KERALA STATE ELECTRICITY REGULATORY COMMISSION THIRUVANANTHAPURAM

Present : Shri. Preman Dinaraj, Chairman

Adv. A.J.Wilson, Member(Law)

Petition No. : **OP No 48/2021**

In the matter of : Truing Up of Accounts of M/s Technopark

for the financial year 2019-20.

Petitioner : M/s Technopark, Thiruvananthapuram

Represented by : Shri. John M Thomas, CEO

Smt. Jayanthi, L CFO

Shri. Madhavan Praveen, GM Projects Shri. Viswanathan N, Dy Manager (Fin) Shri. Anfal, Dy. Manager (Electrical)

Hearing No.& date of :

hearing

1st Hearing held on 26-10-2021.

Order Dated: 16-02-2022

Background

- 1. M/s Technopark, Thiruvananthapuram (hereinafter referred to as theTechnopark or the licensee or the petitioner) vide letter No. ETPK/FIN/KSERC/2021-22/1/736 dated 13-08-2021 submitted a petition for Truing Up of Accounts for the financial year 2019-20 as per the provisions of Tariff Regulations 2018. As per proviso to Sec10(2) of the KSERC (Terms and conditions for determination of Tariff) Regulations 2018, the petition for Truing Up of accounts for 2019-20 is to be filed by the licensee on or before 30-11-2020. However, the licensee has filed the petition for the Truing up for the year 2019-20 only on 13-08-2021 and hence there is a delay of 256 days in filing the Truing up petition. Since there was a delay of 256 days, Technopark also filed petition for condonation of delay vide letter No. ETPK/FIN/KSERC/2021-22/2/748 dated 18-08-2021. The Commission has condoned the delay in filing the truing up petition vide Order IA No.17/2021 dated 03.09.2021 and admitted the petition as OP No.48/2021.
- 2. The Commission had notified the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018 (hereinafter referred to as the Tariff Regulations, 2018), applicable for the Control Period from 2018-19 to 2021-22. As per the provisions of these Regulations, the Commission had approved the ARR&ERC for the Control Period from 2018-19 to 2021-22 as per Order dated 24-03-2020. Regulation 15 of the Tariff Regulations, 2018 provides for the filing of the petition for Truing Up of Accounts for the relevant years. The present

- petition pertains to the Truing Up of Accounts for the second year of the Control Period i.e., 2019-20.
- 3. In the instant petition, the licensee has arrived at a revenue surplus of Rs.28.32 lakh for the year 2019-20, as against a revenue surplus of Rs.609.86 lakh approved by the Commission in the ARR Order dated 24-03-2020. The comparison of ARR&ERC Order and the truing up petition for the year 2019-20 and the trued-up figures for the immediate previous year is tabulated hereunder.

Table-1
Comparison of ARR&ERC for the period 2018-19 and 2019-20

	2018-	19	2019-20)	Difference
Particulars	Truing Up	Trued Up	Approved in	Truing Up	Difference
raiticulais	Claim		ARR (A)	Claim (B)	(C)=(B-A)
	(Rs. lakh)	(Rs. lakh)	(Rs. lakh)	(Rs. lakh)	(Rs. lakh)
Revenue from Sale of Power	6,292.32	6,292.32	7,070.11	6,760.31	(309.80)
Non-Tariff Income	101.79	131.25	92.75	129.20	36.45
Total Income	6,394.11	6,423.57	7,162.86	6,889.51	(273.35)
Purchase of Power	5,337.12	5,327.26	5,988.56	5,764.40	(224.16)
R&M Expenses	410.13	263.67	191.72	479.98	288.26
Employee Cost	22.55	22.55	31.43	39.15	7.72
A &G Expenses	195.56	29.98	54.76	145.79	91.03
Interest and finance charges on	98.58	30.72	0.64	92.28	91.64
long term loans	96.56	30.72	0.04	92.20	91.04
Interest on consumer security	81.36	81.36	95.86	94.27	(1.59)
deposits etc	01.30	01.30	95.00	94.21	(1.59)
Interest on Working Capital	-	-	-	-	-
Depreciation	300.30	138.94	131.43	189.38	57.95
Return on NFA	114.30	31.60	58.60	55.95	(2.65)
Total Expenditure	6,559.90	5,926.08	6,553.00	6,861.19	308.19
Net Surplus/(Deficit)	(165.78)	497.49	609.86	28.32	(581.54)

- **4.** The Commission vide letter dated 04-10-2021 sought the following clarifications on the petition directing the licensee to submit replies to the clarifications on or before 20-10-2021.
 - i. The licensee has not furnished separate audited accounts of the electricity distribution business. The audited Financial Statements of Power Distribution Business is to be furnished separately along with detailed Schedules of each item in the Financial Statements.
 - ii. On examination of the Financial Statements for the year 2018-19 of the Distribution Business, it was observed that the closing balance of GFA in 2018-19 differ from the opening balance of 2019-20. Detailed write-up with supporting schedules on the accounting treatment, details of adjustment,

- accounting entries made in the books of accounts with reasons, if any, for the deviations/difference.
- iii. Reason for mis-match in the cost of purchase (Rs.5764.40 lakh) as per form D.1.1 and (Rs.5770.58 lakh) as per Form D.3.1.
- iv. The rationale for arriving at the percentage applied for apportionment of employee cost to distribution business.
- v. Actual employee cost booked by the licensee for the year 2019-20 is Rs.39.15 lakh. As per the petition, the employee cost of supervisor/meter reader alone is more than 28% of the total employee cost during the year. Specific reasons, if any.
- vi. Reason for increase in the A&G expenses booked for 2019-20 (Rs.145.79 lakh) when compared with the A&G expenses approved in the ARR Order for the year 2019-20 (Rs.54.76 lakh,) an increase of 166.23 per cent.
- vii. Reason for increase in the R&M expenses booked for 2019-20 (Rs.479.98 lakh) over the R&M expenses approved in the ARR Order for the year 2019-20 (Rs.191.72 lakh) and also for the increase of the same compared to Rs.401.11 lakh in 2018-19.
- viii. Detailed split up of the amount of Rs. 102 lakh shown in form D.2.4 under interest on investment, FD, Call Deposit and bank balance specifying the nature and source of these incomes.
 - ix. Reason for decrease in Government Grants of Rs.12758.64 lakh as per Balance Sheet in the year 2018-19 to Rs.10468.62 lakh in 2019-20. The details of grant received and consumer contribution for the year 2019-20.
 - x. The licensee submitted while taking prior approval of the Commission that capital investment of Rs.57.37 lakh for 11 KV power distribution system and 50 KWp solar plant of Rs.29.07 lakh at phase III are funded through Government Grants. In the Truing up petition for 2019-20 the licensee claimed that the expenditure was met from own funds. Reason for deviation in submission on source fund.
- **xi.** Clarification on whether the capital investment incurring Rs.29.07 lakh made was through proper tendering process for 50KWp roof top grid connected solar panel plant Phase -III shown in the truing up petition for 2019-20.
- **xii.** Detailed note showing the area of improvements based on the energy audit spending Rs.24.83 lakh and to quantify the benefits achieved along with copy of the energy audit reports.
- 5. The licensee submitted detailed replies to the above points vide their letter ETPK/FIN/KSERC/2021-22/3/ dt.18.10.2021. These replies have been carefully considered by the Commission while analysing the issues and arriving at specific conclusions.

Hearing on the petition

- 6. The hearing on the petition was held on 26-10-2021 at 11.00 AM through video conference. The applicant M/s Technopark was represented by Shri. John M Thomas Chief Executive Officer, Smt. Jayanthi. L Chief Finance Officer, Shri. Madhavan Praveen G.M. Projects, Shri. Anfal Deputy Manager (Electrical) and Shri. Viswanathan Deputy Manager (Finance). Shri. Anfal, presented the details of the petition on the truing up of accounts for the year 2019-20. The important submissions made by Technopark during the hearing are:
 - i. The licensee has claimed a revenue surplus of Rs.28.32 lakh as against the revenue surplus of Rs.609.86 lakh approved in the ARR order.
 - ii. There is an increase for the year 2019-20 in the number of consumers from 872 to 876 and the sale of power from 865.76 lakh units to 884.69 lakh units when compared to the previous year 2018-19. The majority of consumers were belonging to the LT IVB category in the IT sector.
 - iii. The distribution loss for the year is 2.80% which is higher than the actual distribution loss of 2.20 % for the previous year and the ARR approved distribution loss of 1.46%. The licensee stated that expected Load has not been picked up in Technopark Kollam and Technocity campus. As these are new campuses and new companies are only coming up gradually, the overall loss is high because of higher percentage of fixed energy losses. In Kollam campus, in order to reduce the distribution losses, the licensee has disconnected one of the two incoming feeders from KSEB Ltd which supplies power to the substation. The total loss includes all losses related to transformers, HT, LT power cables and switch gears. The transformers and switch gears used in Phase I are 20 years old. The licensee also claimed that now they are actively monitoring daily distribution losses in all the Technopark campus for immediate analysis and corrective actions.
 - **iv.** The licensee further submitted that Solar Generation was inadvertently omitted in the ARR loss calculation and the loss estimates were therefore lower.
 - v. The solar generation from 285 kWp plant capacity is 4.33 lakh units with a capacity utilization factor of 17.34%.
 - vi. The total power purchase cost for the year 2019-20 is Rs.5770.58 lakh for 905.83 lakh units at an average power cost of Rs.6.37 per unit as against the previous year's power cost of Rs.5337.12 lakh for 882.13 lakh units at an average rate of Rs.6.06 per unit.
 - vii. The True up claim of the licensee for employee cost is Rs.39.15 lakh as against Rs.31.4 lakh approved in the ARR Order by the Commission. The licensee submitted that, in compliance of the direction of the Commission

- vide daily order No. OA 16/2020 dated 11.11.2020; a proportionate ratio for each employee had been arrived at in the year 2018-19, considering the time and effort used by them for distribution business and the same ratio is applied in current year also for apportioning the employee cost.
- viii. The A&G expenses claimed by the licensee as per the petition for truing up was Rs.145.79 lakh as against the approved amount of Rs.54.76 lakh in the ARR&ERC Order. The major claims booked under A&G expense includes Section 3(1) duty Rs.52.48 lakh, security arrangements Rs.37.65 lakh(1/3rd of previous year expense), Rs.24.82 lakh for consultancy charges in respect of energy audit .lt was requested for allowing Section 3(1) Duty as an allowable expenditure.
 - ix. The licensee claimed that there are already some security cameras installed in substations as part of the general security arrangement and are in the process of installing new surveillance cameras in all other substations also.
 - x. The licensee has claimed interest on loan Rs.92.28 lakh and Rs.94.27 lakh as interest on consumer security deposits totaling to Rs.186.55 lakh as against the ARR approved amount of Rs.96.50 lakh. As per the licensee, there were no fresh loans availed during the current year and no interest on working capital has been claimed as consumer deposits meets Working Capital requirement.
 - xi. The Repair and Maintenance Charges claimed by the licensee is Rs.479.98 lakh as against Rs.191.72 lakh approved in the ARR for the year. For the previous year 2018-19, as per the trued-up accounts, Rs.263.67 lakh was approved as R&M charges by the Commission. The major portion of this year expenses are relating to Phase 1 amounting to Rs.360.18 lakh. For phase II & III, the R&M charges claimed amounts to Rs 82.72 lakh and for Technopark Kollam the amount claimed is Rs.31.68 lakh. Materials and spares purchased for this purpose amounts to Rs.5.40 lakh.
- xii. The licensee has submitted that a separate petition was filed in respect of the complete employee details as per the order dated 11.11.2020 and after examining the said petition the Commission had issued directions to conduct a prudent work study. The licensee further submitted that they are in the process of preparing a Request for Proposal (RFP) to conduct a prudent study on all the O&M activities and the report of the study will be submitted to the Commission once the report is received.
- xiii. The CFO of the licensee submitted that fixed assets have been recast as per Commission's CAPEX APPROVAL Order (OP No.42/2020 dated: O3/O3/2021) for assets added from FY 2012-13 to FY 2016-17 and hence there is change in Closing Asset Value for FY 2018-19 and opening balance of FY 2019-20 due to adjustment of the amount deferred / disallowed in the

order.

- **xiv.** Depreciation claimed amounts to Rs.189.38 lakh for this year. The licensee submitted that the depreciation is calculated based on Commission's order and ruling Tariff regulations.
- xv. The return on Net fixed asset claimed by the licensee is Rs. 55.95 lakh. i.e., 3% of NFA. The licensee claims that the NFA allowed is being progressively wiped out by Section 3 duty disallowed. Technopark needs to build sufficient funds for future expansion without Government support. So they prayed to allow to build this fund.
- 7. The Commission had made the following comments/remarks during hearing.
 - i. Technopark being a progressive organization should stop buying solar panels of low wattage and should go for solar panel having higher watts capacity, so that the generation efficiency can be improved.
 - ii. The Commission commented that incurring distribution losses of 2.95% and 2.29% in Phase 1 and Phase II & III is very much on the higher side; if such losses has occurred, then there is possibility of leakage in the underground cables and it must be examined.
 - iii. The Commission said that while replacing transformers and cables, compromise to merely effect economy at the cost of efficiency and better performance must not be made. Instead attempt must be to get the latest and best specification at most competitive rates.
 - iv. The Commission also commented that Power factor disincentive /penalty is not a solution in itself. The licensee should insist upon all consumers to maintain power factor at 0.95 or higher and to this end install capacitors for improving the power factor.
- **8.** After hearing the licensee, the Commission has issued the following directions.
 - i. To submit a detailed write up regarding the funding of the asset additions made during the year 2019-20 clearly showing the nature of fund deployed and its sources.
 - ii. To furnish a copy of report on prudent study of all O&M expenses.
 - iii. To submit a detailed petition on recast of fixed assets claimed by the licensee for the consideration of the Commission and approval.
- 9. The licensee vide their letter ETPK/FIN/KSERC/2021-22/3/943 dated 18.10.2021 submitted replies for the clarifications on the petition sought by the Commission and has also furnished Compliance Report sought on previous two Commission Orders dated 08.04.2021.
- **10.** KSEB Limited, the power seller Licensee to Technopark, vide letter dated 28.10.2021 furnished the following counter statement/remarks upon the truing up

petition for the year 2019-20 filed by Technopark.

- To disallow the cost incurred for additional power procurement due to higher loss.
- **ii.** To limit the O&M expenses within the norms specified as the O&M expense is 139% higher than the approved ARR norms.
- iii. To take a uniform approach regarding Section 3(1) duty as the same is claimed by Technopark.
- iv. The power purchase cost in respect of Technocity and Kollam connection is not tallying with KSEB Ltd records.

Analysis and decision of the Commission

- 11. The Commission has carefully considered the licensee's petition for Truing Up of Accounts for the year 2019-20, the additional clarifications submitted by the licensee on 18.10.2021, the counter statements furnished by the KSEB Ltd vide their letter dated 28.10.2021 and the views presented by the licensee during the hearing held on 26.10.2021.
- **12.** The analysis and decisions of the Commission on the truing up petition for the Financial Year 2019-20 and other submissions is detailed below.

Energy sales

13. As per the approved ARR Order dated 24-03-2020 the projected sale of power for the year 2019-20 was 936.46 lakh units. In their truing up petition, the licensee has mentioned the actual sales as 884.69 lakh units. Compared to the actual sales of Rs.865.76 lakh units in the year 2018-19 there is an increase of 2.19% in the current year sales. The phase wise energy sale is as shown below.

Table- 2
Phase wise energy sales for 2018-19 and 2019-20

Particulars	2018-19 (In lakh units)	2019-20 (In lakh units)	% Increase
Phase I	596.86	593.21	-0.61%
Phase II &III	264.07	286.32	8.43%
Technocity	0	0.10	-
Kollam	4.83	5.06	4.76%
Total	865.76	884.69	2.19%

14. From the above Table, it is clear that for Phase I, there is 0.61% decrease in energy sales compared to the previous year. Regarding Phase II and III, there is an increase of 8.43% in energy sales. The energy sale of Kollam has also increased by 4.76%. The Commission after examining the above approves the actual energy sale of 884.69 lakh units for the year 2019-20.

No. of Consumers

15. As per the petition, the number of consumers is 876 for the year 2019-20 which shows that there is an increase of 4 consumers compared to the previous year 2018-19. The phase wise details of number of consumers furnished by the licensee is shown below:

Table - 3
Phase wise details of consumers for 2019-20

Particulars	Phase I	Phase II & III	Technocity	Kollam	Total Consumers
LT consumers	557	248	0	49	854
HT consumers	17	4	1	0	22
Total No.	574	252	1	49	876

16. For the immediate previous year 2018-19, the phase- wise break up is as under.

Table-4
Phase wise details of consumers for 2018-19

Particulars	Phase I	Phase II & III	Kollam	Total Consumers
LT consumers	559	239	54	852
HT consumers	17	3	0	20
Total No.	576	242	54	872

- **17.** The Commission has noted that even though a new site Technocity has been added, there is only one HT consumer there and only a marginal growth in the number of consumers of the licensee, when compared to the previous year.
- 18. The detail of the consumer strength for the year 2018-19 and 2019-20 is furnished in the table below. The major portion of the consumer strength is contributed by the LT consumers. i.e., about 97% (854 consumers) of the consumer strength. A new site, Technocity, has been added in 2019-20 with a single consumer in HT -II (A) General category.

Table-5
Details of consumer strength for the year 2018-19 and 2019-20

	2018-19 2019-20								
Particulars	Phase I	Phase II &III	Kollam	Total	Phase I	Phase II &III	Technocity	Kollam	Total
LT – IV B IT/ITES below 10kW	54	121	39	214	55	124	0	39	218
LT – IV B IT/ITES above 10kW up									
to 20kW	53	28	3	84	53	28	0	3	84

LT – IV B IT/ITES above 20kW	198	45	7	250	204	45	0	1	250
LT - VI (A) General	3	0		3	3	0	0	0	3
LT VI (B) General	9	0		9	9	0	0	0	9
LT VI (C) General (1ph or 3 ph)	30	5		35	30	7	0	0	37
LT VI (F) General (1 ph)	28	19		47	25	22	0	1	48
LT VII (A) Commercial (1-Ph)	51		2	53	49	0	0	2	51
LT VI (F) General (3 ph)	43	7	0	50	40	7	0	0	47
LT VII (A) Commercial (3-Ph)	57	4		61	56	5	0	0	61
LT VII (B) Commercial	11	0		11	11	0	0	0	11
LT IV A Industrial below 10 KW	1	0		1	1	0	0	0	1
LT IV A Industrial above 10 KW									
below 20 KW	2	5		7	2	5	0	0	7
LT IV A Industrial above 20 KW	2	2	2	6	2	2	0	2	6
LT VI (G) General	1	0		1	1	0	0	0	1
LT IX Display Lighting and Hording	1	1		2	1	1	0	0	2
Self Consumption	1	1		2	1	1	0	0	2
Street Lighting	14	1	1	16	14	1	0	1	16
Sub Total (LT)	559	239	54	852	557	248	0	49	854
HT -I (B) IT & IT Services	14	3	0	17	14	4	0	0	18
HT -II (A) General	1			1	1	0	1	0	2
HT II B	1	0		1	1	0	0	0	1
HT- IV Commercial	1			1	1	0	0	0	1
Sub Total (HT)	17	3	0	20	17	4	1	0	22
Grand Total	576	242	54	872	574	252	1	49	876

19. The Commission after examining the particulars submitted by the licensee approves the number of consumers as 876 for the year 2019-20.

Energy Requirement & Distribution Loss

20. As per the petition, the total energy input is 910.16 lakh units, which is inclusive of energy purchased from KSEB Ltd 905.83 lakh units and 4.33 lakh units from the solar plant. The Commission in the Order on ARR&ERC dated 24-03-2020 approved 950.32 lakh units as energy requirement for the year 2019-20. The actual distribution loss claimed by the licensee as per the truing up petition for the Financial Year 2019-20 is 2.80% as against the loss of 1.46% approved by the Commission in the Order on ARR&ERC dated 24.03.2020. The details are tabulated hereunder.

Table-6
Distribution loss for the year 2018-19 and 2019-20

			2018-19	2019-20		
	Particulars	ARR Approved	As per Truing Up Petition	Trued Up	ARR Approved	As per Truing Up Petition
1	Energy sales (lakh units)	881.94	865.76	865.76	936.46	884.69
2	Energy Requirement (lakh units)	868.41	885.24	883.61	950.32	910.16
3	Distribution loss (lakh units)	13.53	19.48	17.85	13.86	25.47
4	Distribution loss (%)	1.53%	2.20%	2.02%	1.46%	2.80%

^{*} Includes solar generation of 4.33 lakh units.

21. The phase wise details of distribution loss furnished by the licensee are shown below.

Table 7
Phase wise distribution loss as per the petition for 2018-19 and 2019-20

2018-19								
Particulars	Phase I	Phase II & III	Kollam	Total				
Energy Purchased & Solar (lakh unit)	609.26	270.41	5.57	885.24				
Energy Sold (lakh unit)	596.86	264.07	4.84	865.77				
Distribution Loss (lakh unit)	12.4	6.35	0.73	19.48				
Distribution Loss (%)	2.04%	2.35%	13.15%	2.20%				

2019-20									
Particulars	Phase I	Phase II &III	Technocity	Kollam	Total				
Energy Purchased & Solar (lakh unit)	611.23	293.02	0.44	5.47	910.16				
Energy Sold (lakh unit)	593.21	286.32	0.10	5.06	884.69				
Distribution Loss (lakh unit)	18.02	6.70	0.34	0.41	25.47				
Distribution Loss (%)	2.95%	2.29%	77.27%	7.50%	2.80%				

- 22. The above table reveals that, there is a decrease in loss in phase-II & III as well as Kollam compared to the previous year, though higher than the ARR approved losses of 1.21% and 2.00% respectively. The Commission noted that there is an increase in loss to 2.95% in Phase 1 compared to the previous year loss of 2.04%.
- **23.** According to the licensee, the present level of distribution loss of 2.80% is due to the following reasons.
 - i. The expected load has not been picked up in Technopark Kollam and Technocity campus.
 - **ii.** Because of higher percentage of fixed energy losses, the overall distribution loss is high.
 - iii. As these are new campuses and new companies are only coming up

gradually.

- iv. The transformers and switch gears used in Phase I are 20 years old.
- 24. The licensee stated that in Kollam campus, in order to reduce the distribution losses, the licensee has disconnected one of the two incoming feeders from KSEB Ltd which supplies power to the substation. The total losses include all losses related to transformers, HT, LT power cables and switch gears. The licensee further stated that Solar generation was inadvertently omitted in the ARR loss calculation which made the loss estimate lower and requested to condone the inadvertent mistake.
- **25.** The Commission during the hearing commented that there is no chance of incurring 2.95% and 2.29% loss in Phase 1 and Phase II and III; if incurring such losses, there is chance of leakage in the underground cables.
- **26.** The counter statement by KSEB Limited, seller Licensee to Technopark with regard to T&D loss vide letter dated 28.10.2021 is quoted below.
 - "Hon. Commission had approved overall distribution loss of 1.46% in the ARR order for the year 2019-20. As per the true up petition, T&D works out to 2.80%. It is submitted that the cost incurred for additional power procurement due to higher loss may be disallowed."
- 27. As per the details furnished by the licensee, the distribution loss for the year is higher than the approved loss level. As per Regulation 12 of the Tariff Regulations, 2018, distribution loss is a controllable factor and Regulation 72(4) specifies the mechanism for sharing the gains or losses on account of distribution loss.
 - "72 (4). Any variation between the actual level of distribution losses and the approved level of distribution losses shall be dealt with, as part of the truing up of the respective financial year in the control period, in the following manner:-
 - (a) If the actual distribution loss is higher than the approved level of distribution loss for any particular financial year of the
 - (b) , then the quantum of power purchased corresponding to the excess distribution loss for that financial year, shall be disallowed at the average cost of power purchase for the respective financial year;
 - (c) If the actual distribution loss is lower than the approved level of distribution loss for any particular financial year of the control period, then the savings in power purchase cost corresponding to the difference in distribution loss for that financial year at the average cost of power purchase for the respective financial year, shall be shared between the distribution business/licensee and the consumers in the ratio 2:1."

Energy Audit

- 28. An energy audit was conducted for Technopark Phase I, Phase III and Kollam Campus during May 2019. As per the licensee, the audit was conducted by approved audit party, Kerala Productivity Council. An amount of Rs 24.83 lakh was paid to the auditor in FY 2019-20. The licensee further submits that the energy loss in the system was reduced as part of the action taken based on the Energy Audit report.
- **29.** The Commission vide letter dated 04-10-2021 sought clarification to submit a detailed note showing the area of improvements based on the energy audit, to quantify the benefits achieved and to furnish a copy of the energy audit report.
- **30.** As per the energy audit report furnished by the licensee, the following are some of the observations & suggestions for improvement of energy efficiency in the system.
 - a) Conduct periodical visits in the consumer premises by the Technopark supervisors so that any unaccounted power consumption in the consumer side can be prevented.
 - b) Provide suitable harmonic filters at incomer side of each connection (at LT side for HT connections) thereby avoid the adverse effects of harmonics on nearby/overall system.
 - c) Maintain a fool proof system so that the unaccounted metering loss if any can be prevented.
 - d) To provide VFD control for the existing chiller pumps control with differential discharge line pressure as feedback.
 - e) To provide VFD for the condenser pumps with condenser inlet water temperature as feedback so that the speed as well as the flow of pumps can be controlled based on the chiller operation and speed results in reduced energy consumption.
 - f) To provide ON/OFF control for the CT fan so that CT fan operation can be optimized.
 - g) To provide lighting energy saver to reduce the lighting consumption.
 - h) Operate all the APFC in auto mode rather than manual mode to avoid the leading Power factor condition in the facilities.
 - i) Repair all faulty APFCs and maintain in healthy condition to have better electrical distribution system.
 - j) Providing capacitors of smaller value (5/10 kVAr) can achieve better overall system power factor.
 - k) Filters of the AHU units are recommended to service periodically.

- I) Recommended to operate the AHU actuator control valve automatically rather than manual control. So that optimum chilled water flow can be maintained with the chiller pump.
- m) The rated efficiency of the motors for pumping are very low it's between 70-80% but presently energy efficient pumps with efficiency greater than 90% is available.
- n) Recommended to replace the old and re wounded motors to energy efficient motors.
- Recommended to incorporate maximum natural lighting as possible so as the dependency on the artificial lighting can be reduced.
- p) Provide the occupancy sensors for the AHU rooms& electrical rooms. Also proper lighting controls throughout the facility.
- q) Provide adequate awareness on energy conservation to the staffs and trainees.
- r) Provide energy conservation posters and stickers throughout the facilities to spread the awareness on energy savings.
- 31. The licensee stated that the energy loss in the system was reduced as part of the action taken based on the Energy Audit Report. The licensee further states that the following measures were taken based on the audit report recommendation by the Petitioner to control losses and improving performance.
 - a) Technopark has replaced/corrected the low accuracy class energy meters & CT's and also informed consumer to replacing the low accuracy class energy meters/CT's with new one. Based on this, consumers are replacing the inefficient meter/CT. This will reduce the overall AT&C losses.
 - b) Technopark has corrected the polarity and phase sequence of metering CTs in all campuses of Technopark to reduce the metering error.
 - c) Technopark has directed the consumers, that their harmonic value is below the permissible limit and some of the consumers are corrected their harmonics level within the limit.
 - d) Technopark has checked and sealed all the energy meters of consumers and is periodically checking the status of meter sealing for ensuring that no tampering is being occurred.
 - e) Technopark has initiated to upgrade the contract demand of Technopark Phase-III campus from 5MVA to 8MVA to avoid the excess demand Charges.

- f) Technopark has informed the consumers, that their power factor level is below the acceptable value and have charged penalty as per tariff order in their power bills. Some of the consumers have taken necessary action for improving their power factor.
- g) Technopark has conducted preventive maintenance of all the APFC panels of Technopark common facility load (Chillers, Lift, Motors etc.), repaired all faulty APFC panel and operated most of the APFC in auto mode for improving the power factor.
- h) Technopark has replaced all the conventional light (MH, SV, Fluorescent tube, CFL, etc.) with energy efficient LED lights. In this practice, Technopark has saved a considerable amount of energy.
- i) Conducted an awareness program based on energy conservation for all staff, trainees, and consumers.
- j) Provided energy conservation posters and stickers throughout its campuses for awareness of energy savings.
- 32. The Commission examined all the details submitted by the licensee. The Commission is at a loss to understand as to how the 2018-19 distribution loss of 2.04% in the Truing Up petition for Phase 1 has increased to 2.95% in 2019-20. Further, it is to be noted that this huge increase in loss of 44.61% over the previous year occurred when the energy audit was over as early as in May 2019. The above facts reveal that the licensee has not exercised due safeguards to prevent such abnormal losses. Further all energy audit recommendation based actions claimed to have been taken by the licensee has clearly failed especially in the case of Phase 1. The Commission would like to draw the specific attention to the licensee's top management to enquire whether a proper energy audit was indeed conducted by duly qualified energy auditors. Hence this excess loss especially in Phase 1 is disallowed.
- 33. Regarding Phase 2 and 3, there is a marginal decrease of 0.06% compared to the Truing Up figures submitted by the licensee when compared to the current year. As far as Kollam is concerned the decrease in loss percentage of 5.65% is perhaps due to disconnection of one of the two incoming feeders from KSEB. Based on the current figures, the Commission is not in a position to assess and state as to what impact and to what extent the energy audit measures thereafter have contributed to this decrease, if at all.
- 34. Regarding Technocity having just one HT Consumer and a load of 0.44 lakh units, the actual sale is just 0.10 lakh units and the loss of 0.34 lakh units amounting to a distribution loss of 77.27%. In view of this scenario, the Commission hereby directs the licensee to take a commercial decision regarding the viability of the distribution business here. Alternatively,

KSEB Ltd may be requested to supply power at this site till such time that the business picks up both in terms of the number of consumers and quantum of load.

- 35. The Commission further notes that the overall distribution loss is high compared to the previous year in spite of the measures said to have been taken in the energy audit conducted to reduce energy losses. Since distribution loss is a controllable parameter, any relaxation in the target without due and justifiable reasons will affect the efficiency of the licensee. But considering the efforts taken by the licensee to reduce the losses in Phase II & III and Kollam, and considering Solar generation inadvertently omitted in the ARR loss calculation, the Commission retains the trued-up loss for 2018-19 ie.2.02% which is less than the current year truing up loss of 2.80% and higher than the ARR approved loss of 1.46%.
- 36. However, the licensee shall strive continuously to reduce the overall distribution loss and achieve energy efficiency in all phases. An action taken report on the Commission's recommendations at Para 34 shall be provided within 3 months of the date of this Order. The Commission will be forced to limit the distribution loss to ARR approved level in the next truing up if the target is not achieved by the licensee. The Commission hereby directs the licensee to quantify the benefits, loss reduction etc achieved through energy audit in the next truing up petition.
- **37.** As per the provisions of Regulation 72(4) (a), since the distribution loss is higher than the approved level, the quantum of power purchased corresponding to the excess distribution loss, shall be the disallowed at the average cost of power purchase for the year. Accordingly, the quantum of power purchased for over and above the approved distribution loss of 2.02% is disallowed as shown below:

Table- 8
Distribution loss approved for the year 2019-20

		2019-20	
Particulars	Approved in ARR	As per Truing Up petition	Approved in Trued Up
Total Energy Sales (In lakh units)	936.46	884.69	884.69
Energy Requirement (In lakh units)	950.32	910.16	902.93
Distribution loss (In lakh units)	13.86	25.47	18.24
Distribution loss (%)	1.46%	2.80%	2.02%
Excess Distribution loss (In lakh units)			7.23

38. As shown above, the Commission hereby approves the distribution loss at 2.02%. Since the distribution loss is higher than the approved level, the

quantum of power purchased corresponding to the excess distribution loss of Rs.7.23 lakh units is hereby disallowed at the average cost of power purchase for the year.

Power Purchase Cost

39. The total power purchase cost for the year 2019-20 as per the petition is Rs. 5770.58 lakh for a purchase of 905.83 lakh units at an average cost of Rs.6.37 per unit. The Commission had, in the ARR Order, approved a power purchase of 950.32 lakh units at a purchase cost of Rs.5988.56 lakh and average cost of Rs.6.30 per unit. The phase wise power purchase cost for the year 2019-20 is tabulated below.

Table-9
Phase wise power purchase cost claimed for the year 2019-20

	Maximum	Energy	Fixed	Variable	Incontivo	Other	Total
Campus	demand	Received	charges	charges	Incentive (Rs lakh)	charges	charges
	uemanu	(lakh units	(Rs lakh)	(Rs lakh)	(NS Iakii)	(Rs. lakh)	(Rs. lakh)
Phase-1	171,910	611.07	567.53	3,307.66	-	0.11	3,875.30
Phase -2&3	76,980	288.84	280.94	1,563.38	-	0.04	1,844.36
Phase -4	1,282	0.44	4.36	1.66	(0.01)	0.17	6.18
Technocity	1,202	0.44	4.30	1.00	(0.01)	0.17	0.10
Phase -5 Kollam (2)	3,600	5.47	11.85	32.79	(0.62)	0.71	44.73
Total	253,772	905.83	864.69	4,905.48	(0.63)	1.03	5,770.58

- **40.** The above Table shows that, the power purchase cost of Rs.5770.58 lakh as claimed by the licensee is lower compared to the approved power purchased cost of Rs.5988.56 lakh in ARR Order for the FY 2019-20. The trued-up power purchase cost was Rs.5327.26 lakh for the year 2018-19.
- 41. The Commission had sought reasons for power purchase costs of Rs.5764.40 lakh in form D.1.1 not matching with the amount of Rs.5770.58 lakh shown in form D.3.1. The licensee submitted that, the difference of Rs.6.18 lakh is the cost of power purchase for Technocity Campus invoiced by KSEB Ltd for the FY 2019-20. Technopark had deferred payment of these invoices for want of certain clarifications from KSEB Ltd. However, since Technopark had billed its customer in Technocity campus, the power purchase cost from KSEB Ltd was included in the form D.3.1. Based on the clarification by KSEB Ltd, the payments were made during the Financial Year 2020-21. Since the actual payment for power purchase cost of Rs.6.18 lakh for the year 2019-20 was made only in 2020-21 the claim now made is disallowed. The licensee can claim this amount of Rs.6.18 lakh against 0.44 lakh units purchased for Technocity Campus during the truing up of accounts for the year 2020-21.

42. As per the submission of KSEB Ltd, the following differences are noted in the power purchase cost with that in the records of KSEB Ltd.

Table-10

Difference in power purchase cost as per petition and KSEB records

	As per the petition					As per KSEB Ltd.			
	Units (lakh)	Fixed charges (Rs lakh)	Variable charges (Rs lakh)	Total charges (Rs.Lakh)	Units	Fixed charges (Rs lakh)	Variable charges (Rs lakh)	Total charges (Rs.Lakh)	
Technocity	0.44	4.36	1.66	6.02	0.44	6.9088	2.4392	9.438	
Kollam	5.47	11.85	32.79	44.73	5.47	11.85	57.90	79.75	

- 43. The Commission hereby directs the licensee to reconcile the difference in power purchase figures with that of KSEB Ltd within a period of 3 month from the date of issue of this Order.
- **44.** As shown in Table 8, the power purchase requirement at the approved distribution loss is 902.93 lakh units, whereas the actual power purchase including solar is 910.16 lakh units resulting in excess distribution loss of 7.23 lakh units. This cost of excess distribution loss, amounting to Rs.46.06 lakh is disallowed at the average cost of power purchase at Rs.6.37 per unit as per Regulation 72(4)(a).
- 45. As per the details furnished by the licensee, the average power purchase cost for the year 2019-20 is worked out at Rs.6.37/kWh. As per Regulation 72, excess distribution loss, shall be disallowed at the average cost of power purchase. The approved distribution loss is 2.02% whereas the actual distribution loss is 2.80%. The excess energy lost is 7.23 lakh units. Based on this, the approved power purchase cost is worked out as shown below.

Table-11
Power Purchase Cost approved for the year 2019-20

	Particulars		
1	Total cost of power purchase (Rs. lakh) [5770.58 – 6.18]	5764.40	
2	Actual quantum of power purchased (in lakh units) [905.83 – 0.44]	905.39	
3	Average cost of purchase (Rs. /kWh) (1) / (2)	6.37	
4	Excess distribution loss (in lakh units) (Table- 8)	7.23	
5	Efficiency Loss (Rs.lakh) (6.37*7.23)	46.06	
6	Power purchase approved for 2019-20 (1-5) (Rs. lakh)	5718.34	

46. The efficiency loss for the excess distribution loss of Rs.46.06 lakh is hereby disallowed from the power purchase cost and the Commission hereby approves the power purchase cost of Rs.5718.34 lakh for the

purpose of truing-up for 2019-20.

Operation & Maintenance Expenses

- 47. The Operation & Maintenance expenses include controllable expenses like Employee Cost, Repair & Maintenance Expenses & Administrative & General Expenses. The Commission as per Regulation 79(3) of the Tariff Regulations, 2018 had approved the licensee to recover O&M costs as per norms specified in the Regulations for the year 2019-20. The Commission had vide ARR order dated 24-03-2020, approved the O&M expenses for the period 2019-20.
- **48.** In the counter statement by KSEB Limited vide letter dated 28.10.2021, with regard to O&M expenses, KSEB Ltd stated that the O&M expense is 139% higher than the approved ARR amount for 2019-20. Section 3(1) duty is also claimed by the licensee. KSEB ltd requested the Commission to take a uniform approach regarding Section 3(1) duty. They also stated that the R&M expenses seem too high and requested to limit the O&M expenses within the specified norms.
- **49.** The licensee has furnished the O&M expenses in the petition for truing up for 2019-20 which is higher than the norms specified by the Commission. A comparison of the expenses under O&M in the licensee's petition for truing up and the amount approved in the ARR order are tabulated below: -

Table-12
Comparison of the O&M Expenses for the year 2018-19 & 2019-20

	2018-19	2019-20	2019-20
Particulars	Trued up	ARR approved	True up claim
	(Rs. lakh)	(Rs. lakh)	(Rs. lakh)
Employee expenses	22.55	31.43	39.15
R&M Expenses	263.67	191.72	479.98
A&G Expenses	29.98	54.76	145.79
Total	316.20	277.91	664.92

50. The above table shows that, the O&M expenses claimed by the licensee as per truing up claim for 2019-20 is Rs.664.92 lakh. This is higher than the previous year's trued up amount of Rs.316.20 lakh and also above the approved amount of Rs.277.91 lakh in the ARR Order for 2019-20. The Commission notes that the employee cost, R&M expenses and AG expenses have significantly increased when compared to the previous year's trued up values and the ARR approved figures. Each of these items are discussed below.

Employee Cost

51. The major items booked under Employee Cost are Consolidated pay, salaries, dearness allowances, HRA, other allowances etc. In their truing up petition for

2019-20, the licensee has claimed Rs.39.15 lakh as against the approved amount of Rs.31.43 lakh as per the norms specified in Tariff Regulations 2018. The total employee cost claimed by the licensee as per the petition is shown below.

Table 13
Employee wise cost for the year 2019-20

No	Designation	Posts	Gross Salary	Ratio	Apportioned
INO	Designation	PUSIS	(Rs. In lakhs)	Kallo	(Rs. In lakhs)
1	Chief Finance Officer	1	18.72	20%	3.74
2	DGM (Projects)	1	17.70	25%	4.43
3	Deputy Manager (Electrical)	1	7.66	100%	7.66
4	Asst. Manager Finance	1	10.68	20%	2.75
5	Jr. Finance Officer	1	6.93	20%	1.73
6	Sr. Executive Finance	1	3.79	75%	2.84
7	Apprentice Trainee	1	1.20	50%	0.60
8	Jr. Electrical Engineer	1	1.76	100%	1.76
9	Supervisors/Meter reader	4	14.56	75%	10.92
10	Civil Engineer	1	3.30	25%	0.83
	Total		92.99		39.15

52. The split up of the employee expenses as per form D 3.4(a) is claimed for the year 2019-20 is shown below.

Table-14 Employee cost for the years 2018-19 and 2019-20

	2018-19	2019-20
Particulars	Trued up	Truing Up
i aiticulais	(Rs. lakh)	claim (Rs. lakh)
Basic Salary	13.35	14.78
Dearness Allowance (DA)	7.14	2.96
House Rent Allowance	0.38	0.53
Other Allowances (CCA)	0.08	0.09
Personal Pay	0.13	0.10
Arrears	0.84	-
Consolidated Pay	-	20.69
Staff welfare expenses	0.62	-
Grand Total	22.55	39.15

53. The licensee in the petition stated that the Employee Cost includes only the salary and benefits paid to the permanent employees of Technopark directly involved in the distribution business activity. As per the licensee, the ratio for

apportioning the cost is the same as that has been approved by Commission in Truing up order for the previous year. The petitioner stated that they had submitted the recast employee expenses for previous year as directed by the Commission. The same ratio and approach are taken for the current year also and accordingly, the employee expense is Rs.39.15 lakh for this year. The gross employee cost submitted for truing-up in FY 2018-19 was Rs.22.55 Lakh whereas the recast value was Rs. 35.07 Lakh. The licensee submitted that there is only one permanent employee, Deputy Manager (Electrical), who is full time employed and directly managing the business of electricity distribution. The licensee further submits that the Junior Engineer working full time in the department is temporally hired and all maintenance services are carried out through contractors.

- 54. In the petition, it is also stated that the Salary and benefits given to direct employees of Technopark is disbursed on the basis of the pay scale approved by the State Government. The licensee further stated that there are some employees engaged partially or fully in the distribution business, to whom the remunerations are given as consolidated pay. As per the licensee, remuneration to Chief Financial Officer, Senior Executive Finance, Supervisors, Jr. Electrical Engineer, Civil Engineer and the apprentice are consolidated payments. It is submitted that the employee cost including supervisors and meter readers are also included in the employee cost. It is also submitted that the staff welfare Expenses has been discontinued from 2019 February as reported in previous year True-up petition. As per the licensee, the increase in employee cost is about 12% when compared to the recast expenses of previous year. The licensee states that this is because of the normal increment given to the employees.
- 55. The Employee cost claimed by the licensee in truing up petition for the year 2018-19 amounted to Rs.22.55 lakh which was recasted to Rs.35.07 lakh. The recasted employee cost include the additional employee cost of Rs.12.52 lakh for Sr. Executive Finance, Apprentice Trainee, Jr. Electrical Engineer, Supervisors/Meter reader and Civil Engineer. The licensee has used the same ratio of apportionment in the year 2019-20 for above mentioned employees. The employee cost of recasted employees for the year 2018-19 and 2019-20 are shown below.

Table-15
Additional Recasted Employee cost for the years 2018-19 and 2019-20

			201	2018-19		2019-20	
			Gross	Apportion	Gross	Apportion	
Designation	Posts	Ratio	Salary	ed cost	Salary	ed cost	
			(Rs. In	(Rs. In	(Rs. In	(Rs. In	
			lakhs)	lakhs)	lakhs)	lakhs)	
Sr. Executive Finance	1	75%	3.02	2.27	3.79	2.84	
Apprentice Trainee	1	50%	1.18	0.59	1.20	0.60	
Jr. Electrical Engineer	1	100%	1.76	1.76	1.76	1.76	
Supervisors/Meter reader	4	75%	9.69	7.27	14.56	10.92	
Civil Engineer	1	25%	2.56	0.64	3.30	0.83	
Total			18.21	12.52	24.60	16.95	

- 56. The Commission vide letter dated 04-10-2021 sought clarification to submit the rationale for arriving at the percentage applied for apportionment of employee cost to distribution business. The licensee submitted that, the ratio for apportioning the cost is the same as that has been approved by the Commission in the Truing up order for the previous year. The licensee further stated that they had submitted the recast employee expenses for previous year as directed by the Commission in Daily Order dated 11-11-2020 on the public hearing on the Truing-up petition for FY 2018-19. The licensee had submitted the recast employee cost vide clarification dated on 20-11-2020. The licensee also stated that, the ratio adopted in that submission has been followed in the present petition also for apportionment of employee cost.
- 57. The Commission examined the submissions of the licensee and observed that the recasted employee cost is apportioned by the licensee on the basis of time and effort used for distribution business. Therefore, the Commission hereby approves the recasted employee cost of Rs.16.95 lakh for the year 2019-20.
- 58. Thus, the actual employee cost approved by the Commission is Rs.39.15 lakh (including the recasted employee cost of Rs.16.95 lakh) for the year 2019-20.

Repair & Maintenance Expenses

59. The licensee in the petition states that the operation, maintenance and repairs of the distribution system in Technopark license area is carried out by licensed electrical contractors. The contract is awarded after a due transparent process of competitive tendering as per the existing rules and government directions. The tenders for R&M works are invariably invited through the government e-tendering portal. Thus, it is ensured that contract amount discovered is the lowest possible price. The details of the R&M contracts are given in the table below.

Table-16
Details of R&M Contracts awarded

Campus	Contractor	From	То	Contract Value	
Phase-1 -	Sterling & Wilson	01-04-17	31-03-20	Rs 786.74 Lakh	
Kazhakkuttam	Sterling & Wilson	01-04-17	31-03-20	KS 700.74 Lakii	
Phase 2 & 3 -	AEGIS Power Engineers	01-01-19	31-12-21	Rs 146.6 Lakh	
Kazhakkuttam	ALOID I OWEI LIIGINEEIS	01-01-19	31-12-21	113 140.0 Lakii	
Phase 3 – 110 kV	Sterling & Wilson P Ltd	01-03-19	29-02-20	Rs 45.69 Lakh	
Substation	Sterling & Wilson F Ltu	01-03-19	29-02-20	115 45.09 Lakii	
Phase 5 - Kollam	AEGIS Power Engineers	01-06-18	31-05-19	Rs 29.88 Lakh	
Phase 5 - Kollam	AEGIS Power Engineers	01-06-16	31-05-20	Rs 32.27 Lakh	

60. During the year 2019-20, the total R&M Costs were Rs.479.98 lakh. The phase wise expenses are shown in Table below. There is approximately 23.40% and 4% increase in cost for Phase-1 and Phase-5 respectively, whereas the cost decreased by 6% for Phase-2&3 compared to the expenses for last year. Materials and Spares purchased during the year for this purpose was Rs.5.4 lakh.

Table-17
Phase wise actual R&M expense for the years 2018-19 & 2019-20

	2018	3-19	2019-20	% increase/
Particulars	Truing up	Trued up	Truing up	decrease over
Faiticulais	claim	•	claim	previous true up
(Rs.lakh)		(Rs.lakh)	claim	
Technopark Phase I	291.89	155.08	360.18	23.40%
Technopark Phase- II &III	87.77	80.28	82.72	-5.75%
Technopark Kollam	30.46	28.31	31.68	4.00%
Material and Spares	-	-	5.39	
Purchased				
Total	410.12	263.67	479.98	17.03%

- **61.** The licensee in their petition has claimed R&M Costs of Rs.479.98 lakh, as against Rs.191.72 lakh, the normative cost fixed by the Commission as per the Tariff Regulations 2018.
- **62.** The licensee further stated in their petition that, the methodology adopted by the Commission for specifying the normative O&M costs for the Distribution licensees other than KSEB is arrived at based on the actual/approved expenses in the previous control period and by applying escalation factor. The licensee further stated that application of average escalation factors for arriving at the cost in the Regulation does not reflect the reality and broadens the gap between the real and approved costs. The licensee requested the Commission to consider the fact

that the R&M contracts were awarded after a fair and transparent process or online tendering where there were a fair number of competitive bids for the contract
and that there is little scope for the reducing these costs. There is no way to
compensate for the substantial gap between the actual R&M cost genuinely
incurred and that allowed in the ARR. The licensee also stated that the
Commission may please note that this difference in cost does not in any way
reflect any defect or inefficiency on the part of the petitioner. The cost incurred is
the lowest discovered through transparent bidding. The petitioner is legally bound
to the contracted amount that was discovered through transparent bidding
process. The licensee also requested to the Commission to allow the petitioner to
meet the actual expenses in this respect. The licensee further states that there
were considerable disallowances in the trued-up costs of the previous control
periods which broadened the gap between the real cost and the projected cost.

- 63. The licensee was also directed vide the Order dated 08-4-2021 for Truing Up of Accounts for the year 2018-19 to submit detailed split up of expenditure along with justification thereof for the wide variation between the petition figure and the approval of R&M expenditure. The licensee vide letter dated 18-10-2021 has submitted the explanation, which stated that in respect of the R&M expenses, the Commission may please note that the operation, maintenance and repair of the electrical system is carried out through contractors by inviting competitive bids. The administrative and management of the distribution business is done by very few staff directly employed by Technopark. The petitioner had already submitted the tender documents on 23-10-2020 itself. The Commission had fixed the norms for the R&M expenditure in each control period based on the previous period average trued up expenditure and then applying an inflation index. However, there was high disallowance in the years previous to the Multi-Year Tariff Regulation was implemented. This has reflected in the fixation of norms by the Commission. When there were no data available for trued up expenditure, the Commission took certain assumptions to arrive at the norm. This was also not been addressed and corrected later. This has caused the gap between actual expenditure and norms to widen more and more during passage of each period. Now the norms are almost half of the truing up expenses and has become unviable for a small licensee to sustain the business. Often the licensee has to use funds of the main business to support the distribution business. The licensee pleaded the Commission to kindly revisit the process of fixing norms for R&M expenses so that the business is self- sustainable. The licensee also stated that this matter was repeatedly requested to the Commission in various truing up petitions.
- **64.** The Commission has examined the details of the R&M expenses of the licensee. There is an overall increase of 17.03% in R&M expenses claimed over the claim

- for the previous year. The increase is mainly contributed by the increase in R&M expenses for phase I at 23.40%. In Kollam campus, the increase is about 4%. In Technopark Phase II & III, there is a decrease of 5.75% in R&M expenses over the previous year. The licensee stated that the contract for R&M works is being outsourced and the agency is selected through competitive bidding process.
- 65. The Commission vide letter dated 04-10-2021 sought clarification for the increase in R&M expense over the previous year as well as ARR approved amount. The licensee states that the R&M expenses allowed in the regulation and approved in the ARR order as well is Rs. 191.72 lakh. As per the licensee, the operation, repairs and maintenance of the electrical system in Technopark campuses are carried out through contractors after a transparent process of competitive tenders. Therefore, the amount incurred under this head is the minimal amount payable for the R&M activities. Further, the licensee states that the amount allowed in the ARR is insufficient to meet the actual cost. The licensee further states that the Commission may revisit the methodology adopted for fixing R&M norms for the petitioner. The licensee stated that, the contractor, M/s. Sterling and Wilson, had submitted their invoice for March 2019 (previous year) amounting to Rs.25.83 lakh only during May 2019 and paid subsequently. The licensee further stated that, if the said amount is added to the previous year (2018-19) figure, the total R&M expenses would be Rs.426.94 lakh (i.e., Rs.401.11 lakh + Rs.25.83 lakh) for FY 2018-19 and the same for FY 2019-20 would be Rs.448.75 lakh (i.e., Rs.479.98 lakh – Rs.25.83 lakh). Thus, as per the licensee the increase in R&M expenses over previous year would only be a nominal 5.11% only, if the above figures are taken for comparison.
- was Rs.410.12 lakh and the Trued Up amount was Rs.263.67 lakh. However, in the present petition licensee stated an amount of Rs.401.11 lakh as recasted R&M for the year 2018-19. The licensee has not submitted the any details of this recasted amount showing the Form D 3.4(c) of present Truing Up petition. The Commission further notes that there is an error in the total R&M expense figure for 2019-20 submitted by the licensee in the clarification above. The actual figure should have been Rs.454.15 lakh (i.e., Rs.479.98 lakh-Rs.25.83 lakh). The licensee further stated that, the invoice amount of Rs.25.83 lakh for March 2019 of M/s. Sterling and Wilson had submitted only during May 2019 and this was paid subsequently in 2019-20. In this regard, the licensee has not produced any invoice and proof of payment. Since the licensee has not provided full details of the payment made, the Commission is not in a position to consider the said adjustment.
- **67.** The licensee has filed a Petition on 18.12.2020 for approval of O&M staff engaged in power distribution business of the licensee. The Commission vide

Order No 48/2020 dt 08.04.2021 rejected the said petition as the justifications were unreliable and vide Para 10 of the said Order, directed the petitioner to conduct a prudent work study so as to estimate the optimum level of staff required for O&M activities in their various campuses, and to renegotiate the labour component with the contractor for the reduction of the O&M contract staff. The Commission directed to conduct this exercise within four months from the date of the above-mentioned Order.

- 68. The petitioner, in this regard, submitted that the matter was placed at the 128th Executive Council of Techopark and as approved by the council, Technopark is in the process of preparing a Request for Proposal (RFP) to conduct prudent study on all the O&M activities including power distribution. The licensee also submitted that they will be submitting the report of the study to the Commission once the report is received.
- 69. The Commission after examining the above details is not in a position to approve the entire expenses as claimed by the licensee in the petition as the work study is not yet started and the report not submitted. Hence, the Commission hereby directs the licensee to submit a copy of report on prudent study on all O&M expenses.
- **70.** The Commission in the ARR&ERC Order while determining the norms for the R&M expenses for the control period had considered the approved R&M expense for 2019-20 by taking average of expenses from 2012-13 to 2014-15 and escalated at a rate of 4.84 %. The Commission has adopted the same methodology for 2018-19 also. Considering the escalation rate of 4.84% over the approved R&M expense for 2018-19, the Repair and Maintenance expenses approved for the year 2019- 20 is as shown below.

Table-18 R&M expense approved for 2019-20

	2018-19		2019-20	
	As per Truing	Trued	As per Truing	Trued Up
Particulars	Up petition	Up	Up petition	
	(Rs.lakh)	(Rs.lakh)	(Rs.lakh)	(Rs.lakh)
Technopark Phase I	291.89	155.08	360.18	162.59
Technopark Phase-II&III	87.77	80.28	82.72	84.17
Technopark Kollam	30.46	28.31	31.68	29.68
Material and Spares Purchased	-	-	5.39	5.39
Total	410.12	263.67	479.98	281.82

71. The Commission hereby approves the R&M expenses of Rs.281.82 lakh for the year 2019-20.

A&G expenses:

72. The A&G expenses claimed by the licensee for 2019-20 Rs.145.79 lakh, as against the ARR approved amount of Rs.54.76 lakh. A comparison of the split up of the A&G expense for 2018-19 and 2019-20 is shown below.

Table-19
Comparison of A&G Expenses for 2018-19 & 2019-20

		2018-19	2019-20
SI. No.	Particulars	Trued Up (Rs. Lakh)	Truing Up claim (Rs. Lakh)
1	Insurance	1.20	1.64
2	Telephone & Postage, etc.	0.49	0.42
3	Audit Fees	0.30	0.30
4	Conveyance Charges (Hired Vehicle for Distribution Business)	6.60	6.16
5	Electricity charges	10.27	9.39
6	Professional & Consultancy Charges	0.00	24.83
7	Bank Charges	0.06	0.13
8	Petition and other Fees to KSERC / KSEB	2.73	3.11
9	License Fee and related fee to KSERC	2.21	2.18
10	Security arrangements (1 person night duty per station)	0.00	37.66
11	Others Fees (To Electrical Inspectorate and KSEB Ltd)	6.12	7.48
12	Gross A&G Expenses	29.98	93.30
13	Ele. Duty u/s 3(I), KED Act	0.00	52.49
14	Less: Expenses Capitalised	0.00	0.00
15	Net A&G Expenses	29.98	145.79

- 73. The Commission notes that the Net A&G Expenses of Rs.145.79 lakh for the FY 2019-20 includes Payment of Rs.52.49 lakh towards Electricity Duty under Section 3(1) of the Kerala Electricity Duty Act 1963. The licensee states that the Commission has not considered the Duty Component while approving the A&G Expenses in the ARR petition. As per the licensee, the disallowances in the truing up figures are met from the 3% RoNFA usually allowed by the Commission. The licensee also stated that this year the 3% return calculated based on the NFA allowed by the Commission is Rs 55.95 lakh. The licensee further stated that if the Commission disallows this Duty, the entire return on investments made by the petitioner would be wiped out.
- **74.** KSEB Limited in its counter statement vide letter dated 28.10.2021 requested the Commission to take a uniform approach regarding Section 3(1) duty as the same is claimed by Technopark. The Commission in the previous Orders had stated that duty under Section 3 cannot be passed on to the consumers in view of the

- statutory provisions of the Kerala Electricity Duty Act, 1963. As per Section 3(3) of the Electricity Duty Act 1963, the duty under section-3 on the sale of energy should be borne by the licensee and shall not be passed on to the consumers. Accordingly, the amount paid towards electricity duty is not admissible and the Electricity duty amounting to Rs.52.49 lakh is hereby disallowed.
- 75. Another major component, of the A&G expenses is the cost of providing Security Expenses (Rs.37.66 lakh). The licensee submitted that they had redeployed the security staffs in substations to other areas and retained only one staff in all thirteen (13) substations for night duty as directed by the Commission in Order No OA16/2020 dated 08.04.2021. The licensee further submitted that there are already some security cameras installed in substations as part of the general security arrangement and they are in the process of installing new surveillance cameras in all other substations also. Consequently, the expenses booked under this sub category have been reduced to Rs.37.66 lakh (32.96%) in 2019-20 from previous year expense of Rs. 114.24 lakh. The amount payable to Security arrangement per month is Rs 24,140 for one shift. Thus, for all 13 substations the Security expenses was Rs.24,140 x 13 substations x 12 months = Rs.37,65,840/-
- 76. The Commission noted that, the licensee had claimed securitity expenses for 13 substations and not submitted sufficient details and justification for this claim. The Commission is at a loss to understand as to how in such a small complex, there is 13 substations. Apparently, the definition of substation has not been understood properly by the licensee. Further, the Commission is not inclined to accept the licensee's contention of 13 substations and hence cannot accept this claim. If at all any security staff has been deployed in any substation, the licensee shall submit complete details of the number of such security staff, their wages, full justification for their deployment etc. within 3 months of the date of issue of this Order. Hence, the Commission hereby defers the security expenses claim of Rs.37.66 lakh for the year 2019-20. The licensee is also informed that in case no proper response is received, then the Commission shall disallow all expenses under this Head.
- 77. The Professional & Consultancy Charges (Rs.24,82,730/-) constitutes the next highest expense under the A&G expense head. The professional charge is paid to M/s. Kerala State Productivity Council for conducting comprehensive energy audit in all the phases of Technopark (As per supply code 113). The scope of the work are verify HT< meter in all campuses, Transformer loss and distribution loss evaluation, Evaluation of connected capacitor /APFC system, verify AT&C losses and suggesting methods for improvement and evaluate the power quality of the system, etc. The Commission approves the actual Professional & Consultancy Charges Rs.24.83 lakh as a one-time expenditure for the year 2019-20. Thus, the total A&G expenses approved for the year 2019-20 is

Rs.55.64 lakh (Rs.93.30 lakh- Rs.37.66 lakh)

Table-20
Approved A&G Expenses for 2019-20

SI. No.	Particulars	Truing Up claim (Rs. lakh)	Trued Up (Rs. lakh)
1	Insurance	1.64	1.64
2	Telephone & Postage, etc.	0.42	0.42
3	Audit Fees	0.30	0.30
4	Conveyance Charges (Hired Vehicle for Distribution Business)	6.16	6.16
5	Electricity charges	9.39	9.39
6	Professional & Consultancy Charges	24.83	24.83
7	Bank Charges	0.13	0.13
8	Petition and other Fees to KSERC / KSEB	3.11	3.11
9	License Fee and related fee to KSERC	2.18	2.18
10	Security arrangements (1 person night duty per station)	37.66	0.00
11	Others Fees (To Electrical Inspectorate and KSEB Ltd)	7.48	7.48
12	Gross A&G Expenses	93.30	55.64
13	Ele. Duty u/s 3(I), KED Act	52.49	0.00
14	Less: Expenses Capitalised	0.00	0.00
15	Net A&G Expenses	145.79	55.64

78. The Approved O&M expenses for 2019-20 are given below.

Table-21
O&M expenses approved for 2019-20

ARR approved	True up claim	Trued up
(Rs. lakh)	(Rs. lakh)	(Rs. lakh)
31.43	39.15	39.15
191.72	479.98	281.82
54.76	145.79	55.64
277.91	664.92	376.61
	(Rs. lakh) 31.43 191.72 54.76	(Rs. lakh) (Rs. lakh) 31.43 39.15 191.72 479.98 54.76 145.79

79. The Commission hereby approves the Total O&M expenses of Rs. 376.61 lakh for the year 2019-20.

Asset Addition

80. Assets worth Rs. 90.84 lakh has been capitalised in FY 2019-20. The details of assets added are given in the table below.

Table-22 Fixed Asset Addition claimed for the year 2019-20

SI.No.	Asset Addition	Rs lakh
1	11KV Power Distribution System-Phase III	57.37
2	Billing software	4.39
3	50kWP Solar Power Plant Phase III	29.07
	Total	90.84

- **81.** Regarding the 11 KV Power Distribution System-Phase III, the Commission granted approval vide order No. OP 12/2017 dated 13-11-2019. The decision of the Commission in the said order is quoted below.
 - "Commission hereby grant approval for creating necessary distribution infrastructure in the 48 acres of land in the south and south east side of the Phase-III campus at a total cost of Rs 93.37 lakh. The source of fund for the investment is through grant from the State Government and the Commission shall not allow depreciation, interest charges and return on equity on this asset."
- **82.** The licensee had claimed an amount of Rs.4.39 lakh for Billing software and stated in the petition that the existing billing software was modified to include the consumers in Kollam and Technocity Campuses and for additional facilities in the software such as generation of monthly summary tables and graphs for billing, Entry of power purchase bills from KSEB, Solar Bill Generation, Generation of Various reports required for preparing the submissions before the Commission.
- 83. Another Fixed Asset Addition claimed for the year 2019-20 is the 50 kWP Solar Power Plant Phase III of Rs.29.07 lakh. The 50 kWp solar plant in Phase III campus was also installed during the year 2019-20 for which provisional approval was given vide OA No. 25/2020 dated 24-03-2020. In the said order, the Commission noted that most of the works proposed for the years 2018-19 to 2021-22 are not related to the distribution business of the licensee, but could be related to the park business and many of the works are also proposed to be funded through grants. Based on the information furnished for the year 2019-20, the Commission identified 50kWp Roof Top Grid Connected Solar Power Plant above the Water Tanks, Technopark Phase-III amounting to Rs.28.98 lakh as part of distribution licensee operation and the source of funding was Grants.
- **84.** The decision of the Commission in the OA No. 25/2020 dated 24-03-2020 is quoted below.

"The licensee has furnished the estimated cost of the work and the rationale for such works. In the absence of detailed quantification of benefits and costs arising from such projects, the Commission is unable to fully ascertain necessity of investment and accordingly to allow the capital expenditure as proposed by the licensee. Hence, out of the proposed capital expenditure, the works related to distribution business shall be considered for provisional approval. In this context, the Commission reiterates that the works for which provisional approval has

been accorded shall be executed through proper tendering process ensuring sufficient participation of bidders, and following due procedure. In the case of Solar PV plant, the cost mentioned is higher than the benchmark cost of MNRE. Hence, the licensee shall ensure that installation of the Solar PV plant is done as per the bench mark cost of MNRE and in a cost effective manner through proper tendering process."

- **85.** The Commission vide letter dated 04.10.2021, sought clarification on the source of funding, as the licensee while taking prior approval of the Commission submitted that capital investment of Rs.57.37 lakh for 11 KV power distribution system and 50kWp solar plant of Rs.29.07 lakh at phase III are funded through Government grants and later claimed in the Truing up petition for the year 2019-20 that the expenditure is met from own funds. For this query, the licensee vide letter dated 18.10.2021 clarified that the petitioner had sought approval for Capital Investment Plan for the 11 kV Distribution System (Rs 57.37 Lakh) and the 50 kWp Solar plant as per the budget allocation to Technopark. Though Technopark had taken up the matter with the Government for release of Grant, no grant was received from the Government towards power distribution for the year 2019-20 due to paucity of funds. Since, the Commissioning of 11kV power distribution system was very essential for Commissioning of Phase III, the expense had to be met from own source.
- 86. During hearing, in reply to a query by the Commission as to whether the expenditure is met from the accumulated surplus of the licensee, the licensee clarified that the said expenditure is met from the rental income of the park business. The Commission is at a loss to understand as to the reasons for such funding especially considering the fact that as per OA No 16/2020 dated 08-04-2021; the licensee had a cumulative revenue surplus of Rs.1680.87. Since the Commission was not satisfied with the clarification given by the licensee, the Commission directed the licensee to submit a detailed write up regarding the funding of the project clearly showing the nature of fund deployed and its sources. But, the licensee has not furnished the details till now. Hence, the Commission hereby directs the licensee to submit a detailed write up regarding the funding of the project clearly showing the nature of fund deployed and its sources within 3 months from the date of issue of this order.
- **87.** The Commission also sought clarification vide letter dated 04.10.2021 whether the capital investment of Rs. 29.07 lakh for 50kWP roof top grid connected solar power plant phase-III is implemented through proper tendering process and if so, to furnish the details of the same. The licensee vide letter dated 18.10.2021 clarified that project was executed after the due tender process through etendering portal of the Government. Total 5 tenderers had participated in the

- process. The licensee also furnished details of Tender, such as Notice Inviting tender, evaluation statements, e-tender technical evaluation summary, approval for award of work, Work order, GST Invoice etc.
- 88. The Commission examined the submissions by the licensee and noted that the item rate e-tender under two cover bid system for the supply installation testing and commissioning 50kWp roof top grid connected Solar power plant was published in the e-tendering portal on 10.05.2018 and the last date of submission was 29.05.2018. The Commission further noted that the L1 was quoted at Rs.28.98 lakh/- which was the same amount provisionally approved in OA No. 25/2020 dated 24-03-2020 where as in the petition, the amount claimed is Rs.29.07 lakh. The Commission in OA No. 25/2020 dated 24-03-2020 mentioned that the licensee shall ensure that the installation of Solar PV plant is done as per the benchmark cost of MNRE. Since the date of opening of the Technocommercial bid as per the submission was 07.06.2018, the applicable MNRE benchmark cost was that of year 2018-19. The Commission examined the applicable MNRE benchmark and found that for the year 2018-19, the MNRE benchmark cost is Rs.55000/kWp for capacity above 10 and upto 100kWp whereas as the actual cost incurred is Rs.57,960 which is higher than the MNRE benchmark cost. However, taking into consideration that the licensee had made efforts to get the competitive bids, the Commission hereby approves Rs.29.07 lakh spent on the 50kWp Solar Power plant.
- **89.** After examining the total capital additions submitted for the year 2019-20 and in the backdrop of OP No.12/2017 and OA No. 25/2020, the Commission approves the Fixed Asset Additions of Rs.90.83 lakh for the year 2019-20.

Table-23
Fixed Asset Addition approved for the year 2019-20

Sl.No.	Asset Addition	Rs lakh
1	11KV Power Distribution System-Phase III	57.37
2	Billing software	4.39
3	50kWP Solar Power Plant Phase III	29.07
	Total	90.83

- 90. Thus, the asset additions approved for the year 2019-20 is Rs.90.83 lakh.
- 91. The Commission vide Order OA 16/2020 dated 08.04.2021 sought split up details of expenditure towards 11 kV Cable lying and rerouting amounting to Rs 17.24 Lakh claimed as Asset Addition during the year 2018-19 within 3 months from the date of the said order for approval of the same. The petitioner vide letter dated 18.10.2021 submitted the detailed Bill of Quantities (BoQ) and the invoices. The Commission will be considering the same along with the petition on Fixed Assets recasting.

Fixed Asset Recast

92. The licensee in the petition stated that the Asset Values have been recast as per the order of the Commission on Capital Investment plan (Order number OP No.42/2020 dated: 03/03/2021). As per the petition, opening GFA created out of Grants for FY 2019-20 is 93% less that of previous year closing GFA and the GFA created out of own fund and Loan is 35% less compared to previous year closing balance. The details of Fixed Assets before and after recasting as per the petition are show below.

Table-24
Details of Fixed Assets before recasting as per the petition

No	Asset Group		GFA for FY 18-19	deprec	g cumulative lation for FY 018-19	Closing N 2018	
		Grant	Own Source	Grant	Own Source	Grant	Own Source
1	Other Civil works		188.95		59.25		129.69
2	HV Distribution lines	21.91	686.74		364.36	21.91	322.38
3	HV Substation Transformers	480.91	2796.49		1230.27	480.91	1568.22
7	LT Distribution system		83.29		61.70		21.32
8	LT: Distribution lines		201.57		20.32		181.26
9	LT: Sub-station equipment		2.54		1.35		1.19
10	LT: Others	1459.70	1901.77		390.30	1949.70	1511.47
11	Meters						
12	IT Equipment		0.47		0.20		0.26
13	Total	2452.52*	5637.67*		2128.03*	2452.52	3733.78*

^{*}The total amount as per the petition founds is to be incorrect.

Table-25
Details of Fixed Assets after recasting as per the petition

No	No Asset Group		Opening GFA for FY 2019-20		Opening Cumulative depreciation for FY 2019-20		Opening NFA for FY 2019-20	
		Grant	Own Source	Grant	Own Source	Grant	Own Source	
1	Other Civil works		188.95		67.98		120.97	
2	HV Distribution lines		661.95		392.88		269.06	
3	HV Substation Transformers	26.39	2421.96		1255.13	26.39	1166.83	
7	LT Distribution system		89.85		65.44		24.41	
8	LT: Distribution lines		24.43		18.51		5.93	
9	LT: Sub-station equipment		6.94		2.50		4.44	
10	LT: Others	136.11	285.98		12.90	136.11	273.08	
11	Meters							
12	IT Equipment		0.47		0.21		0.26	
13	Total	162.50	3771.36*		1815.56	162.50	1864.96	

^{*} The total amount as per the petition founds is to be incorrect.

- 93. The petitioner submitted that depreciation account also has been recast and excess depreciation has been reversed based on the Commission's above Order and depreciation for the assets created out of Government grants are not considered in the account, only the assets created using own sources and loans are considered for depreciation.
- **94.** The Commission while examining the petition, noticed that there is a difference of Rs.327.57 lakh in the recasted opening NFA of Rs. 1864.96 lakh as on 01.04.2019 given in the petition and the opening NFA of Rs.1541.25 lakh as on 01.04.2019 approved by the Commission in the Truing Up of Accounts for the year 2018-19.
- **95.** However, the Commission is of the view that this will not reflect a true and fair view of state of affairs of the concern as the entire assets relating to the distribution business must be shown in the books of accounts of the distribution business itself even if the Commission disallows the same.
- 96. The licensee in Form D 4.3 submitted that they had made provision for short depreciation for 2012-13 to 2014-15 and reversed the depreciation for 2015-16 based on old rates. But the Commission is not able to ensure whether the same has been reflected in the books of accounts. Hence, the Commission hereby directs the licensee to file a separate petition on the Fixed Assets Recasting for the consideration of the Commission and approval of the same.

Depreciation

97. The depreciation claimed by the licensee in the petition for truing up for the year 2019-20 is Rs.189.38 lakh as against Rs 131.43 lakh approved in the Order on ARR&ERC. The details of claim made by the licensee is shown below.

Table-26
GFA and Depreciation claimed for 2019-20

No	Item	Opening	Additions	Closing	Remarks
1	GFA (created from grants etc)	162.50	0.00	162.50	No Depreciation
2	GFA (created from own fund)	3680.52	90.84	3771.36	
3	Total (Rs Lakhs)	3843.02	90.84	3933.86	
4	Depreciation (Rs Lakhs)	1815.56	189.38	2004.94	Only for item 2

98. The GFA and depreciation claimed by the licensee as per Form D 3.5 are given below.

Table-27
Details of GFA and Depreciation claimed for 2019-20

Assets	GFA at the beginning of the year		Additions (Rs. lakh)		GFA at the end of the Year		Depreciation claimed
	(RS.	lakh)		-	(RS	. lakh)	(Rs. lakh)
	Grant	Own	Grant	Own	Grant	Own	Own source
	Giani	source	Giant	source	Giant	source	Own source
Other Civil works	-	188.95	-	-	-	188.95	6.31
HV Distribution lines	-	661.95	-	-	-	661.95	36.48
HV Substation	26.39	2,421.96	-	-	26.39	2,421.96	123.59
Transformers							
LT Distribution	-	89.85	-	-	-	89.85	6.14
system							
LT Distribution lines	-	24.43	-	-	-	24.43	1.30
LT : Sub-station	-	6.94	-	-	-	6.94	0.38
equipments							
LT : Others	136.11	285.98	-	90.84	136.11	376.82	15.10
Meters	-	-	-	-	-	-	-
IT Equipments	-	0.47	-	-	-	0.47	0.07
TOTAL	162.50	3,680.52	-	90.84	162.50	3,771.36	189.38

99. During the truing up for the 2017-18, the Commission reworked the GFA from 2012-13 to 2017-18 based on the capital expenditure approvals given by the Commission vide its Order dated 13-11-2019 and Order dated 04-09-2020. The reworked GFA has been taken as opening balance for 2018-19 and closing balance arrived after adjusting approved asset additions for the year and depreciation. Hence the closing GFA for 2018-19 as per the truing up order is considered as the opening GFA for 2019-20. The GFA and depreciation as worked out by the Commission is given below.

Table-28
Depreciation approved for 2019-20

Asset categories	GFA as on 1/4/2019 Rs. lakh	Asset Addition during the Year Rs.	GFA as on 1/4/2020 Rs. lakh	Accumul ated depreciat ion as on 1/4/2019 Rs. lakh	Depreci ation rate	Deprec iation for the year 2019- 20 Rs.lakh	Accumulat ed depreciati on as on 31/3/2020 Rs. lakh	NFA at the end of the year
Land & Rights		Lakh						
Civil works	188.95		188.95	67.97	3.34%	6.31	74.28	114.67
Transmission lines	661.95		661.95	386.75	5.28%	34.95	421.70	240.25
Substations	2244.96		2244.96	1239.64	5.28%	118.53	1,358.17	886.79
11 kV works	97.41	57.37	154.78	60.21	5.28%	6.66	66.87	87.91
LT lines/ others*	44.58	29.07	73.65	18.98	5.28%	3.12	22.10	51.55
Metering equipment	6.94		6.94	2.58	5.28%	0.37	2.95	3.99
Electrical installations	91.11		91.11	18.96	5.28%	4.81	23.77	67.34
Softwares	0.47	4.39	4.86	0.03	6.33%	0.17	0.20	4.66
Total	3336.38	90.83	3427.20	1795.12		174.92	1,970.04	1,457.16
(Less) Assets created from Govt. grants /contributions	612.06		612.06		5.28%	(32.32)		
Depreciation for the year						142.60		

^{*}Includes 50kWp Solar Power Plant Phase III

100. The depreciation as worked out by the Commission for the year 2019-20 is Rs.142.60 lakh as against Rs.189.38 lakh claimed by the licensee in the petition for truing up for the year 2019-20 and as against Rs 131.43 lakh approved in the Order on ARR&ERC. This also includes depreciation on pro rata basis for asset additions listed above. Accordingly, the depreciation of Rs.142.60 lakh is approved by the Commission for the financial year 2019-20.

Interest and Finance Charges

101. The interest and finance charges claimed by the licensee for the year 2019-20 amounts to Rs.186.55 lakh as against the ARR approved amount of Rs.96.50 lakh.

Table-29
Interest and finance charges claimed for 2019-20

	2019-20 (Rs. lakh)		
Particulars	Approved in	As per Truing	
	ARR	Up Petition	
Interest on long term loans	0.64	92.28	
Interest on consumer security deposits	95.86	94.27	
Interest on Working Capital	-	-	
Total	96.50	186.55	

Interest on loans

102. The licensee in their petition has booked an amount of Rs 92.28 lakh towards interest on loans for the year 2019-20 whereas the ARR amount is Rs. 0.64 lakh. The opening net capital loan for the year was Rs.607.01 lakh. The Commission also noted that the licensee had made repayment of Rs.98.87 lakh during 2019-20. Further, no fresh loans were taken during the financial Year. The existing loan is taken from the consortium of South Indian Bank and Federal Bank for the infrastructure development project for the entire phase III. This loan was taken for a period of 144 months from July 2015 swapping a then existed loan to reduce the interest and repayment burden. The details are summarized in the Table below with all figures in Rupees Lakh.

Table-30

Details of Interest on loan for the year 2019-20 as per petition

Particulars	(SIB and Federal Bank)
Faiticulais	Phase-III Rs. Lakh
Gross Loan -Opening	1,069.56
Cumulative repayments of Loans upto previous year	462.55
Net loan-Opening	607.01
Less: Repayment (s) of Loans during the year	98.87
Net loan –Closing	508.14
Rate of Interest on Loan on annual basis	10.30%
Interest on loan claimed	92.28
Loan repayment effective from (date to be indicated)	27.07.2015

103. As per the details furnished by the licensee in the petition, the interest charges for the loan taken from the Consortium of banks is 10.30%. The Commission sought clarification on the interest rate as it seemed higher and the licensee in email dated 17.11.2021, furnished that the rate of interest was 10.30% p.a upto 01.12.2019 and from 02.12.2019, it was reduced to 10.05% p.a. which was further reduced to 9.50% p.a. from 03.02.2020. The Commission also sought communication received from the bank regarding changes in interest rate. On

verification of the same, it was found that the approved rate of interest from 02.12.2019 to 02.02.2020 is 9.75%. Furnishing of incorrect information to the Commission is a serious default by the licensee and is viewed as such. The Commission hereby directs the licensee to be more careful in all future submissions before the Commission.

104. The Commission after examining the submissions of the licensee including the varying rates of interest has proceeded to calculate on the basis of the weighted average rate of interest for the above period. The weighted average rate of interest for the period is shown below.

Table 31
Weighted Average Interest rate approved for 2019-20

Period for the year	Rate of Interest (%) (1)	Days in a year (2)	Weight (1) * (2)
01-04-2019 to 01-12-2019	10.30	245	2523.50
02-12-2019 to 02-02-2020	9.75	63	614.25
03-02-2020 to 31-03-2020	9.50	58	551.00
		366	3688.75
Weighted Average Inte	10.08%		

105. The Commission noted that in the lincensee's ARR &ERC the Commission had approved the interest charges based on the provisions of the Regulations on normative basis. Accordingly, the interest charges for normative loan including for the addition to assets for the year 2019-20 are as shown below.

Table-32
Interest charges on normative loan approved for 2019-20

Particulars	Rs in lakh
Opening Normative loan for 2019-20	313.22
Add. Asset addition Particulars for 2019-20	90.83
Less: Depreciation for 2019-20	142.60
Closing Normative Loan	261.45
Average Loan	287.33
Rate of Interest (%)	10.08%
Interest charges allowable for Asset additions	28.96
(Rs. 287.33 lakh X 10.08%)	20.90

106. The Commission hereby approves Rs.28.96 lakh as interest on loan for the year 2019-20 as against Rs.92.28 lakh claimed by the licensee.

Interest on security deposits

107. The interest on security deposits paid to the consumers for the year 2019-20 as claimed by the licensee amounts to Rs.94.27 lakh as against the ARR approved

amount of Rs.95.86 lakh. The Commission approves the actual amount of Rs.94.27 lakh paid by the licensee as interest on security deposits for the year 2019-20.

Interest on working capital

108. For the year 2019-20, the licensee has not claimed any interest on working capital. Thus, the interest and finance charges approved for the year is shown below.

Table-33
Interest and finance charges approved for 2019-20

	2018-19	2019	9-20
Particulars	Trued up	Truing up (Rs.	Trued up
	(Rs. Lakh)	Lakh)	(Rs. Lakh)
Interest on Loans	30.72	92.28	28.96
Interest on security deposits	81.36	94.27	94.27
Total	112.08	186.55	123.23

109. The Interest and Finance charges approved by the Commission for the year 2019-20 is Rs.123.23 lakh.

Return on Net Fixed Assets

110. The Commission in the ARR order had allowed RoNFA of Rs.58.60 lakh at the rate of 3% of NFA net of consumer contributions and Grants. The licensee has claimed a return of Rs.55.95 lakh on the basis of net fixed assets at the rate of 3% of NFA of Rs.1864.96 lakh at the beginning of the year 2019-20. The details of the claim as per the truing up petition for the year 2019-20 are given below.

Table-34
Return on NFA claimed for 2019-20 (Rs Lakh)

Destination		2019-20		
Particulars		Aproved ARR	Truing Up Petition	
Net Fixed Assets net of Consumer Contribution	Rs. Lakh		1864.96	
& Grants (at the beginning of the year)	No. Lakii		1004.90	
Rate of return	%	3.00	3.00	
Total return on net fixed assets	Rs. Lakh	58.60	55.95	

111. The licensee has claimed Rs.55.95 lakh as the return on NFA for the year 2019-20. However, considering the approval of asset additions from 2012-13 to 2016-17, the return on NFA is to be allowed based on the revised asset addition. The NFA at the beginning of the year 2019-20 is Rs.1541.26 lakh (Opening GFA of

Rs.3336.38 lakh as on 01-04-2019 – Opening Cumulative Depreciation of Rs.1795.12 lakh as on 01-04-2019). The assets created out of Government grants and consumer contribution is Rs.612.06 lakh. Thus, the NFA eligible for return is Rs.929.20 lakh (Rs.1541.26 lakh-Rs.612.06 lakh). The return on NFA approved for the year 2019-20 is as shown below.

Table-35
Return on NFA approved for 2019-20

Particulars	ARR approved	Truing up	Trued up
	(Rs. lakh)	(Rs. lakh)	(Rs. lakh)
NFA (Net of consumer contributions and grants at the beginning of the year) [1]		1864.96	929.20
Rate of return (%) [2]	3.00	3.00	3.00
Total return on NFA (1*2)	58.60	55.95	27.88

Revenue from Sale of Power

112. The revenue from sale of power as per the truing up petition for 2019-20 is Rs. 6760.31 lakh for a sale of 884.69 lakh units. The actual sale for the year 2018-19 was 865.76 lakh units and the revenue from the sale of power was Rs. 6292.32 lakh. The split up of the revenue from sale of power for the year 2019-20 is tabulated below.

Table-36
Revenue from Sale of Power for the year 2019-20

Particulars	No. of consumers	Sales (lakh units)	Revenue (Rs.lakh)	Realisation (Rs./kWh)
LT – IV B IT/ITES below 10kW	218	13.69	88.05	6.43
LT – IV B IT/ITES above 10kW up to 20kW	84	12.99	93.26	7.18
LT – IV B IT/ITES above 20kW	250	395.68	3,160.85	7.99
LT - VI (A) General	3	0.49	3.69	7.57
LT VI (B) General	9	1.25	10.02	8.02
LT VI (c) General (1ph or 3 ph)	37	2.60	26.99	10.39
LT VI (F) General (1 ph)	48	1.23	10.43	8.50
LT VII (A) Commercial (1-Ph)	51	1.51	13.55	9.00
LT VI (F) General (3 ph)	47	15.99	153.93	9.62
LT VII (A) Commercial (3-Ph)	61	6.47	71.44	11.05
LT VII (B) Commercial	11	0.09	0.75	8.42
LT IV A Industrial below 10 KW	1	0.01	0.06	9.05
LT IV A Industrial above 10 KW below 20 KW	7	0.74	4.43	6.00

LT IV A Industrial above 20 KW	6	4.47	36.40	8.14
LT VI (G) General	1	0.13	1.21	9.23
LT IX Display Lighting and Hording	2	0.05	0.77	15.01
Self Consumption	2	2.12	22.00	10.38
Street Lighting	16	2.29	9.72	4.24
Sub Total (LT)	854	461.78	3,707.55	8.03
HT -I (B) IT & IT Services	18	413.64	2,973.90	7.19
HT -II (A) General	2	4.04	29.39	7.27
HT II B	1	0.77	9.83	12.83
HT- IV Commercial	1	4.47	39.91	8.94
Sub Total (HT)	22	422.91	3,053.03	7.22
Grand Total	876	884.69	6,760.58	7.64
Electricity Duty Recovery			355.59	
Gross Revenue From Sale of Power			7,116.18	
Less: Electricity Duty Payable to Govt. plus commission (Contra Entry)			355.87	
Net Revenue from Sale of Power			6,760.31	

113. After examining the details, the Commission approves Rs. 6760.31 lakh as the revenue realized by the licensee for the year 2019-20.

Non-tariff income

114. The non-tariff income accounted by the licensee in the Truing up petition is Rs 129.20 lakh as against the approved amount of Rs.92.75 lakh vide ARR Order dated 24.03.2020. About 79% of this income came from Interest on Bank balances and interest on security deposit with KSEB Ltd (Rs 102.21 lakh), 17% from late payment surcharge (Rs. 21.70 lakh), balance 4% from Commission for collection of Electricity Duty (Rs.3.51 lakh) and miscellaneous Receipts (Rs.1.78 lakh). The miscellaneous receipts include connection charges, reconnection charges, temporary connection charges etc.

Table -37
Non-tariff income for 2018-19 &2019-20

	2018-	-19	2019-20	
Particulars	As per	Approved in truing up	ARR approved	As per
	Truing Up			Truing Up
	Petition			Petition
	Rs. lakh	Rs. lakh	Rs. lakh	Rs. lakh
Interest on investments, FD, Call Deposits	66.98	66.98	70.33	102.21
& Bank balances	00.96	00.90	70.33	102.21
Income from late payments	23.09	23.09	18.07	21.70

Misc. recoveries	8.32	8.32	4.35	1.78
Commission for collection of Electricity Duty	3.40	3.40		3.51
Interest on cumulative Revenue surplus		29.46		
Grand Total	101.79	131.25	92.75	129.20

- 115. From the above table, it is clear that the Non-tariff income for 2019-20 has increased by Rs.27.41 lakh compared to the previous year claim of 2018-19. Since there is an increase in the Interest on investments, FD, Call Deposits & Bank balances by Rs.35.23 lakh compared to the previous year, the Commission vide letter dated 04-10-2021 sought clarification for the detailed split up clearly specifying the nature and source of these incomes. The licensee clarified that this interest income was received from two sources: (a) An amount of Rs.28.95 lakh was received as interest from Banks and (b) Rs.73.26 lakh towards interest on security deposit with KSEB Ltd for FY 2019-20.
- 116. The licensee has not provided for interest on cumulative Revenue surplus. The Commission has examined the details of non-tariff income furnished by the licensee. The licensee has booked Rs.28.95 lakh towards income from bank deposits. The revised cumulative surplus till 2018-19 is Rs.1680.87 lakh. Accordingly, the interest on the revenue surplus is approved at a rate of 6.80% per annum (the retail term deposit rate of SBI for a tenor of one year as on 01-04-2019) for an amount of Rs.114.30 lakh (Rs.1680.87 lakh x 6.80%). Of the above, the licensee has already accounted Rs.28.95 lakh as interest from bank. Hence, the balance amount of Rs.85.35 lakh (114.30 28.95) is treated as additional income under the head non-tariff income. Accordingly, the Commission approves the Non-Tariff income of the licensee for the year 2019-20 as Rs.214.55 lakh (129.20 + 85.35).

Revenue Surplus for 2019-20

117. Based on the above, the approved expenditure and revenue for the year 2019-20 after truing up is as shown below.

Table -38

Revenue surplus /Gap after Truing up of Accounts for the year 2019-20

Particulars	As per ARR&ERC Order (Rs. lakh)	Truing Up Petition (Rs. lakh)	Approved in Truing up (Rs. lakh)
Revenue from Sale of Power.	7,070.11	6,760.31	6,760.31
Non-Tariff Income	92.75	129.20	214.55
ERC- Total Revenue	7,162.86	6,889.51	6,974.86
Purchase of Power	5,988.56	5,764.40	5718.34
Employee Cost	31.43	39.15	39.15
Repairs and Maintenance	191.72	479.98	281.82
A&G Expenses	54.76	145.79	55.64
Depreciation	131.43	189.38	142.60
Interest & Finance Charges	0.64	92.28	28.96
Interest on security deposits	95.86	94.27	94.27
Interest on Working Capital	-	-	-
Return on NFA	58.60	55.95	27.88
ARR- Total Expenditure	6,553.00	6,861.19	6388.66
Net Surplus/(Deficit)	609.86	28.32	586.20

118. The approved Total Expenditure and Total Revenue for the year 2019-20 after truing up is Rs.6388.66 lakh and Rs.6974.86 lakh respectively. As against the approved revenue surplus of Rs.609.86 lakh for the year 2019-20, the licensee in the petition for Truing Up of Accounts claimed a revenue surplus of Rs.28.32 lakh. The revenue surplus after the truing up is Rs.586.20 lakh.

Orders of the Commission

- **119.** The Commission after considering the application filed by M/s. Technopark for truing up of accounts for the year 2019-20, and the clarifications and details provided by the licensee approves the following.
 - a) Total revenue is Rs. 6974.86 lakh.
 - b) Total expenditure is Rs.6388.66 lakh.
 - c) The revenue surplus for the year is Rs.586.20 lakh.
 - d) The accumulated revenue surplus up to 2018-19 is Rs. 1680.87 lakh. Total cumulative revenue surplus till 2019-20 will be Rs.2267.07 lakh (Rs.1680.87 lakh + Rs.586.20 lakh).
- **120.** The Commission issues the following directives for compliance:

- a) The licensee to take a commercial decision regarding its viability of the distribution business in Technocity area. Alternatively, KSEB Ltd may be requested to supply power at this site till such time that the business picks up both in terms of the number of consumers and quantum of load.
- b) An action taken report on the Commission's recommendations at Para 34 shall be provided within 3 months of the date of this Order.
- c) The licensee to quantify the benefits, loss reduction etc achieved through energy audit in the next truing up petition.
- d) The licensee shall reconcile the difference in power purchase figures with that of KSEB Ltd within a period of 3 months from the date of issue of this order.
- e) The licensee shall furnish a copy of study report along with recommendation of all O&M activities as mentioned in Para 69 above.
- f) The licensee shall submit complete details of the number of security staff if any, deployed in any substation, their wages, full justification for their deployment etc. within 3 months of the date of issue of this Order.
- g) The licensee shall furnish a detailed write up regarding the funding of the asset additions made during 2019-20 clearly showing the nature of fund deployed and its sources within 3 months from the date of issue of this order.
- h) The licensee shall furnish a detailed petition on recast of fixed assets claimed by the licensee for the consideration of the Commission and approval.

121. The petition is disposed of. Ordered accordingly.

Member (Law)

Sd/- Sd/-

Adv. A.J. Wilson Preman Dinaraj

Approved for issue Sd/-

Secretary

Chairman