in Rs.)**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY- 15</b>
<b>Demand Charges</b> per kVA	170	170
<b>Energy Charges</b>		
Cons.< 1 lakh units/ month	5.35	6.01
For the balance units	5.65	6.31

**24.2.3 HT 2 (b) Commercial**

The proposed tariff, the slab wise rates are given below

**TABLE 67:****Proposed Tariff for HT 2(b)****(in Rs.)**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY- 15</b>
<b>Demand Charges</b> per kVA	190	190
<b>Energy Charges</b>		
Cons.< 2 lakh units/ month	6.75	7.41
Cons.>2 lakh units/month	7.05	7.71

**24.2.4 HT 2 (c )(i) Govt. Hospital, Eductional Institutions & Hostels**

The proposed tariff, the slab wise rates are given below

**TABLE 68:****Proposed Tariff for HT 2(c )(i)****(in Rs.)**

<b>Particulars</b>	<b>Existing Tariff</b>	<b>Proposed tariff for FY- 15</b>
<b>Demand Charges</b> per kVA	170	170
<b>Energy Charges</b>		
Cons.< 1 lakh units/ month	5.00	5.66

Cons.>1 lakh units/month	5.50	6.16
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#### 24.2.4 HT 2 (c )(ii) Hospital, Educational Institutions & Hostels other than above HT-

##### 2(c ) (i)

The proposed tariff, the slab wise rates are given below

**TABLE 69:**

**Proposed Tariff for HT 2(c )(ii) (in Rs.)**

Particulars	Existing Tariff	Proposed tariff for FY- 15
<b>Demand Charges</b> per kVA	170	170
<b>Energy Charges</b>		
Cons.< 1 lakh units/ month	6.00	6.66
Cons.>1 lakh units/month	6.50	7.16

#### 24.2.5 HT 3(a) Agriculture

The proposed tariff, the slab wise rates are given below

**TABLE 70:**

**Proposed Tariff for HT 3(a) (i) (in Rs.)**

Particulars	Existing Tariff	Proposed Tariff for FY -15.
Energy Charges/Minimum Charges	1.50 ps. /unit subject to annual minimum of Rs.1000/HP/ annum	2.16 ps. /unit subject to annual minimum of Rs.1000/HP/ annum

#### 24.3. Summary of Tariff Revision

The revenue at proposed tariff works out to Rs. 124577412 lakhs for FY -15. The category wise tariff revision proposal is detailed in the table below:

**TABLE 71:**

##### 24.3.1. Summary of Tariff across all categories of consumers

SL. No.	Category of consumer	Projected Revenue for FY-15 on existing tariff
	<b>LT Installations</b>	
1	BhagyaJyothi / KutirJyothi	933762.00

2	Domestic (All electric home & domestic lighting)	93949373.00
3	Private professional institutions	952123.00
4	Commercial and Non residential	42263673.00
5	Irrigation Pumpsets	961716076.00
6	LT Industry	28544654.00
7	Public Water Supply	22423048.00
8	Public Lighting	11095614.00
9	Temporary Supply	943801.00
	<b>LT Total</b>	<b>1162822124.00</b>
	<b>HT Installations</b>	
8	HT – 1 Public Water Supply	21718518.00
9	HT – 2(a) Industrial, Non Commercial and Non Industrial including Railways	72998722.00
10	HT – 2(b) Commercial	5169096.00
11	HT-2(c ) (i)	414108.00
12	HT-2(c ) (ii)	2463007.00
13	HT – 3 Irrigation & Agriculture farms, list includes societies etc.	4148988.00
	<b>HT Total</b>	<b>106912439.00</b>
	<b>Total (LT + HT)</b>	<b>1269734563.00</b>
	<b>Misc. Charges</b>	<b>13456810.00</b>
	<b>Grand Total</b>	<b>1283191373.00</b>

**25. PRAYER**

WHEREFORE, in the light of above submissions, the Applicant HRECS prays that the Hon'ble Commission may be pleased to:

- a) Consider and approve for the revised Annual Revenue Requirement (ARR) of the HRECS for FY -15.
- b) Consider and approve the tariff proposals of the HRECS for FY -15;
- c) Allow the recovery of expenses incurred by the HRECS in respect of this filing through tariff, while truing up of the accounts of the HRECS;
- d) Pass such other and further orders as may deem fit in the circumstances mentioned above, in the interest of justice.

Place: Bangalore

Date: 20 -12-2013

**APPLICANT**