### KERALA STATE ELECTRICITY REGULATORY COMMISSION

#### **THIRUVANANTHAPURAM**

#### OA 35/2015

In the matter of Determination of ARR & ERC of M/s Technopark, Kerala for the first

control period 2015-16 to 2017-18, based on the application submitted as per the provisions of KSERC (Terms and Conditions

for Determination of Tariff) Regulations, 2014.

Applicant : M/s Electronics Technology Park, Kerala (Technopark)

Park Centre, Technopark Campus, Thiruvananthapuram- 695 581

**PRESENT**: Shri. T.M.Manoharan, Chairman

Shri.K.Vikraman Nair, Member Shri.S.Venugopal, Member

## **ORDER DATED 11.04.2016**

- 1. M/s Technopark, Thiruvananthapuram, is a deemed distribution licensee for distribution of electricity in the Technopark campus. The license for distribution was originally given by Government of Kerala as per government order No. G.O.(P) No.19/99/PD dated 12-7-1999. The Technopark has now four phases: Phase I, which is the existing park (156 Acres). Phase II (86 acres) is leased out to M/s.Infosys and M/s.UST Global. Phase III extending over 93 acres of land, also a SEZ, is adjacent to phase I. Phase IV is the Technocity (450 acres). Technopark, Kollam (44 acres) is also part of its expansion.
- 2. The Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014 (hereinafter referred to as Tariff Regulations, 2014), was notified on 14.11.2014 vide the notification No.787/SEA/2011/KSERC. As per the provisions of the said regulations, the licensee should submit the application for determination of tariff on or before 31.12.2014.
- 3. Meanwhile, KSEB Ltd had filed a Writ Petition No. 465/2015 on 06.01.2015 with the following prayers,

- (i) Issue a writ of certiorari or any other appropriate writ, order or direction calling for the records leading to Exhibit P5 and quash the same as illegal as it violates Article 14 of the Constitution of India;
- (ii) To issue writ of mandamus or any other appropriate writ, order or direction to the respondent to revise Exhibit P5 regulations strictly as per the legal mandate provided in the Electricity Act, 2003, National Electricity Policy, National Tariff Policy and on the basis of past performance of KSEB including its audited accounts; and
- (iii) Issue such other writs, orders or directions which this Hon'ble Court may deem fit and proper to issue in the facts and circumstances of the case.
- KSEB had also filed a petition for granting an ex-parte interim order staying the operation and implementation of Exhibit P5, pending adjudication of the writ petition. The Hon'ble High Court in its order dated 07.01.2015 issued an order to the effect that the tariff proposal if any submitted by the petitioner namely KSEB Ltd, shall not be rejected on the basis of Exhibit P5 regulations. The Exhibit P5 regulation is the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014. As soon as the copy of the writ petition was received by the Commission, a detailed counter affidavit was filed on 17.03.2015. Further the Commission also filed a detailed petition to get the interim order dated 07.01.2015 vacated. So far the interim order dated 07.01.2015 has not been vacated and the writ petition has not been heard by the Hon'ble High Court. The licensees other than KSEB Ltd, are purchasing electricity from KSEB Ltd for the supply among their consumers. If differential retail supply tariff is fixed for the consumers of small licensees, who supply electricity to a very small number of consumers comparatively in very small areas, it is likely to create a sense of disparity among consumers. In the case of Thrissur Municipal Corporation, the supply of electricity within the area of corporation is done by the Thrissur Corporation Electricity Department (TCED) and KSEB Ltd. Therefore the tariff for consumers under TCED and KSEB Ltd would be different if differential retail supply tariff is adopted. Therefore the Commission has been following the principle of uniform retail supply tariff (RST) for all consumers in the State and differential bulk supply tariff (BST) for different licensees depending upon their consumer mix, expected revenue from charges and various constituents of the aggregate revenue requirement. Therefore the bulk supply tariff can be fixed for a small licensee only after the retail supply tariff is fixed based on the applications for determination of tariff filed by KSEB Ltd. The Commission found that it difficult to apply the Tariff Regulations, 2014 to the

small licensees and to exempt KSEB Ltd from the application of the provisions of the said regulations. The issuance of orders on the application No.OA35/2015 filed by the applicant is delayed in view of the fact that the writ petition challenging the validity of the Tariff Regulations, 2014 is pending before the Hon'ble High Court and that the interim order of the Hon'ble High Court dated 07.01.2015 has not been modified or vacated.

5. M/s Technopark on 17.07.2015filedthe application on ARR & ERC for the first control period for the years 2015-16 to 2017-18. The application was filed as per the provisions in the KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014. Considering the delay in filing the ARR&ERC application, the Commission vide its order dated 20-08-2015 issued a show cause notice under section 142 of the Act 2003 directing the licensee to pay a penalty of Rs.50,000/for non-compliance of regulations. The licensee on28-09-2015remitted the penalty. The Commission admitted the application of the licensee as OA No.35/15,after making payment of the penalty. A comparative statement of the ARR&ERC approved for the year 2014-15 and the estimate submitted by the licensee for the control period is extracted below.

Table-1

Technopark - A summary of the ARR-ERC contained in the Application

Particulars	ARR-ERC	Control	Period Estir	mates in
	Approved		Rs.in Lakh	
Income	2014-15	2015-16	2016-17	2017-18
Revenue from Sale of	4,198.75	4858.08	5135.45	5556.05
Power.	4,190.73	4030.00	3133.43	3330.03
Other Income	46.97	44.05	45.21	46.48
Total Income.	4,245.72	4902.13	5180.66	5602.53
Expenditure				
Purchase of Power	4,356.94	4640.31	5058.42	5518.63
Repairs and Maintenance	196.80	156.37	165.52	175.20
Employee Cost	18.73	133.38	141.18	149.44
A& G Expenses	63.06	19.83	20.99	22.21
Depreciation	126.01	126.18	147.05	147.05
Interest & Finance Charges	147.73	76.73	84.40	92.84
Return on Equity	10.00	58.14	65.37	60.11
Total Expenditure.	4,919.27	5210.94	5682.93	6165.48
Net Surplus/(Deficit)	(673.55)	(308.81)	(502.27)	(562.95)

#### **Hearing on the Matter**

- 6. Public hearing was held at the Conference Hall, Park Centre, Technopark, Thiruvananthapuram on 24-11-2015. In the hearing representatives of the licensee and KSEB Limited were present. The applicant was represented by Sri. Girish Babu, CEO, Technopark, Smt. Jayanthi.L, Chief Financial Officer, Technopark and Sri. E.V. Einstein, Assistant Manager (Electrical), Technopark. Sri. E.V. Einstein, Assistant Manager (Electrical) presented the details of the application on ARR & ERC for the first control period and gave the clarifications on the queries of the Commission. Sri. B. Pradeep, Executive Engineer, KSEBLtd presented the comments of KSEBL and submitted written remarks. The summary of the remarks of KSEB Ltd is extracted below.
  - (i) Since the licensee is having more than one area of supply, they have to submit separate calculation for each area of supply.
  - (ii) The number of consumers and consumption of the categories of consumers does not tally in the forms submitted along with the ARR application
  - (iii) Revenue from sale of energy in respect of LT-IV(B) IT/ITES, LT-VI(F) General, HT-I, HT-II, HT-IV, etc., does not tally with the data submitted in the application along with Form D 2.1
  - (iv) KSEB Ltd also requested the Commission to disallow the claim for increased target for T&D Loss than the approved level of 2014-15.
  - (v) The O&M expenses approved for the entire control period is showing some inconsistency with regard to the ARR approved for the year 2014-15.
  - (vi) The huge investments proposed by the licensee may be considered after prudence check and cost benefit analysis of the same.
  - (vii) The claim of depreciation of the licensee shall be considered after deducting the assets created out of consumer contribution, deposit works, capital subsidies and grants and after due consideration of the age of the assets.
- 7. The licensee vide response dated 04-12-2015 submitted the clarifications to the comments of KSEB Ltd. Licensee submitted the clarifications on the sale of power, T&D loss, number of consumers, the claim on O&M expenses, claim of depreciation, details of the capital investments proposed for the control period and the necessary documents which are considered for the finalization of the projections for the entire control period.

### **Analysis and decision of the Commission**

- 8. The Commission has considered the application and clarifications filed by the licensee, oral submissions during the hearing and the observations presented by the KSEB Ltd on the application. The decisions of the Commission are given in the following paragraphs.
- No. of Consumers: The number of consumers in each year of the control period is showing an increasing trend. The details of the projected increase in the number of consumers are tabulated below.

Table-2
Technopark-details of consumer strength

Catamany	No.	of Consum	ners
Category	2015-16	2016-17	2017-18
HT-I B	17	20	20
HT - II	1	2	2
HT - IV	1	3	3
LT IV(A)	12	14	14
LT IV(B)	317	340	368
LT - VI (A)	1	2	2
LT - VI (B)	8	9	12
LT VI C	32	37	40
LT VI F Single phase	30	32	42
LT VI F Three phase	26	26	38
LT VII (A) Single phase	41	43	47
LT VII (A) Three phase	61	65	75
LT VII (B)	14	14	14
Self Consumption	3	3	3
Street Lighting	14	15	15
Total	578	625	695

From the details provided in the application,LT IV (B) category accounts for more than 50% of the overall consumer base. Projection of consumption and demand is made taking into consideration the increase in power consumption by the existing consumers and the expected consumption from new consumers.

10. **Sale of Power**: -As per Regulation 11 (10), the applicant/distribution licensee shall develop the forecast of expected revenue from existing charges based on the estimates of contract demand and quantum of electricity to be supplied to the

consumers and to be wheeled on behalf of the users of the distribution system for each financial of the control period. Further Regulation 73 specifies as follows:

- "73.Sales forecast. (1) The distribution business/licensee shall submit, along with the application for approval of aggregate revenue requirement and determination of tariff, a forecast of expected demand and sale of electricity to different categories of consumers and to each consumption slab within each tariff category, in its area of supply.
- (2) Sale of electricity, if any, to electricity traders or other distribution licensees shall be separately indicated.
- (3) The Commission shall examine the forecasts for reasonableness based on the growth in number of consumers and in consumption, the demand of electricity in previous financial years, anticipated growth in the next financial year and any other factor, which the Commission may consider relevant and approve forecast of sale of electricity to the consumers with such modifications as deemed fit."
- 11. The expected sale of power for the year 2015-16, 2016-17 and 2017-18 are 75.60MU, 81.79 MU and 88.55 MU respectively, as against 68.53MU approved for the year 2014-15. The details are given below.

Table-3
Technopark – Energy sale approved

Year	Sales MU	(%) of increase over previous year
2014-15	68.53	
2015-16	75.60	10.32
2016-17	81.79	8.19
2017-18	88.55	8.27

As detailed above, the licensee has projected an increase between 8.1% and 10.32% in the energy sales during the control period from 2015-16 to 2017-18. However, the actual average sales during the period between 2008-09 and 2013-14 are as given below.

Table-4
Technopark – Energy sale approved over the years

Year	Sales MU	(%) of increase over previous year
2008-09	42.17	
2009-10	44.32	5.10
2010-11	49.92	12.63
2011-12	57.20	14.56
2012-13	59.88	4.69
2013-14	61.05	1.95
CAGR		7.7

The actual growth rate during the previous years has been volatile and have been lesser than the approved sales in ARR. Taking into consideration the Compounded annual growth rate of previous five years to be about 8% and the fact that the average annual growth rate proposed by the licensee is around 8%, the Commission hereby approves the energy sales as estimated by the licensee for the control period 2015-16 to 2017-18 since there are some major expansion works of the park in the pipe line during the control period.

### **Energy requirement: -Distribution Loss and Energy Requirement:**

- 12. As per the regulation 74 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, the licensee is to provide voltage level distribution loss and distribution loss trajectory for the control period. Necessary supporting studies have to be furnished along with the application. The distribution licensee shall also propose the loss reduction targets for each financial year of the control period along with the distribution loss levels. The Commission has to approve the target level of losses based on the opening level of losses, the figures filed by licensee and other relevant factors.
- 13. As per the details submitted by the licensee, the target of distribution loss for the year 2015-16 is 5.65% and the same for 2016-17 and 2017-18 is 5.55%, as against the distribution loss target of 3.8% approved for the year 2014-15. The details are given below.

Table-5
Technopark–Details of distribution loss level proposed by Licensee

Year	2014-15		2015-16	2016-17	2017-18
	Projected Approved		Projected	Projected	Projected
Total Energy sales (MU)	68.53	68.53	75.60	81.79	88.55
Distribution loss(MU)	2.87	2.71	4.52	4.80	5.19
Total Energy Requirement (MU)	71.40	71.24	80.12	86.59	93.74
Distribution loss(%)	4.00%	3.8%	5.65%	5.55%	5.55%

14. The distribution loss is a controllable factor and lower distribution loss is a measure of better performance of the utility. The licensee while submitting the application have given reasons like high transformation capacity, age of the assets, consumer mix, presence of inductive load due to large scale air conditioner being in operation etc for the increased distribution loss. However it should be noted that the distribution loss levels being reported by the licensees during the last five years have been showing declining trend and were in the range of 4%. The above factors which are shown as reasons for the high distribution loss cannot crop up all on a sudden. This sudden spurt is indicative of a situation where proper recording of loss has not been done till now. Considering the limited area of operation, there is no reason to fix a higher distribution loss level from the level of 3.8% approved for the year 2014-15. Hence, Commission hereby approves target for distribution loss for the control period from 2015-16 to 2017-18 at 3.80%. Accordingly, the quanta of power purchase approved for the control period from 2015-16 to 2017-18 are detailed below.

Table-6
Technopark– Distribution loss and quantum of power purchase approved

SI No	Particulars	2015-16	2016-17	2017-18
1	Energy Sold (MU) (approved)	75.60	81.79	88.55
2	Distribution Loss level approved (%)	3.80%	3.80%	3.80%
3	Power purchase requirement (approved) (MU)	78.59	85.02	92.05
4	Power purchase requirement (claimed) (MU)	80.12	86.59	93.74
5	Quantum of power purchase dis-allowed	1.53	1.57	1.69

#### 15. Power Purchase Cost:

(i) The licensee has been procuring power from KSEB Ltd for distributing electricity within the area of the Technopark at the Bulk Supply Tariff

approved by the Commission from time to time. The details of the cost of power purchase claimed by the licensee are given below.

Table-7
Technopark-Projected Cost of Power Purchase by the licensee for the control period

	2015-16	2016-17	2017-18
Energy requirement (MU)	80.12	86.59	93.74
Maximum demand billed (KVA)	20959.8	23847.33	26997.33
Rate of demand charge (Rs./kVA)	300	300	300
Demand charges (Rs.lakh)	754.55	858.5	971.9
Rate of energy charges (Rs.kWh)	4.85	4.85	4.85
Energy charges (Rs.lakh)	3885.75	4199.92	4546.72
Total cost of power purchase	4640.31	5058.42	5518.63
Average cost of power purchase	5.79	5.84	5.89

- (ii) However, as detailed under Table-5 above, the Commission has approved the power purchase for the year 2015-16 as 78.59 MU as against 80.12 MU proposed by the licensee, similarly the approved power purchase for 2016-17 is 85.02 MU as against 86.59 MU proposed and 92.05MU for the year 2018-19 as against 93.79 MU proposed.
- (iii) Adopting the average cost of power purchase as per the submission of the licensee as detailed under Table-6 above, the quanta of power purchase approved for the control period 2015-16 to 2017-18 are detailed below.

Table-8
Technopark -Approved Cost of Power Purchase for the control period

SI				
No		2015-16	2016-17	2017-18
1	Quantum of power purchase approved (MU)	78.59	85.02	92.05
2	Average BST (as per the filing of the licensee)	5.79	5.84	5.89
3	Cost of power purchase approved (Rs. Lakh)	4551.70	4966.70	5419.14

# 16. Interest and Finance Charges:

(i) The licensee has claimed Rs 76.73 lakh, Rs 84.40 lakh and Rs 92.84 lakh respectively for the years 2015-16, 2016-17 and 2017-18.

- (ii) The licensee has not provided the details of the existing loans including the details of the financial institutions from where the loan was availed, interest rate, date of availing the loan, repayment period. Further, the licensee has also not provided the details of the capital expenditure proposed and the source of finance etc. Without these details, the Commission cannot approve the interest and finance charges. Commission hereby directs the licensee to submit these details within three weeks from the rate of receipt of this order. If the licensee fails to provide the same, the Commission shall not allow the interest & finance charges while considering the revised submission on ARR & ERC for the control period 2015-16 to 2017-18.
- (iii) In anticipation of the submission of the details of loans as directed above, Commission provisionally approves the interest and finance charges as claimed by the licensee for the control period 2015-16 to 2017-18.

Table-9

Technopark – Interest & finance charges Approved for the Control Period

Rs. lakh

Interest &	2014-15	2015-16	2016-17	2017-18
Finance	Approved	Provisional	Provisional	Provisional.
Charges	69.75	76.73	84.4	92.84

However, in the process of truing up, the Commission will allow only the actual interest and finance charges based on prudence check of the details submitted by the licensee as directed above and based on the accounts duly audited and certified by statutory auditor.

### 17. **Depreciation**:

(i) The depreciation claimed by the licensee for the control period 2015-16 to 2017-18 is given below.

Table-10
Technopark- Depreciation (Rs. Lakh)

			2015-16		2016-17		2017-18	
SI No	Particulars	Depreciation %	Gross Assets at the beginning of the year	Depreciation	Gross Assets at the beginning of the year	Depreciation	Gross Assets at the beginning of the year	Depreciation
1	Other Civil works	3.34	188.95	6.31	188.95	6.31	188.95	6.31
2	HV Distribution system	5.28	661.94	34.95	1020.95	53.91	1020.95	53.91
3	Distribution lines	5.28	83.28	4.40	83.28	4.40	83.28	4.40
4	Sub-station equipment	5.28	2027.75	107.07	2064.02	108.98	2064.02	108.98
5	Distribution lines	5.28	24.41	1.29	24.41	1.29	24.41	1.29
6	Meters	5.28	2.53	0.13	2.53	0.13	2.53	0.13
7	Any other items	5.28	1.70	0.09	1.70	0.09	1.70	0.09
	subtotal		2990.56	154.24	3385.84	175.11	3385.84	175.11
	Less: Consumer contribution	5.28	531.45	28.06	531.45	28.06	531.45	28.06
	Total		2459.11	126.18	2854.39	147.05	2854.39	147.05

- (ii) The Gross Fixed Asset (GFA) at the beginning of the year 2012-13, as per the order dated 28-08-2014 in OP 11/2014 in the matter of ARR&ERC of M/s Technopark for the year 2014-15, is Rs.2990.56 lakh. Since the licensee has not submitted the details of the asset additions thereafter, the Commission has adopted the GFA at the beginning of the 2012-13 for approving the depreciation for the year 2014-15.
- (iii) It is noticed that, in the present application, the licensee has adopted Rs 2990.56 lakh as the GFA at the beginning of the year 2015-16 for computing depreciation for the year 2015-16. It indicates that, the licensee has not created and capitalized new assets during the period from 2012-13 to 2014-15. However, the licensee has claimed an asset addition of Rs 395.28 lakh during the year 2015-16. The details are given below.

Table-11

Details of new assets added during the control period 2015-16 to 2017-18

Year	GFA at the beginning of the year	Increase in GFA during the year	Remarks
	(Rs. Lakh)	(Rs. Lakh)	
2015-16	2990.56	395.28	GFA at the beginning of the year 2012-13 has been adopted as the GFA at the beginning of the year 2015-16 (details of additions given below)
2016-17	3385.84	0.00	
2017-18	3385.84		

- (iv) The value of new assets proposed during the year 2015-16 includes Rs.359.01 lakh on HT distribution system and Rs.36.27 lakh on substation equipment. Since the licensee has not actually executed the work proposed and also the licensee has not incurred any expenditure, the Commission cannot allow the depreciation on assets addition proposed during the control period. However, in the process of truing up, the Commission may,after prudence check, allow the depreciation on the new assets createdand capitalized, provided such investments are incurred with the approval of the Commission. The Commission directs the licensee to file the Project Estimates and Cost benefit analysis, the expected dates of commencement and completion of the capital projects and the major source of finance for these projects, to enable Commission to make a meaningful evaluation of the projects.
- (v) In the application for ARR & ERC for the control period, the licensee claimed Rs.531.45 lakh as the assets created out of grants/ consumer contribution. However, as per the audited accounts submitted by the licensee for the year 2011-12 & 2012-13, it is evident that the licensee has created assets worth Rs.612.06 lakh with grants/consumer contribution. On that basis, the Commission had considered the same in the order on the truing up of accounts for the years 2011-12 & 2012-13 in O.A.37/2015 dated 06-01-2016 and O.A.38/2015 dated 12-01-2016 respectively. Since the licensee has not provided the details of the assets created including the assets created out of consumer contribution & grants thereafter, the

Commission hereby approves the consumer contribution and grants as Rs.612.06 lakh for the control period.

- (vi) The Commission has been allowing depreciation as per the CERC norms as revised in 2009 and 2014. However, the licensee has to maintain the accounts in line with the requirements under the CERC norms. Even after repeated directions, the licensee has not provided the vintage of assets including the total value of each assets etc for estimating the depreciation as per CERC norms. However, the Commission approves the depreciation as per the CERC norms 2009/2014. In the process of truing up, the licensee has to show that the accounts are maintained to reflect the depreciation as per the revised CERC norms (2009-14). In absence of the compliance of this condition, depreciation as per the CERC norms applicable for the period 2004-09 shall only be allowed during the truing up.
- (vii) The details of the depreciation provisionally approved for the control 2015-16 to 2017-18 is detailed below.

Table-12
Technopark-Depreciation approved for the control period (Rs. Lakh)

			2015	5-16	2016-17		2017-18	
SI No	Particulars	Deprec iation %	Assets at the beginning of the year	Deprecia tion	Assets at the beginning of the year	Deprec iation	Assets at the beginnin g of the year	Depreciati on
1	Other Civil works	3.34	188.95	6.31	188.95	6.31	188.95	6.31
2	HV Distribution system	5.28	661.94	34.95	661.94	34.95	661.94	34.95
3	<b>Distribution lines</b>	5.28	83.28	4.40	83.28	4.40	83.28	4.40
4	Sub-station equipment	5.28	2027.75	107.07	2027.75	107.07	2027.75	107.07
5	Distribution lines	5.28	24.41	1.29	24.41	1.29	24.41	1.29
6	Meters	5.28	2.53	0.13	2.53	0.13	2.53	0.13
7	Any other items	5.28	1.70	0.09	1.70	0.09	1.70	0.09
	subtotal		2990.56	154.24	2990.56	154.24	2990.56	154.24
	Less: Consumer contribution	5.28	612.06	32.32	612.06	32.32	612.06	32.32
	Total		2378.50	121.92	2378.50	121.92	2378.50	121.92

### 18. **Employee cost**:

(i) Till the year 2014-15, the Commission has been allowing increase in employee cost over the previous years based on the weighted average of the Whole Sale Price Index (WPI) and the Consumer Price Index (CPI) in the weightage of 30:70. The employee cost claimed by the licensee and the same approved by the Commission for the period from 2011-12 to 2014-15 are detailed below.

Table-13
Technopark –Employee cost- claimed and approved during previous years

Year	Employee cost (Rs. Lakh)					
	Claimed	Remarks				
2011-12	17.30	15.32	Truing up			
2012-13	19.97	16.79	Truing up			
2013-14	17.27	17.27	ARR			
2014-15	18.99	18.73	ARR			

- (ii) The Commission has notified the KSERC(Terms and Conditions of Tariff) Regulations, 2014 and the same is applicable from the year 2015-16 to 2017-18. In the note to the regulation, it is specified that, for *Technopark* and *Infopark*, the employee costs, repair & maintenance costs and administrative & general costs approved by the Commission for the financial year 2014-15 have been escalated by the growth rate of 5.85% per annum (based on escalation index notified by CERC), for determining the normative O&M expenses for the financial years.2015-16, 2016-17 and 2017-18.
- (iii) KSEB Ltd vide their counter statement/ remarks dated 21-11-2015 has submitted that, there is apparent error on the normative O&M cost approved by the Commission for M/s Technopark the years 2015-16, 2016-17 and 2017-18. The Commission has appraised the entire facts and it is noticed that, in the Annexure-IX to the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, the normative employee cost for the control period from 2015-16 to 2017-18 has been

- wrongly marked against the A&G expenses for the period from 2015-16 to 2017-18.
- (iv) Accordingly, the employee cost approved for the year 2014-15 and the normative O&M cost as per the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 is extracted below.

Table-14

Technopark –Employee cost- as per the KSERC (Terms and Conditions for determination of Tariff) Regulations, 2014

Year	Employee cost	Percentage increase over previous year	Remarks
	(Rs. Lakh)	(%)	
2014-15	18.73		ARR Order
2015-16	19.83	5.85	KSERC (Terms and
2016-17	20.99	5.85	Conditions for determination
2017-18	22.21	5.85	of Tariff) Regulations, 2014

(v) Considering above, the Commission here by approves the employee cost during the control period 2015-16 to 2017-18 as detailed below.

Table-15
Technopark-Employee cost approved for the Control Period (Rs. Lakh)

Franksis Cost	ARR Approved	Approve	ed for the o	control period
Employee Cost	2014-15	2015-16	2016-17	2017-18
	18.73	19.83	20.99	22.21

## 19. Repair and Maintenance expenses :

(i) For the control period the licensee has projected the R&M expenses as per the Tariff Regulations 2014. The licensee has not submitted any split up details for their projection for the control period. As per the KSERC (Terms & Conditions for Determination of Tariff) Regulations, 2014, the ceiling on repair and maintenance charges specified in the regulations are, Rs.156.37 lakh for 2015-16, Rs.165.52 lakh for 2016-17 and Rs.175.20 lakh for 2017-18.

- (ii) As stated earlier, KSEB Ltd vide their counter statement/ remarks dated 21-11-2015 has submitted that, there is apparent error on the normative O&M cost approved by the Commission for M/s Technopark the years 2015-16, 2016-17 and 2017-18. The Commission has appraised the entire facts and it is noticed that, in the Annexure-IX to the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, a clerical error has crept in while specifying the norms for O&M costs.
- (iii) Commission has escalated the R&M cost approved for the year 2014-15 at the growth rate of 5.85% for arriving the R&M cost of the control period from 2015-16 to 2017-18. While approving the R&M cost for the year 2014-15, the Commission has approved the R&M cost, as projected by the licensee based on the O&M contract entered with outsourcing agency. Further, more than 45% of the total R&M cost projected for the year 2014-15 is for IT park Kollam and Technopark Phase-III, which are yet to be commissioned. Hence, the R&M cost approved for the year 2014-15 cannot be taken as the basis for approving the R&M cost for the control period from 2015-16 to 2017-18.
- (iv) The Commission has noted that, the outsourcing of operation and maintenance (O&M) was not restricted to distribution business alone and hence while approving the R&M cost in the process of truing up, the Commission has approved only 68% of the expense as per the O&M contract with the outsourcing agencies as R&M cost.
- (v) The Commission has approved the truing up of accounts of M/s Technopark up to the FY 2012-13. In the order dated 12-1-2016 in the matter of truing up of accounts of M/s Techopark for the year 2012-13, the R&M cost approved was Rs 84.76 lakh. The licensee is yet to file the application for truing up for the year 2013-14. Hence the Commission adopts the R&M cost approved for the year 2012-13 as the base and has escalated the same at the annual growth rate of 5.85% for arriving the R&M cost for the control period 2015-16 to 2017-18. Accordingly the normative R&M cost arrived for the subsequent years are detailed below.

Table-16
Technopark- Normative R&M cost

Year	R&M cost (Rs. Lakh)	Annual growth rate (%)	Remarks
2012-13	84.76		Truing up order
2013-14	89.72	5.85	
2014-15	94.97	5.85	
2015-16	100.52	5.85	Projection
2016-17	106.40	5.85	
2017-18	112.63	5.85	

(vi) Accordingly the R&M cost approved for the control period from 2015-16 to 2017-18 is detailed above.

Table-17
Technopark–R& M expenses approved for the Control Period (Rs. Lakh)

D&M ovnoncos	2015-16	2016-17	2017-18
R&M expenses	100.52	106.40	112.63

## 20. Administration and General Expenses: -

- (i) As stated under paragraph 18(iii) above, in the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, the Commission has wrongly marked the normative employee cost against the normative A&G expenses.
- (ii) In the order on ARR&ERC for the year 2014-15, the Commission had approved the A&G expense as Rs 63.06 lakhs. The A&G cost projected by the licensee is after considering the Technopark Kollam and Technopark Phase III, however, which are yet to be commissioned.
- (iii) The licensee has not submitted the truing up of accounts for the year 2013-14 and 2014-15 to verify the prudency of the A&G cost claimed. However, the Commission vide the order dated 12-01-2016 on Truing up of accounts for the year 2012-13 has approved the A&G cost as Rs 41.12 lakhs. The approved A&G expenses for the year 2012-13 escalated at the annual growth rate of 5.85% for arriving the A&G expenses for the subsequent years. Accordingly, the A&G expense arrived for the subsequent years are detailed below.

Table-18
Technopark- Normative R&M cost

Year	A&G expenses (Rs. Lakh)	Annual growth rate (%)	Remarks
			Truing up
2012-13	41.12		order
2013-14	43.53	5.85	
2014-15	46.07	5.85	
2015-16	48.77	5.85	Projection
2016-17	51.62	5.85	
2017-18	54.64	5.85	

(iv) Accordingly, the A&G expenses approved for the subsequent years are detailed below.

Table-19
Technopark-A&G expenses provisionally approved for the Control Period (Rs. Lakh)

A&G ovnoncos	2015-16	2016-17	2017-18
A&G expenses	48.77	51.62	54.64

## 21. Return on Equity:

- (i) The sub regulation (2) of regulation 29 of the Tariff Regulations, 2014, on return on investment specifies that,
  - "(2) If the equity invested in the regulated business of the generating business/company or transmission business/licensee or distribution business/licensee or state load dispatch centre is not clearly identifiable, return at the rate of three percent shall be allowed on the net fixed assets at the beginning of the financial year for such regulated business:

Provided that net fixed assets shall be exclusive of the assets created out of consumer contribution, deposit works, capital subsidy or grants.

(ii) As per Regulation 29 (2) of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, the licensee has claimed RoE as follows.

Table-20
Technopark –RoE claimed during the control period (Rs. Lakh)

Year	2015-16	2016-17	2017-18
NFA at the beginning of the year	1937.85	2178.90	2003.79
Return on Equity	58.14	65.37	60.11

(iii) As detailed under Table-11 above, the Gross Fixed Asset excluding grants and contributions as on 01.04.2015, i.e., at the beginning of the financial year 2015-16 is Rs.2378.50lakh. Further, as per the Form D 3.5 submitted by the licensee, the total accumulated depreciation at the beginning of the year 2015-16 (as on 01-04-2015) is Rs.1052.71 lakh. Thus, the Net Fixed Asset (NFA) as on 01-04-2015 is Rs.1406.40 lakh, instead of Rs.1937.85 lakh claimed by the licensee. Further, Commission has not approved any asset addition during the control period 2016-17 and 2017-18. However, as detailed under Table-11 above, the Commission approved the depreciation for the years 2015-16, 2016-17 and 2017-18 at Rs.126.18 lakh. Based on these figures, the GFA, NFA and rate of return allowed to the licensee is detailed below.

Table - 21
Technopark-Return on Investment approved for the control period (Rs. Lakh)

Particulars	2015-16	2016-17	2017-18
Gross Assets (after adjusting consumer contribution)	2378.50	2378.50	2378.50
Cumulative Depreciation as on 01-04-2015	1052.71	1174.63	1296.55
Depreciation approved during the year	121.92	121.92	121.92
Net Fixed Assets as on beginning of FY	1325.79	1203.87	1081.95
Rate of Return	3.00%	3.00%	3.00%
RoE allowed	39.77	36.12	32.46

22. **Aggregate Revenue Requirement:** The Aggregate Revenue Requirements approved for the control period are summarised as given below.

Table 22
Technopark- Aggregate Revenue Requirement approved for the control period
(Rs in lakh)

Particulars	Projected	Provisionally Approved	Projected	Provisionally Approved	Projected	Provisionally Approved
	2015-16	2015-16	2016-17	2016-17	2017-18	2017-18
Purchase of Power	4640.31	4551.70	5058.42	4966.70	5518.63	5419.40
Depreciation	154.24	121.92	175.11	121.92	175.11	121.92
Interest & Finance Charges	76.73	76.73	84.40	84.40	92.84	92.84
Employee Cost	133.38	19.83	141.18	20.99	149.44	22.21
Repairs and Maintenance	156.37	100.52	165.52	106.40	175.20	112.63
Administration and General Expenses	19.83	48.77	20.99	51.62	22.21	54.64
Return on Equity	58.14	39.77	65.37	36.12	60.11	32.46
Total Expenditure	5239.00	4959.24	5710.99	5388.15	6193.54	5856.10

#### 23. Revenue from Tariff:

(i) The revenue from sale of power claimed by the licensee during the control period 2015-16 to 2017-18 is detailed below.

Table-23
Technopark - Revenue Projections for the control period(Rs.Lakh)

	2015-16		2016-17		2017-18			
Categories	MU	Revenue	MU	Revenue	MU	Revenue		
LT Category								
LT IV A (Industrial)	0.11	6.05	0.12	6.40	0.13	6.78		
LT IVA (Industrial) 10kW <cl<20kw< td=""><td>0.01</td><td>0.54</td><td>0.01</td><td>0.57</td><td>0.01</td><td>0.61</td></cl<20kw<>	0.01	0.54	0.01	0.57	0.01	0.61		
LT IV A CL> 20 kW (Industrial)	0.19	11.89	0.21	12.79	0.22	13.55		
LT IV B IT/ITES CL< 10kW	0.25	17.14	0.26	18.43	0.28	19.54		
LT IVB IT/ITES 10kW <cl<20kw< td=""><td>1.32</td><td>81.33</td><td>1.40</td><td>92.63</td><td>1.45</td><td>98.19</td></cl<20kw<>	1.32	81.33	1.40	92.63	1.45	98.19		
LT IV B IT/ITES CL > 20 kW IT & ITES	42.52	2855.27	45.10	2890.88	47.80	3064.33		
LT VI A General	0.01	0.53	0.01	0.57	0.01	0.60		

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LT VI B General	0.16	0.00	0.17		0.18	
LT VI C General 1 Phase or 3 Phase	0.24	25.37	0.25	27.41	0.27	29.05
LT VI F General1 Phase	0.14	8.84	0.15	9.40	0.16	9.96
LT VI F General 3 Phase	0.83	71.69	0.88	76.50	0.93	81.09
LT VII A Commercial 1 Phase	0.11	7.57	0.11	8.12	0.12	8.61
LT VII A Commercial 3 Phase	1.34	106.04	1.42	125.39	1.51	132.91
LT VII B Commercial	0.02	1.08	0.02	1.15	0.02	1.22
Self-consumption	0.33	20.43	0.34	22.01	0.37	23.33
Street Lighting	0.26	8.90	0.28	9.43	0.28	9.43
Sub Total	47.86	3175.10	50.73	3251.27	53.75	3445.78
		HT Cate	egory			
HT -I Industrial	26.62	1604.67	29.82	1805.75	33.39	2021.34
HT -II Non Industrial	0.35	21.75	0.39	34.63	0.44	37.55
HT- IV Commercial	0.77	56.56	0.86	79.84	0.96	87.43
Sub Total	27.74	1682.98	31.07	1893.55	34.80	2119.65
Total	75.60	4858.08	81.79	5135.45	88.55	5556.05

- 24. The last retail tariff revision was made in the State by the Commission vide its order dated 14-8-2014 in OP No. 9 of 2014 and hence the licensee has to adopt the tariff as per the said order for estimating the tariff for the control period. However, Commission has noted with displeasure that, the licensee has not adopted the prevailing tariff especially for HT categories and also for LT-VI(B) IT/ITES category having connected load above 20 kW. In the case of HT -I (B) IT and IT enables services, the licensee has adopted the energy rate at Rs 4.50 per unit instead of the approved energy charge of Rd 5.60 per unit. Similarly for HT-II (B) non industrial category, the licensee has adopted the energy charge at Rs.4.50 per unit instead of Rs.6.20 per unit. Similarly for LT-VI(B) IT/ITES category, the licensee has adopted the demand charge at Rs 60/kVA/month instead of Rs 125/kVA/month. For assessing the revenue from self-consumption, the licensee has to adopt the prevailing LT-IV(B), i.e, the tariff applicable to IT and IT enabled services. However, the licensee has adopted LT-IV(A), the tariff applicable to LT industries.
- 25. The Commission has revised the revenue from sale of power for the control period, at the prevailing tariff approved by the Commission. The details of the revenue from sale of power approved for the control period 2015-16 to 2017-18 are givenbelow.

Table-24

Technopark - Revenue Projections for the control period (Rs.Lakh)

	2015-16		2016-17			2017-18			
Categories	MU	Proposed	Approved	MU	Proposed	Approved	MU	Proposed	Approved
LT IV A									
(Industrial)	0.11	6.05	6.05	0.12	6.40	6.40	0.13	6.78	6.78
LT IVA									
(Industrial)									
10kW <cl<20kw< td=""><td>0.01</td><td>0.54</td><td>0.54</td><td>0.01</td><td>0.57</td><td>0.57</td><td>0.01</td><td>0.61</td><td>0.61</td></cl<20kw<>	0.01	0.54	0.54	0.01	0.57	0.57	0.01	0.61	0.61
LT IV A CL> 20									
kW (Industrial)	0.19	11.89	11.89	0.21	12.79	12.79	0.22	13.55	13.55
LT IV B IT/ITES									
CL< 10kW	0.25	17.14	17.14	0.26	18.43	18.43	0.28	19.54	19.54
LT IVB IT/ITES									
10kW <cl<20kw< td=""><td>1.32</td><td>81.33</td><td>81.33</td><td>1.40</td><td>92.63</td><td>92.63</td><td>1.45</td><td>98.19</td><td>98.19</td></cl<20kw<>	1.32	81.33	81.33	1.40	92.63	92.63	1.45	98.19	98.19
LT IV B IT/ITES									
CL > 20 kW IT &									
ITES	42.52	2855.27	2807.70	45.10	2890.88	3003.13	47.80	3064.33	3183.32
LT VI A General	0.01	0.53	0.53	0.01	0.57	0.57	0.01	0.60	0.60
LT VI B General	0.16	0.00	12.27	0.17	13.10	13.10	0.18		
LT VI C General	0.24	25.37	25.37	0.25	27.41	27.41	0.27	29.05	29.05
LT VI F General									
1 Phase	0.14	8.84	10.31	0.15	9.40	11.84	0.16	9.96	12.55
3 Phase	0.83	71.69	80.00	0.88	76.50	85.32	0.93	81.09	90.44
LT VII A Comml									
1 Phase	0.11	7.57	7.93	0.11	8.12	9.28	0.12	8.61	9.84
3 Phase	1.34	106.04	140.82	1.42	125.39	150.92	1.51	132.91	159.97
LT VII B									
Commercial	0.02	1.08	1.10	0.02	1.15	1.17	0.02	1.22	1.24
Self									
Consumption	0.33	20.43	23.26	0.34	22.01	25.10	0.37	23.33	26.61
Street Lighting	0.26	8.90	10.16	0.28	9.43	10.77	0.28	9.43	10.83
Sub Total	47.86	3175.10	3236.42	50.73	3251.27	3469.45	53.75	3445.78	3663.13
HT -I Industrial	26.62	1604.67	1840.36	29.82	1805.75	2104.93	33.39	2021.34	2357.52
HT -II Non									
Industrial	0.35	21.75	27.23	0.39	34.63	30.50	0.44	37.55	34.16
HT- IV									
Commercial	0.77	56.56	66.18	0.86	79.84	65.55	0.96	87.43	73.41
Sub Total	27.74	1682.98	1933.77	31.07	1893.55	2200.97	34.80	2119.65	2465.09
Total	75.60	4858.08	5170.19	81.79	5135.45	5670.43	88.55	5556.05	6128.22

26. **Non-Tariff Income:** The licensee has projected non-tariff income for the control period considering the income from statutory investments and interest on investments, bank deposits and bank balances. In the year 2013-14 the licensee had submitted the non-tariff income as Rs.46.97 and the Commission viewed that there was no reason for the reduction in non-tariff income from that of the previous year and had approved non-tariff income of Rs.46.97 lakh in the order on ARR for the year2014-15. For the control period, the licensee has projected a non-tariff income lower than that approved for the previous year and no specific reason for the same has been submitted. On enquiry, the licensee explained that the actual non-tariff income for 2014-15 was less than that of approved amount of 46.97 lakh and therefore they projected in line with the actuals for the control period from 2015-16 to 2017-18. The projection of the licensee is shown below.

Table 25
Technopark- Estimate of Non-tariff income for the Control Period

	2015-16	2016-17	2017-18
Income from statutory investments	11.55	12.71	13.98
Interest on investments, bank deposits and bank balances	32.00	32.00	32.00
Misc. recoveries	0.50	0.50	0.50
Total	44.05	45.21	46.48

Hence, Commission provisionally approves the same as claimed by the licensee for the entire control period. However, in the process of truing up, the Commission will approve the non-tariff income as per the actuals, duly audited and certified by statutory auditor, after prudence check.

### 27. Revenue Surplus/Gap:

The revenue surplus/gap for the control period as estimated by the licensee and that approved by the Commission are as follows

Table -26
Revenue Gap, Projected by the licensee and Approved by the Commission for the control period (Amount in Rs. lakh)

Particulars	2015-16		2016-17		2017-18	
Financial Year	Projected	Approved	Projected	Approved	Projected	Approved
Income						
Revenue from Sale of						
Power.	4858.08	5170.19	5135.45	5670.43	5556.05	6128.22
Other Income	44.05	44.05	45.21	45.21	46.48	46.48
Total Income	4902.13	5214.24	5180.66	5715.64	5602.53	6174.70
Expenditure						
Purchase of Power	4640.31	4551.70	5058.42	4966.70	5518.63	5419.40
Depreciation	154.24	121.92	175.11	121.92	175.11	121.92
Interest & Finance Charges	76.73	76.73	84.40	84.40	92.84	92.84
Employee Cost	133.38	19.83	141.18	20.99	149.44	22.21
Repairs and Maintenance	156.37	100.52	165.52	106.40	175.20	112.63
Administration and General Expenses	19.83	48.77	20.99	51.62	22.21	54.64
Return on Equity	58.14	39.77	65.37	36.12	60.11	32.46
Total Expenditure	5239.00	4959.24	5710.99	5388.15	6193.54	5856.10
Net Surplus (+)/ (Deficit)(-)	-336.87	(+)255.00	-530.33	(+)327.49	-591.01	(+)318.60

## **Directives of the Commission**

- 28. In view of the facts and reasons explained in earlier paragraphs, the Commission gives the following directives. The licensee shall submit,
  - (i) the details of the existing loans including the source, interest rate, date of availing loan, repayment period.
  - (ii) the details of investment approval for the capital investments proposed during the control period including the source of finance and the time lines.
  - (iii) the details of the vintage of assets including the value of each asset created.
  - (iv) the details of the assets created out of consumer contribution and grants, year wise.
  - (v) the base used for apportioning common costs and the details of the common costs apportioned.

The licensee shall also,-

- (i) promote demand side management and energy efficiency measures within its area of licence;
- (ii) promote renewable energy either by generation or by purchase of renewable energy certificates; and bring down the distribution loss to the approved level.

#### **Orders of the Commission**

29.(1) After carefully considering the claims of the applicant and the views expressed by M/s KSEB Ltd and in view of the pendency of Writ Petition No. 465/2015 filed by M/s KSEB Ltd before the Hon'ble High Court of Kerala, the Commission hereby approves provisionally the ARR and ERC for the licensee for the first control period as stated below,-

Financial Year	ARR	ERC	Revenue Surplus	
	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)	
2015-16	4959.24	5214.2	255.00	
2016-17	5388.15	5715.6	327.49	
2017-18	5856.10	6174.7	318.60	

- (2) The licensee shall limit the expenditure to the levels approved by the Commission.
- (3) The existing RST and BST shall continue until further orders.

These orders may be reviewed, subject to the result of the judgment of the Hon'ble High Court in Writ Petition No. 465/2015 filed by KSEB Ltd, in the view of the fact that impact, if any, on the ARR and ERC of KSEB Ltd may have consequential impact on the ARR and ERC of the licensee, since the Commission is following the principles of uniform retail supply tariff (RST) and differential bulk supply tariff (BST).

The application is disposed of and ordered accordingly.

Sd/- Sd/- Sd/S. Venugopal K.Vikraman Nair T.M.Manoharan Member Chairman

Approved for issue

Sd/-Santhosh Kumar.K.B Secretary