KERALA STATE ELECTRICITY REGULATORY COMMISSION THIRUVANANTHAPURAM

OA 09/2017

In the matter of Application for the approval of revised ARR & ERC for the year 2017-18 filed by M/s Technopark 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.K.Vikraman Nair, Member Shri.S.Venugopal, Member

ORDER DATED 22.06.2017

- M/s Technopark, Thiruvananthapuram, is a deemed distribution licensee for distribution of electricity in the Technopark campuses. 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, adjacent to Phase I which is a special economic zone (SEZ). Phase IV is the Technocity (450 acres). Technopark, Kollam (44 acres) is also part of its expansion. M/s Technopark is the distribution licensee for all the above campuses.
- 2. The Commission vide its order dated 11.04.2016 in OA 35/2015 had approved the ARR & ERC of M/s Technopark for the three years first control period (2015-16 to 2017-18) as per the provisions of KSERC (Terms and Conditions for determination of Tariff) Regulations, 2014 (*hereinafter referred to as Tariff Regulations, 2014*). This application submitted by M/s Technopark as per the letter No. ETPK/KSERC/2016-17/1317 dated 22th February 2017, is for the approval of revised ARR and ERC for the year 2017-18.
- 3. After receiving the petition, the Commission vide letter dated 31-03-2017 had sought clarifications on the application and also directed to submit the truing up petitions as per Regulation 11 of the Tariff Regulations 2014. The licensee has

not yet submitted the application for the truing up for the year 2015-16. The licensee had furnished the clarifications vide its letter dated 21-5-2017.

4. As per the application submitted, changes proposed in the ARR &ERC for the year 2017-18 is as shown below:

	(Rs.lakh)		
Particulars	Approved	Revised ARR & ERC	
Revenue from Sale of Power	6128.22	6123.93	
Other Income	46.48	64.03	
Total Income	6174.70	6187.96	
Purchase of Power	5419.40	5653.30	
Depreciation	121.92	168.38	
Interest & Finance Charges	92.84	184.88	
Interest on consumer security deposits and deposits from Users of the distribution system	-	95.93	
Employee Cost	22.21	39.20	
Repairs and Maintenance	112.63	337.01	
Administration and General Expenses	54.64	200.61	
Return on Equity	32.46	61.28	
Total Expenditure	5856.10	6740.59	
Total Surplus/(Deficit)	(+)318.60	-552.63	

Table-1 Revised ARR & ERC for the year 2017-18

Hearing on the Matter

- 5. Public hearing on the application was held at the Court Room, Office of the Commission, Thiruvananthapuram on 21-04-2017. In the hearing representatives of the licensee and KSEB Ltd were present. The applicant was represented by Smt. Jayanthi.L, Chief Financial Officer, Sri. E.V.Einstein, Assistant Manager (Electrical) and other officers of Technopark. Sri. E.V.Einstein, Assistant Manager (Electrical) presented the details of the application on revised ARR & ERC for the year 2017-18 and gave the clarifications on the queries of the Commission.
- 6. KSEB Ltd. was represented by Sri.Bipin Shankar, Deputy Chief Engineer (TRAC), Smt. Meharunisa, Executive Engineer (TRAC) and Sri.Manoj.G,

Assistant Executive Engineer (TRAC). Sri.Bipin Shankar, Deputy Chief Engineer (TRAC),KSEB Ltd. presented the observations/comments of KSEBL and also furnished written remarks. Summary of the remarks given by KSEB Ltd is given below.

- The licensee did not submit separate accounts for each area of supply as per Regulation 11(14) of the KSERC (Terms and Conditions for determination of Tariff) Regulations 2014.
- b. The projection of the licensee on the Operation and Maintenance cost such as R&M expenses, Employee cost and A&G expenses are higher than the amount approved by the Commission. It was submitted that the Operation and Maintenance cost may be limited to the norms fixed by the Commission.
- c. It was submitted that huge infrastructural investments for providing better quality service should either be recovered from the beneficiary consumers within the area of supply or through appropriate financial assistance from the Government. The cost incurred for such investments may not be allowed to be passed on to the consumers of KSEB through BST applicable to Technopark. It was further requested that the Commission may fix a ceiling on such investments made by the licensee.
- d. The claim of the licensee on the interest and finance charges for the capital expenditure without the approval of the Commission may be declined.
- e. The Commission may allow depreciation only after considering the vintage of assets. It was further submitted that the depreciation may be allowed in accordance with the Tariff Regulations 2014.
- f. The Return on Equity estimated by the licensee is inclusive of the capital expenditure under taken by the licensee without the approval of the Commission. The Commission may allow only the reasonable Return on Equity as per the KSERC Tariff Regulations, 2014.
- 7. In the daily order the Commission directed the applicant to submit on or before 19-05-2017, the clarifications sought for by the Commission and to submit reply, if any on the comments made by KSEB Ltd. The licensee vide the letter dated 21-05-2017, submitted the clarifications on some of the issues raised by the Commission.

Analysis and decision of the Commission

8. The Commission has considered the application filed for the year 2017-18 as per the Tariff Regulations 2014 for the revisions of ARR&ERC for the year 2017-18 and additional submissions and the observations presented by the KSEB Ltd. The analysis and decisions of the Commission on the application are detailed below.

Number of Consumers:

9. The licensee has projected an increase in number of consumers for the year 2017-18 compared to the approved figures. The details are tabulated below.

Projected No. of Consumers in 2017-18				
Category	As per the approved ARR	Revised ARR		
HT-I B	20	22		
HT - II	2	1		
HT - IV	3	1		
LT IV(A)	14	44		
LT IV(B)	368	504		
LT - VI (A)	2	1		
LT - VI (B)	12	9		
LT VI C	40	36		
LT VI F Single phase	42	38		
LT VI F Three phase	38	38		
LT VII (A) Single phase	47	71		
LT VII (A) Three phase	75	82		
LT VII (B)	14	15		
Self Consumption	3	3		
Street Lighting	15	15		
Total	695	880		

Table-2 Technopark–details of consumer strength

From the details provided in the application it is seen that the licensee has projected an increase in number of consumers than that from the approved levels. The increase has been maximum in LT (IV)B category which accounts for more than 50% of the total consumer base.

Sale of Power:

10. The Commission in its order dated 11-04-2016 has approved the energy sale for the year 2017-18 at 88.55 MU. The licensee in the revised ARR for the year 2017-18 has estimated an energy sale of **90.78 MU** on account of increase in the number of consumers in all the phases of the licensee including Kollam (Phase). The licensee has stated that the projection of consumption and demand is made taking into consideration the increase in power consumption of to the existing consumers and expected addition of new consumers. The details are given below.

	Approved	Revised		
Category	ARR	ARR		
Category	Approved	Estimated		
	sales MU	sales MU		
HT-I B	33.39	37.38		
HT - II	0.44	0.32		
HT - IV	0.96	0.77		
LT IV(A)	0.36	0.67		
LT IV(B)	49.53	49.02		
LT - VI (A)	0.01	0.01		
LT - VI (B)	0.18	0.13		
LT VI (C)	0.27	0.30		
LT VI F Single phase	0.16	0.11		
LT VI F Three phase	0.93	0.37		
LT VII (A) Single phase	0.12	0.11		
LT VII (A) Three phase	1.51	0.94		
LT VII (B)	0.02	0.02		
Self Consumption	0.37	0.26		
Street Lighting	0.28	0.36		
Total	88.55	90.78		

 Table-3

 Technopark–Details of consumer strength and estimated sales

- 11. Majority of the consumers and energy consumption is in the LT category. The consumer strength of HT category is very less when compared to the LT category, however more than one third of the overall energy sales is to HT category. 96.31% of energy in the HT category is consumed by IT/ITES industrial consumers. Consumption of Non-Industrial/ Commercial HT categories is very less. More than 90% of the consumption in the LT category is by IT/ITES industrial consumers, out of this 80% of the consumption is by consumers having contract demand above 20kW. Self-consumption/ Auxiliary consumption of the licensee is only 1 % of the total consumption of LT consumers.
- 12. According to the licensee, increase in the number of consumers is in IT buildings inside Technopark Phase-I Campus. TATA consultancy services is setting up their software development centre in 25 Acres of SEZ land in Technopark Phase-I campus. The 1 million sqft IT building constructed by Technopark in phase-III campus is almost fully occupied. Over sixty IT/ITES company have already started their operations from the building.
- 13. After considering the explanation and details furnished by the licensee, the Commission approves the revised sales of energy as estimated by the licensee for the year 2017-18.

Distribution Loss and Energy Requirement:

14. As per the revised application, the licensee had estimated the energy input at 94.39 MU for the year 2017-18 as against 92.05 MU approved by the Commission. In the clarification dated 21-5-2017, the licensee has further revised the energy input to 94.69 MU. Accordingly, the distribution loss as per the revised ARR, is 4.13% for the year 2017-18 as against the loss target of 3.80% approved by the Commission for the year 2017-18 as per the order dated 11-4-2016.

Dortiouloro	2017-18		
Particulars	ARR approved	Revised estimate	
Total Energy sales (MU)	88.55	90.78	
Distribution loss(MU)	3.50	3.91	
Total Energy Requirement (MU)	92.05	94.69	
Distribution loss (%)	3.80%	4.13%	

Table-4
Technopark–Details of distribution loss level proposed by Licensee

15. The Commission has examined the revised figures of the licensee. The revised distribution loss estimated by the license is on the higher side. The distribution loss is a controllable factor and lower distribution loss is a measure of better performance. Considering the limited area of operation of the Technopark and increase in sales in new areas, there is no justification to have higher distribution loss compared to the approved level of 3.80%. Hence, Commission approves the same level of the distribution loss target approved for the year 2017-18 ie., 3.80%. Accordingly, the quantum of power purchase approved for the year 2017-18 is 94.37 MU as detailed below.

Table-5

Technopark– Distribution loss and quantum of power purchase approved 2017-18

Particulars	MYT Order	Revised estimate	Revision Approved
Energy sale (MU)	88.55	90.78	90.78
Distribution Loss level approved (%)	3.80%	4.13%	3.80%
Distribution loss (MU)	3.50	3.91	3.59
Power purchase requirement (MU)	92.05	94.69	94.37

16. Cost of Power Purchase: The licensee has revised the cost of power purchase for the year 2017-18 at Rs.5653.30 lakh as against the approved power purchase cost of Rs.5419.40 lakh. The above estimates are based on the prerevised BST applicable for M/s Technopark. The estimated the cost of power purchase of Rs.5653.30 lakh for the year 2017-18 includes Rs 64.27 lakh for purchasing REC for meeting the RPO during the year 2017-18. The phasewise details of energy purchase proposed by the licensee for the year 2017-18 is as shown below:

Table-6Technopark-Phase wise details of energy purchase for 2017-18

Campus	Max demand (In kVA)	Energy purchase (lakh units)	Total fixed charges (Rs.lakh)	Total energy charges (Rs.lakh)	Total cost (Rs.lakh)
Technopark Phase -1	197027	709.29	605.19	3,440.07	4,090.26
Technopark Phase -2	0	0	0	0	0
Technopark Phase -3	59970	232.13	197.90	959.82	1,157.72

Technopark Phase -4 (Technocity)	0	0	0	0	0
Technopark Phase -5 (Kollam)	17666	2.48	53.80	282.75	345.05
REC				64.27	64.27
Total	274664	946.88	906.39	4,746.91	5,653.30

The consolidated power purchase cost for the year 2017-18 projected by the licensee is given below:

Table-7

Technopark-Projected Cost of Power Purchase by the licensee for 2017-18

Particulars	2017-18
Energy requirement (MU)	94.67
Maximum demand billed (kVA)	274664
Rate of demand charge (Rs./kVA)	300
Demand charges (Rs.lakh)	906.39
Rate of energy charges (Rs.kWh)	4.85
Energy charges (Rs.lakh)	4682.64
Procurement of Non Solar REC (Rs lakh)	64.27
Total cost of power purchase (Rs lakh)	5653.30

17. The licensee has estimated the cost of power purchase based on the pre-revised tariff. However, the Commission has revised the BST applicable to the licensees vide the tariff order dated 17-04-17 and the applicable tariff of Technopark is shown below.

Particulars	Old Tariff	Revised BST
Energy Charge	4.85/unit	5.20/unit
Fixed Charge	Rs.300/kVA	Rs.300/kVA

18. The licensee has also projected to procure REC worth Rs.64.27 lakh for the year 2017-18 for complying with RPO. The Commission in its order dated 16-11-2016 on revised ARR&ERC for the year 2016-17 had made specific comment on the Procurement of Non Solar REC which is quoted hereunder.

"As per the KSERC (Renewable Energy) Regulation, 2015, all the licensees in the State including M/s Technopark have to meet the solar and non-solar renewable purchase obligation (RPO) as specified therein.

In case any licensee is unable to generate or purchase renewable energy, such licensee has to purchase renewable energy certificate for making up the deficit, if any, in meeting its RPO. In this regard it has to be noted that while purchasing REC, the licensee is spending money without actually getting any energy. Therefore purchase of REC has to be resorted to only if renewable energy is not available for purchase. In recent years, the generation of renewable energy in our country, has increased manifold. Solar plants are coming up in a big way in the States such as Rajasthan, Gujarat, Madhya Pradesh, Andhra Pradesh, Telungana, Tamil Nadu and Karnataka. Government of India have proposed to construct dedicated transmission lines for renewable energy (green corridor). Government of India have also issued policy directives to the effect that transmission charges and transmission loss shall be waived for renewable energy. Government of India have also intimated that the licensees should purchase renewable energy through tenders. It is informed that the cost of solar energy per unit is below Rs.5/-. The rate of power purchased by the licensee from KSEB Ltd is estimated at Rs.5.85 per unit. As per the provisions of the KSERC (Renewable Energy) Regulation, 2015, purchase of solar energy is sufficient for meeting non-solar RPO as well. Hence if the Technopark purchases solar energy through a transparent tender process, it would be able to meet both solar and non-solar RPO at a reasonable rate which in all likelihood would be below Rs.5/- per kWh. The licensee need not pay inter-state transmission charges and incur transmission loss on interstate transmission lines in view of the recent directions of Government of If the licensee purchases REC, it will have to spend money India. without getting any energy. If solar energy is purchased by the licensee, it can reduce the quantum of energy to be purchased from KSEB Ltd and at the same time it can meet the RPO. Thus by purchase of solar energy the licensee will be able to meet both solar and non-solar RPO at reasonable rate without any extra expenditure to the licensee. Therefore the Commission is not inclined to approve any amount towards purchase of REC. Purchase of solar energy by tender process will ultimately result in reduction of cost of power purchase considering the rate of Rs.5.85 per kWh for the energy purchased from KSEB Ltd. and the rate of about Rs.5/- per kWh for solar energy."

19. The Commission in the said order had approved the cost of power purchase excluding the cost of purchase of non-solar REC. Thus, the Commission is of the view that upfront approval of purchase of renewable energy certificates is not a desirable trend. The licensee has to take all efforts to achieve the RPO by sourcing power from renewable sources including solar energy plants. Hence as in the case of previous year, the Commission is not inclined to approve the cost of purchase of non-solar REC. Hence, the cost of power purchase approved for approved by the Commission for the year 2017-18 is Rs 5731.23 lakh at the revised BST as shown below.

Table-8
Technopark – Cost of power purchase approved for the year 2017-18 (Rs. Lakh)

Particulars	Proposed by the licensee	Approved by the Commission
Energy requirement (MU)	94.67	94.37
Maximum demand billed (KVA)	274664	274664
Rate of demand charge (Rs./kVA)	300	300
Demand charges (Rs.lakh)	906.39	823.99
Rate of energy charges (Rs.kWh)	4.85	5.20
Energy charges (Rs.lakh)	4,682.64	4,907.24
Procurement of Non Solar REC (Rs lakh)	64.27	-
Total cost of power purchase (Rs lakh)	5,653.30	5,731.23

Capital Expenditure:

- 20. The licensee has given a summary of capital expenditure for 2017-18. The following are the major investment proposed by the licensee:
 - Augmentation of existing power transmission system of KSEBL for catering to the additional power requirement of Technopark Campuses. The estimate amount of this project comes to Rs.60.9 crore which is planned to be funded by Government grant.
 - b. Construction of 110kV Air Insulated Substation for Technocity at a cost of Rs. 16.11 Crores
 - c. Replacement of EHT metering equipment at 110kV Substation Kazhakuttom for facilitating open access at an estimated cost of Rs.20.00 lakh.

- d. 11 kV power distribution system at the south and south east side of Technopark Phase-III campus. The estimated cost of the project is Rs.2.65 crore
- e. SITC of HT panels at 110 kV Substation Technopark Phase-III campus. The estimated cost of the project is Rs.41.30 lakhs to be financed from internal funds.
- f. Grid connected Solar Photo Voltaic Plant at Technopark Phase -III campus. The estimated cost of the project is Rs.1.7 crore.
- 21. In the letter submitted to the Commission on 19-06-2017, the licensee has stated that they *'will be submitting petition for approval of capital investments as detailed in the ARR separately before the Hon.Commission with necessary cost benefit analysis and other supporting documents shortly'*. The Commission shall consider the capital expenditure proposed, based on the detailed analysis and documents to be submitted to the Commission.

Interest and Finance Charges:

22. The interest and finance charges claimed as per the revised application for the year 2017-18 is Rs.184.88 lakh, against the approved amount of Rs 92.84 lakh.. The details of the claim are shown below.

	2017-18			
	Canara Bank (Tejaswani building)	South Indian Bank PH-3	Total	
Net Loan (opening balance)	89.86	1,521.89	1,611.75	
Drawal during the year	-	-	-	
Less repayments during the year	28.72	83.41	112.13	
Net loan (closing balance)	61.14	1,438.48	1,499.62	
Average net loan	89.86	1,521.89	1,611.75	
Rate of interest on Loan	11.75%	11.30%		
Interest on Loan	12.62	172.27	184.89	

Table-9

Technopark – Details of interest and finance charges for the year 2017-18 (Rs. Lakh)

23. The Commission has examined the claim of interest and financing charges. The details furnished by the licensee is not only insufficient but also inconsistent with the information available with the Commission. The details of the loan availed as furnished by the licensee is not consistent with figures in the balance sheet of

previous years as given in Form D(BS). From the details furnished, it is also not clear as to the purpose for which loans are availed. Since the details furnished by the licensee is grossly insufficient and inconsistent, the Commission is not in a position to approve the additional claim of interest and finance charges by the licensee. Hence, the Commission directs that the licensee shall furnish complete details of loans availed, grants & other contributions received from government and others sources including that of consumers for the last three financial years before the Commission.

- 24. Further, the licensee has claimed Rs.95.93 lakh as interest on security deposit for the year 2017-18. The estimation details and the security deposit outstanding as on 31-3-2016 are not furnished by the licensee. As per the details furnished by the licensee, security deposit outstanding as on 31-3-2015 is only Rs.9.25 crore. The bank rate applicable for the year 2017-18 is 6.75%. Accordingly, the interest on security deposit would be Rs.62.44 lakhs.
- 25. The interest charges as approved above is provisional and the Commission will take a final view on this once the accounts, are made available as directed above along with reports of statutory audit, at the time of truing up of accounts.

Particulars	Approved vide the order dated 11-4-2016	Claim as per the revised application	Approved as per the revised application
	(Rs. Lakh)	(Rs. Lakh)	(Rs. Lakh)
Interest & Finance charges	92.84	184.88	92.84

Interest on security

deposits

Total

Table-10Technopark- Interest & finance charges- claimed and approved for the year 2017-18

26. **Depreciation**: The Commission vide the order dated 11-4-2016 had approved the depreciation for the year 2017-18 at Rs 121.92 lakh, however in the revised application, the licensee has claimed the depreciation at Rs 168.38 lakh. The details are given below.

92.84

95.93

280.81

62.44

155.28

Particulars	Depreciation	Depreciation approved for 2017-18 in order dated 11-04-2016					claimed as per d application	
Faiticulais	%	Gross Fixed Assets	Depreciation	Gross Fixed Assets	Depreciation			
Other Civil works	3.34	188.95	6.31	208.95	6.98			
Transmission Lines	5.28	661.94	34.95	810.95	42.82			
HV Distribution system	5.28	83.28	4.40	478.20	25.25			
Sub-station equipment	5.28	2027.75	107.07	2272.17	119.97			
Distribution lines	5.28	24.41	1.29	24.41	1.29			
Meters	5.28	2.53	0.13	2.54	0.13			
Any other items	5.28	1.70	0.09					
Subtotal		2990.56	154.24	3797.21	196.44			
Less: Consumer contribution	5.28	612.06	32.32	531.45	28.06			
Total		2378.50	121.92	3265.76	168.38			

Table-11Technopark–Details on Depreciation for 2017-18 (Rs. Lakh)

- 27. In the revised application, the licensee has claimed depreciation on the new assets of Rs.368.72 lakh. During the hearing, the Commission has directed the licensee to submit the details of the capital investments as claimed in the application. In the application, the licensee has projected a list of the major capital investments as shown in paragraph 20.
- 28. The licensee has claimed asset additions worth Rs.368.72 lakhs including transmission lines (Rs.149 lakhs), and substation equipments (Rs.199.72 lakhs). The above assets are proposed in the capital expenditure programme. Some of these projects are funded by the State Government. Considering this, depreciation on these items can be allowed only after it is completed and the source of funding is certainly known. These details along with the date of commissioning of the new assets should be submitted at the time of truing up. Hence, in the process of truing up, the Commission may, after prudence check, approve the depreciation on the new assets created and capitalized, provided such investments are incurred with the approval of the Commission. Accordingly, for the year 2017-18, the Commission is not revising the amount of Rs.121.92 lakh towards depreciation for the year 2017-18.

O&M Expenses:

29. The licensee has proposed O&M expenses of Rs.576.82 lakhs for the year 2017-18. The Commission vide Order dated 11-04-2016 on OA 35/2015 finalised the ARR & ERC for the first control period (2015-16 to 2017-18) and had approved the O&M expenses which includes Employee Cost, Repair and maintenance expenses and Administrative and general expenses for 2017-18. A comparison between the approved and the revised application for the year 2017-18 are detailed below.

Table-12

O&M expenses for distribution business as approved vide the order dated 11-4-2016 and the claims as per the revised application (Rs. lakh)

O&M Expenses	ARR order dated 11-4-2016	Revised application
Employee Cost	22.21	39.20
R&M expense	112.63	337.01
A&G expense	54.64	200.61
Total	189.48	576.82

30. Employee cost: As detailed above, vide the order dated 11-4-2016, the Commission had approved the employee cost for the year 2017-18 as Rs 22.21 lakh. In the revised application, the licensee has claimed the employee cost at Rs 39.20 lakh. The split up of the employee cost claimed by the licensee is tabulated below.

Table-13Technopark- Details on Employee cost as per revised application (Rs. Lakh)

Particulars	2017-18
Basic salary	15.07
Dearness allowance	17.53
House rent allowance	0.35
Other allowance	0.05
Medical reimbursement	2.08
Interim relief/wage revision	1.11
Provident fund contribution	3.01
Total	39.20

31. The major portion of the claim made by the license is for the basic salary and dearness allowance. The licensee has further stated that the employee cost for

FY 2017-18 based on the cost of employees engaged on contract basis against a sanctioned post apportioned for the distribution business is as shown below.

Designation	No. of posts	Apportionment %
Chief Executive Officer	01	10
General Manager (Projects)	01	50
Chief Finance Officer	01	20
Asst. General Manager (Projects)	02	30
Manager (Finance)	01	20
Finance Officer	01	20
Asst. Manager (Electrical)	02	50
Asst. Manager (Electrical)	01	100
Executive (Finance)	01	50
Junior Officer (Finance)	01	20

Table-14Technopark- Details on sanctioned post

32. Employee cost is a controllable item of expenditure. The licensee has not furnished any convincing reason for revising the approved O&M expenses for the year 2017-18. Hence, the Commission maintains the employee cost as Rs 22.21 lakh as approved by the Commission vide the order dated 11-4-2016 for the year 2017-18.

Table-15Technopark- Employee cost approved as per the revised application for the
year 2017-18 (Rs. Lakh)

Particulars	rticulars ARR order dated Claimed revis		Approved vide the revised application
Employee cost	22.21	39.20	22.21

33. **Repair and Maintenance expenses**: The Commission in the order dated 11-4-2016 on ARR & ERC for the control period had approved Rs 112.63 lakh as repair and maintenance cost for 2017-18. In the application submitted on the revised estimates for 2017-18 the repair and maintenance cost is estimated at Rs.337.01 lakh. The licensee has stated that the estimated amount includes the contract labour cost. The licensee has stated that the outsourced agencies are selected through a competitive open tendering process. The details of the estimate are shown below.

			Monthly O&M charges for power	O&M Charges Actuals for FY	Estimated for	Projected for
			(Incl of service tax)	· · ·		FY 2017-18
Area	Contract period	Agency	Rs.	In Lakhs)	(Rs. In Lakhs)	(Rs. In Lakhs)
Technopark Phase-I Campus	01-09-2014 to 31-10-2015	Aegis Power Engineers	913484			
Technopark Phase-I Campus	01-11-2015 to 31-10-2016	Sterling & Wilson	1840000	155.94	220.80	242.88
110kV substation Technopark		_				
Phase-III	01-09-2014 to 31-09-2015	Electrotek Engineers Pvt. Ltd	242304			
110kV substation Technopark						
Phase-III	01-10-2015 to 30-09-2016	Electrotek Engineers Pvt. Ltd	300706			
110kV substation Technopark						
Phase-III	01-10-2016 to 31-09-2017	Electrotek Engineers Pvt. Ltd	321161	32.58	37.31	40
Technopark Kollam (IT Building)	1-08-2014 to 30-07-2015	Electrotek Engineers Pvt. Ltd	178702			
Technopark Kollam (IT Building)	1-08-2015 to 31-08-2016	Electrotek Engineers Pvt. Ltd	196022			
Technopark Kollam (IT Building)	1-09-2016 to 31-08-2017	Electrotek Engineers Pvt. Ltd	215624	22.83	24.89	27
110kV substation Technopark						
Kollam	01-09-2016 to 31-08-2017	Electrotek Engineers Pvt. Ltd	206925	0	4.14	26
	Total Amount (Rs. In	Lakhs)		211.35	287.15	337.01

 Table-16

 Technopark– Details of R&M expenses claimed as per revised application for the year 2017-18 (Rs. Lakh)

34. The Commission has approved the R&M expenses for the year 2017-18 at Rs 112.63 lakh, based on the past actual for the year 2012-13 and after allowing escalation rates as per the Tariff regulation, 2014. As per the details furnished by the licensee, the main reason for increase in R&M expenses is inclusion of new areas in to the distribution business. The licensee has stated that the agency for O&M activities is selected based on competitive bidding. The Commission analysed the details furnished by the licensee. As per the details furnished, the major item of expenses is towards the Technopark phase I campus (Rs.242.88 lakhs), for which the contract period expired on 31-10-2016, which is already over. Further, the period of contract for other areas are also due to expire before the financial year 2017-18. Hence, it is difficult to estimate the R&M expenses for the year 2017-18 as per the details furnished by the Licensee. Thus, the increase in cost attributable to the increase in area can be considered once the actuals are available. Hence it is directed that the licensee shall furnish the details on the R&M expenses in the truing up process. For the present, the Commission approves the R&M expense for the year 2017-18 at Rs 112.63 lakh, which is the same as that approved in the order dated 11-4-2016.

	for the year 2017	7-18 (Rs. Lakh)	
Particulars	ARR order dated 11-4-2016	Claimed in the revised application	Approved vide the revised application
R&M expenses	112.63	337.01	112.63

Table-17 Technopark– R&M expenses approved as per the revised application for the year 2017-18 (Rs. Lakh)

35. Administration and General Expenses: - The A&G expense estimated by the licensee is higher than the amount approved by the Commission. The Commission had approved Rs.54.64 lakh in the ARR for the control period for 2017-18. In the revised ARR for the year 2017-18 the licensee has projected an A&G expense of Rs. 200.61 lakh. This includes Rs.79.34 lakh as the security charges and Rs.57.00 lakh for Electricity Duty under section 3 of the Kerala Electricity Duty Act 1963. The security charges and the duty under section 3 of the Kerala Electricity Duty Act 1963 together amounts to Rs.136.34 lakh.

Table-18

Technopark– A&G expenses projected as per the revised application for the year 2017-18 (Rs. Lakh)

Particulars	Rs.lakh
Rent Rates & Taxes	7.58
Telephone & Postage, etc.	1.26
Legal charges (Inspection Charges)	14.30
Audit Fees	0.57
Consultancy charges	1.65
Other Professional charges	2.83
Conveyance	7.05
Electricity charges	23.10
Fees & subscription	3.30
Printing & Stationery	2.44
Bank Charges	0.19
Security arrangements	79.34
Ele. Duty u/s 3(I), KED Act	57.00
A&G Expenses	200.61

- 36. The Commission has already taken a position that the arrangement of security for the park is the responsibility of the Park business, and security, if any, for electrical installations only can be charged to distribution business. The licensee has also claimed Rs.57.00 lakh as the duty under sub-section (1) of Section 3 of the Kerala Electricity Duty Act, 1963 (hereinafter referred to as Section 3 (1) duty). The electricity duty under Section 3 (1) of the Kerala Electricity Duty Act, 1963, is payable by the licensee to the Government and the duty paid by the licensee under Section 3 (1) cannot be passed on to the consumers and therefore it cannot be claimed as an expenditure in the ARR.
- 37. While approving the A&G expense for the year 2017-18 as per the order dated 11-4-2016, the Commission had approved the A&G expenses for the year 2016-17 at Rs 54.64 lakh, based on the past actuals and the annual escalation factors as provided in the Tariff Regulation, 2014. The Commission is not inclined to change the A&G expense for the year 2017-18,and the A&G expense approved for the year 2017-18 is Rs 54.64 lakh.
- 38. **Return on Equity:** While approving the ARR&ERC of M/s Technopark for the first control period 2015-16 to 2017-18 vide the order dated 11-4-2016, the Commission had approved the RoE at Rs 32.46 lakh, at 3% of NFA as per the sub regulation (2) of regulation 29 of the Tariff Regulations, 2014. The details are given below,

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

Table - 19Technopark-Return on Investment approved for 2017-18 (Rs. Lakh)

39. In the revised application, the licensee has claimed the RoE at Rs 61.28 lakh.The details are given below.

Table-20Technopark –Revised RoE claimed during 2017-18 (Rs. Lakh)

Year	2017-18
NFA at the beginning of the year	2003.79
Return on Equity	61.28

- 40. The Commission has not approved any asset addition during the control period and therefore, there may not be any change in the NFA at the beginning of the year 2017-18. Hence the Commission decides not to revise the approved estimate of Rs.32.46 lakh towards RoE for 2017-18 as detailed under Table-19 above.
- 41. **Aggregate Revenue Requirement:** The Aggregate Revenue Requirements approved for the control period are summarised below.

Particulars	Approved ARR (Rs.lakh)	Revised ARR & ERC (Rs.lakh)	Approved as per the revised application (Rs.lakh)
Purchase of Power	5,419.40	5,653.30	5731.23
Interest & Finance Charges	92.84	280.81	155.28
Depreciation	121.92	168.38	121.92
Employee Cost	22.21	39.20	22.21
Repairs and Maintenance	112.63	337.01	112.63
Administration and General Expenses	54.64	200.61	54.64
Return on Equity	32.46	61.28	32.46
Total Expenditure	5,856.10	6,740.59	6230.37

 Table 22

 Technopark -Details of Aggregate Revenue Requirement for 2017-18

42. **Revenue from Tariff:**

The licensee has estimated total revenue from sale for power at Rs.6123.93 lakh for the year 2017-18 as against approved revenue of Rs.6128.22 lakh. The revenue from sale of power claimed by the licensee as per the revised application is detailed below.

rechnopark - Revenue Projections for 2017-10 (RS.Lakii)			
Category	Sales MU	Revenue Rs.Lakh	Average Tariff
HT I (IT & TES	37.38	2245.17	6.01
HT -2(Non-Industrial Non Commercial)	0.32	21.95	6.88
HT -4 (Commercial)	0.77	62.19	8.10
LT IV A (Industrial)	0.19	11.41	5.98
LT IVA (Industrial) 10kW <cl<20kw< td=""><td>0.03</td><td>1.57</td><td>6.10</td></cl<20kw<>	0.03	1.57	6.10
LT IV A CL> 20 kW (Industrial)	0.46	28.78	6.30
LT IV B IT/ITES CL< 10kW	1.23	73.21	5.94
LT IVB IT/ITES 10kW <cl<20kw< td=""><td>2.28</td><td>143.08</td><td>6.26</td></cl<20kw<>	2.28	143.08	6.26
LT IV B IT/ITES CL > 20 kW IT & ITES	45.51	3300.00	7.25
LT VI A General	0.02	1.14	7.11
LT VI B General	0.13	9.09	7.03
LT VI C General 1 Phase or 3 Phase	0.30	30.61	10.15
LT VI F General 1 Phase	0.11	9.24	8.48
LT VI F General 3 Phase	0.37	34.35	9.42
LT VII A Commercial (1 ph)	0.11	11.26	9.93
LT VII A Commercial (3 ph)	0.94	97.33	10.38
LT VII B Commercial	0.02	1.05	6.00
Street Lighting	0.26	9.57	3.62
Self-Consumption	0.36	32.94	9.17
Total	90.78	6123.93	6.75

Table-23		
Technopark - Revenue Projections for 2017-18 (Rs.Lakh)		

43. The revenue from sale of power claimed by the licensee is as per the pre revised RST applicable to the different categories of the consumers. The Commission vide tariff order dated 17-04-2017 revised the tariff applicable to the consumers. The licensee has later furnished the revenue from sale of power based on revised tariff. Based on the revised estimate, the revenue from sale of power approved for the year 2017-18 is Rs. 6356.83 lakh as shown below.

Technopark - Revenue approved for 2017-18 (Rs.Lakh)			
Category	Sales MU	Revenue Rs.Lakh	Average Tariff
HT I (IT & TES	37.38	2649.85	7.09
HT -2(Non-Industrial Non Commercial)	0.32	22.36	6.99
HT -4 (Commercial)	0.77	63.57	8.26
LT IV A (Industrial)	0.19	10.91	5.74
LT IVA (Industrial) 10kW <cl<20kw< td=""><td>0.03</td><td>1.71</td><td>5.70</td></cl<20kw<>	0.03	1.71	5.70
LT IV A CL> 20 kW (Industrial)	0.46	31.12	6.77
LT IV B IT/ITES CL< 10kW	1.23	75.94	6.17
LT IVB IT/ITES 10kW <cl<20kw< td=""><td>2.28</td><td>147.13</td><td>6.45</td></cl<20kw<>	2.28	147.13	6.45
LT IV B IT/ITES CL > 20 kW IT & ITES	45.51	3115.25	6.85
LT VI A General	0.02	1.07	5.35
LT VI B General	0.13	9.78	7.52
LT VI C General 1 Phase or 3 Phase	0.30	29.33	9.78
LT VI F General 1 Phase	0.11	8.36	7.60
LT VI F General 3 Phase	0.37	29.90	8.08
LT VII A Commercial (1 ph)	0.11	9.38	8.53
LT VII A Commercial (3 ph)	0.94	80.84	8.60
LT VII B Commercial	0.02	1.06	5.30
Street Lighting	0.26	10.63	4.09
Self-Consumption	0.36	33.65	9.35
Total	90.78	6356.83	7.00

Table-24 Technopark - Revenue approved for 2017-18 (Rs.Lakh)

44. **Non-Tariff Income:** The licensee has projected non-tariff income for the year considering the income from investments & bank deposits. The Commission in the order on ARR had approved the non-tariff income of Rs.46.48 lakh for the year 2017-18. In the revised application submitted, the licensee projects the non tariff income at Rs.64.03 lakh for 2017-18. The projection of the licensee is shown below.

Particulars	Rs.lakh	
Income from statutory investments	23.22	
Interest on investments, fixed and call deposits and bank balances	38.70	
Miscellaneous receipts	1.86	
Revenue from late payment surcharge	0.25	
Total	64.03	

Table 25Technopark- Estimate of Non-tariff income for 2017-18

The Commission approves the revised non-tariff income as estimated by the licensee.

45. **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

Particulars	Approved ARR	Revised ARR & ERC	Approved as per the revised application
Purchase of Power	5,419.40	5,653.30	5731.23
Interest & Finance Charges	92.84	280.81	155.28
Depreciation	121.92	168.38	121.92
Employee Cost	22.21	39.20	22.21
Repairs and Maintenance	112.63	337.01	112.63
Administration and General Expenses	54.64	200.61	54.64
Return on Equity	32.46	61.28	32.46
Total Expenditure	5,856.10	6,740.59	6230.37
Revenue from Sale of Power	5556.05	6193.93	6356.83
Other Income	46.48	64.03	64.03
Total Income	5602.53	6187.96	6420.86
Total Surplus/(Deficit)	(-)591.01	(-)552.63	(+)190.49

Table-26 Technopark - Approved by the Commission for 2017-18 (Rs. in lakh)

46. As shown above, the revenue surplus for the year 2017-18 is Rs.190.49 lakh as against a revenue gap of Rs.591.01 lakh approved in the ARR for the year 2017-18 vide order dated 11-04-2016.

Directives of the Commission

- 47. The Commission issues following directives to the licensee for compliance.
 - (a) The licensee shall furnish actual details of loans availed, grants & other contributions received from government and others sources including that of consumers for the last three financial years before the Commission.
 - (b) The licensee shall also furnish the audit reports of the Technopark and the distribution business separately for the last three years.

(c) The licensee shall also comply with the directives issued vide order dated 11-4-2016 and report the compliance to the Commission during the truing up process.

Orders of the Commission

48. After considering the claims of the applicant and the views expressed by M/s KSEB Ltd, the Commission hereby approves the revision in the ARR and ERC for the licensee for the year 2017-18, subject to the observations mentioned in the order as stated below,-

Financial Year	2017-18 (Rs. Lakh)
ARR	6230.37
ERC	6420.86
Surplus / (Revenue Gap)	(+)190.49

- 49. The licensee shall limit the expenditure to the levels approved by the Commission.
- 50. The application is disposed of and ordered accordingly.

Sd/-K.Vikraman Nair Member Sd/-S.Venugopal Member

Approved for issue

Sd/-Santhosh Kumar.K.B Secretary