

KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

Application No :OA 10/2019

Present: **Shri. R. Preman Dinaraj, Chairman**
Shri.K.Vikraman Nair, Member

In the matter of **Determination of ARR & ERC of M/s Rubber Park India Private Limited (RPIL) for the Control Period 2018-19 to 2021-22**

Applicant: **M/s Rubber Park India Private Limited (RPIL)**

Order Dated 08-11-2019

1. M/s.Rubber Park India (P) Limited (*hereinafter referred to as RPIL or the Licensee*), is a distribution licensee under the Electricity Act, 2003. RPIL is a joint venture of Kerala Industrial Infrastructure Development Corporation (Kinfra) and Rubber Board. The Company was incorporated in 1997 under the Companies Act 1956 for establishing industrial parks, exclusively for rubber and rubber wood based industries with world class infrastructure. The first park was set up in 107 acres at Irapuram in Kunnathunadu Taluk, near Perumbavoor, in Ernakulam Dist. The second park is proposed to be set up in 45 acres of land at Piravanthoor in Pathanapuram Taluk, near Punalur in Kollam District. Government of Kerala, vide G.O. (P) No.20/2003/PD dated 17-06-2003 notified as Gazette Extra Ordinary No.1199 dated 05-07-2003, granted license to RPIL, under the provisions of Indian Electricity Act, 1910 for distribution of power at Rubber Park, Airapuram. Rubber Park owns a 110/11 kV, 25 MVA (12.5 MVA x 2) capacity substation and well-established ring main power distribution network for supply of power to various consumers in the park. There are 2 ring main distribution system with 11 kV underground Cables, two numbers of 11 kV dedicated feeder and 9 unitized Substations. Since inception Rubber Park adopted prepaid billing system for the consumers. Rubber Park receives power from KSEB at 110 kV through 110 kV double circuit Kalamassery –Muvattupuzha feeder drawn from Kalamassery Sub Station. The Licensee has entered into a PPA with Kerala State Electricity Board Ltd (*herein after referred to as KSEBLtd*) to purchase power at 110 kV for

distribution to the Industrial units within the industrial park at Valayanchirangara near Perumbavoor in Ernakulam District. The area of operation is limited to the boundaries of the Rubber Park. In addition to serving the consumers inside the park, RPIL had provided open access facility to a consumer of KSEB Ltd at 11 kV voltage level.

- The Commission had notified the KSERC (Terms and Conditions for Determination of Tariff) Regulations (hereinafter referred to as Tariff Regulations, 2018) on 26-10-2018. As per Regulation 10(1) of the said regulations, every distribution business/licensee shall file, on or before the thirty first day of October 2018, the petition for approval of Aggregate Revenue Requirement and determination of tariff for each year of the Control Period. The licensee filed the petition for the approval ARR & ERC for the control period from 2018-19 to 2021-22 as per the Tariff Regulation 2018 in the Multi Year Tariff Framework on 03-11-2018. A comparison of the ARR-ERC for the control period and the actual for the previous years 2016-17 & 2017-18 furnished by the licensee as per the petition is shown below.

Table – 1
Comparative Statement of ARR & ERC

Particulars	2016-17	2017-18	Control Period Estimates			
	As per accounts (Rs.lakh)	As per accounts (Rs.lakh)	2018-19 Projected (Rs.lakh)	2019-20 Projected (Rs.lakh)	2020-21 Projected (Rs.lakh)	2021-22 Projected (Rs.lakh)
Revenue from Sale of Power	1905.08	1871.33	1923.51	1923.51	2018.24	2118.49
Income from wheeling charges	0.19	0.21	0.21	0.21	0.21	0.21
Other Income	0.61	0.60	0.60	0.60	0.60	0.60
Total Income	1905.88	1872.14	1924.32	1924.32	2019.05	2119.30
Purchase of Power	1757.61	1589.60	1741.11	1707.36	1798.33	1894.75
Repairs and Maintenance	31.35	33.87	39.58	41.28	42.95	41.56
Employee Cost	55.26	58.74	61.65	64.64	67.77	71.05
A&G Expenses	47.07	49.06	56.03	57.85	60.44	63.35
Depreciation	47.35	49.84	42.86	48.79	45.37	40.23
Interest & Finance Charges	1.29	0.94	2.19	2.19	2.19	2.19
Interest on normative loan	41.99	39.20	58.30	60.06	62.42	63.71
Return on Equity	41.83	42.16	42.93	44.22	45.96	46.91
Total Expenditure	2023.75	1863.41	2044.65	2026.39	2125.42	2223.75
Net Surplus (+)/(-) Deficit	(-)117.87	(+)8.73	(-)120.33	(-)102.07	(-)106.37	(-)104.45

3. As shown above, the licensee proposed revenue gap for each year of the control period. The Commission vide letter dated 06-03-2019 sought clarifications on the petition. The licensee submitted the reply on 28-03-2019. In the submission, the licensee had revised the depreciation and the interest on normative loan and Return on equity. Accordingly, the revised estimates for control period are as shown below.

Table -2
Revised estimates of ARR & ERC for the control period by licensee

Particulars	Control Period Estimates			
	2018-19 Projected (Rs.lakh)	2019-20 Projected (Rs.lakh)	2020-21 Projected (Rs.lakh)	2021-22 Projected (Rs.lakh)
Revenue from Sale of Power	1923.51	1923.51	2018.24	2118.49
Income from wheeling charges	0.21	0.21	0.21	0.21
Other Income	0.60	0.60	0.60	0.60
Total Income	1924.32	1924.32	2019.05	2119.30
Purchase of Power	1741.11	1707.36	1798.33	1894.75
Repairs and Maintenance	39.58	41.28	42.95	41.56
Employee Cost	61.65	64.64	67.77	71.05
A&G Expenses	56.03	57.85	60.44	63.35
Depreciation	44.57	47.31	50.68	49.72
Interest & Finance Charges	2.19	2.19	2.19	2.19
Interest on normative loan	58.45	60.21	62.58	63.87
Return on Equity	43.03	44.33	46.07	47.02
Total Expenditure.	2046.61	2025.17	2131.01	2233.51
Net Surplus (+) /(-) Deficit	(-)122.29	(-)100.85	(-)111.96	(-)114.21

4. Considering the clarifications and the revisions made, the petition was admitted as OA 10/2019.

Hearing on the Matter

5. The public hearing on the application for the approval of ARR& ERC for the control period 2018-19 to 2021-22 was conducted at the Conference Hall, Office of RPIL, Valayanchirangara on 04-04-2019. The petitioner was represented by Sri.J.Krishna Kumar MD, Rubber Park India (P) Ltd and other officers of the licensee. Sri.Anees.T.M, Resident Engineer, Rubber Park India (P) Ltd. presented the details of the application responded to the queries of the Commission. The main points submitted in the petition are given below.
- The licensee proposes revenue gap for each year of the control period. The licensee has not proposed any increase in the sale for the year 2019-20, compared to the 2018-19, whereas has proposed a 5% increase for each

subsequent years of the control period. The revenue from sale of power has been estimated at the prevailing tariff. The licensee has estimated a distribution loss of 2% for each year of the control period.

- The licensee has projected the power purchase cost for the control period and has also included the cost for meeting the Renewable Power Purchase Obligation. According to the licensee, the Commission has fixed the RPO target only till 2018-19. So the licensee has projected the RPO for the subsequent years of the control period at the same rates fixed by the Commission for the year 2018-19.
- Operation & maintenance includes controllable expenses like Employee cost, Repair & Maintenance Expenses & Administrative & General Expenses. The licensee has projected the Operation and maintenance expenses over and above the ceiling level specified in the regulation
- Employee cost has been escalated for each year of the control period at 4.84% on the actual expense for 2017-18.
- While claiming R&M the licensee has proposed the amount as per the norms. The licensee has also proposed an additional expense as one-time expenses, which is for overhauling of transformers and for painting the sub-station.
- A&G expenses also have been escalated for each year of the control period at 4.84% on the actual expense for 2017-18. The licensee has also stated that 50% of the common expenses are allocated for the licensing business. The licensee has also proposed Section 3(1) duty as part of A&G expense
- The licensee has proposed a total capital investment of Rs. 135.40 lakh for the control period and has stated that the capital works are to be financed from the equity of the company. The licensee has submitted quotations and estimates of the proposed capital investment.
- The licensee has projected interest and financing charges includes interest on normative loan and bank charges for the security provided to KSEB Ltd. The licensee has projected an amount of Rs.2.19 lakh for each year of the control period on account of bank guarantee and letter of credit charges as KSEB Ltd demanded LC as payment security for the Bulk power supply. The claim is for the double security mechanism for executing the PPA as required by KSEB Ltd.

- The licensee in the petition has claimed depreciation in the straight line method as per the Tariff Regulations 2018. The licensee has projected depreciation for each year of the control period including the proposed capital additions for each year of the control period.
 - The licensee has proposed that open access consumer M/s. M Fuels to wheel 0.067 MU of power through the distribution network of Rubber Park. Accordingly projected the wheeling charges of Rs.0.207 lakh for each year of the control period. The licensee has stated that the forecast is based on the actual income received during the year 2017-18.
 - The non-tariff income proposed by the licensee for each year of the control period is Rs.0.604 lakh which is the actual non-tariff income for 2017-18. The amount includes miscellaneous receipts of Rs.0.068 lakh and an amount of Rs.0.536 lakh as commission for collection of electricity duty.
6. Sri.Bipin Shankar, Deputy Chief Engineer TRAC and Sri. Ajith Kumar.G, DAO, TRAC represented KSEB Ltd. Sri.Bipin Shankar presented the counter statement/comments of KSEB Ltd. and stated that the written remarks on the application will be submitted subsequently. The major points presented by KSEB Ltd are abstracted below.
- Distribution loss may be approved considering a loss reduction trajectory, than considering a constant loss for all the years of the control period.
 - The licensee has claimed Employee cost,R&M expenses and A&G higher than the norms approved by the Commission. The Commission may limit the expenses to the approved level.
 - The capital investment proposed by the licensee may be considered only after detailed analysis and prudence check.
7. The Commission during the hearing sought clarifications on the petition. With regard to the capital investment proposal of Rs.60.00 lakh for automated metering infrastructure, the Commission suggested that the licensee may study the latest developments in the sector and frame suitable proposal for implementation in the park considering the limited area and number of consumers. The licensee may seek assistance of KSEB Ltd in this regard, if required so. The Commission directed the licensee to submit the revised distribution loss trajectory for the control period and the steps initiated by the licensee for reduction in the distribution loss. The Commission also directed the licensee to take necessary steps for procurement of

Renewable Energy instead of purchasing Renewable Energy Certificate to meet Renewable Purchase Obligation.

8. The licensee vide letter No.RP/E/02/B/13685 dated 15-05-2019 submitted the reply. The licensee submitted that the company will carry out proper study for the estimation of distribution losses in order to set a realistic base line of the estimates of losses with the assistance of an external agency during the year 2019-20.
9. With regard to the direction of the Commission for procurement of Renewable Energy instead of purchasing Renewable Energy Certificate to meet Renewable Purchase Obligation, the licensee submitted that the company has the following options for procuring Renewable energy instead of purchasing Renewable Energy Certificates to meet the Renewable Power Obligation.
 - Purchase Renewable Power through long term, short term or medium term Open access.
 - Installation of Roof Top solar in the Office building of the company.
 - Entrust the Renewable Power Purchase Obligation with KSEB Ltd.
10. The licensee also stated that as per the sub regulation 2 of the Regulation 15 of the open access regulation, 2013 an applicant proposing to avail open access, cannot avail open access for the quantum of power already contracted with others. The company had already executed power purchase agreement with KSEB Ltd for a quantum of 6700 kVA and hence, the company can't avail renewable energy via the first option. The company is having roof top area sufficient for installing around 65 kWp of solar power plant, which is insufficient to meet the entire renewable power purchase obligation of the company. Hence, the only option available for the company for procuring Renewable energy instead of purchasing Renewable Energy Certificates to meet the Renewable Power Obligation is to entrust the Renewable Power Purchase Obligation with KSEB Ltd. The licensee also vide letter 01-07-2019 submitted that they had approached KSEB Ltd in the matter and KSEB Ltd had informed RPIL that they can consider the request to meet the RPO from the year 2021-22 onwards only.

Analysis and decision of the Commission

11. The Commission considered the application for approval of ARR & ERC for the Control Period 2018-19 to 2021-22, the additional clarifications and submissions furnished by the licensee along with the comments of KSEB Ltd. The analysis and

decisions of the Commission on the application for approval of ARR & ERC for the Control Period 2018-19 to 2021-22 are detailed below:

- 12.No. of Consumers& Sale of power:** - As per Regulation 10 (8) of Tariff Regulations 2018, the applicant/distribution licensee shall develop the forecast of expected revenue from existing charges based on the estimates of contract demand and quantum of electricity to be supplied to the consumers and to be wheeled on behalf of the users of the distribution system for each financial year of the control period. Further, Regulation 71 provides as follows:

71.Sales forecast. –(1) *The distribution business/licensee shall submit, along with the petition for approval of Aggregate Revenue Requirement and determination of tariff, a forecast of expected demand and sale of electricity to different categories of consumers and to each consumption slab within each tariff category, in its area of supply for the Control Period.*

(2) *Sale of electricity, if any, to electricity traders or other distribution licensees shall be separately indicated.*

(3) *The Commission shall examine the forecasts for its reasonableness based on the growth in number of consumers and consumption per consumer, the demand of electricity in the preceding financial years, anticipated growth in the succeeding financial years and any other factor, which the Commission may consider relevant and approve forecast of sale of electricity to the consumers with such modifications as deemed appropriate.*

13. The licensee has projected an increase in the number of consumers and increase in the sales for each year of the control period. The details of the sale of power and the number of consumers projected are tabulated hereunder.

Table – 3
Number of consumers &Energy sales projection

Year	No.of Consumers	Sales in MU	% Increase in sales over previous year
2016-17 (As per accounts)	55	31.51	
2017-18 (As per accounts)	58	29.63	-5.97%
2018-19(Projected)	63	30.78	3.88%
2019-20 (Projected)	63	30.78	0.00%
2020-21 (Projected)	67	32.31	5.00%
2021-22 (Projected)	71	33.92	5.00%

14. The licensee has submitted the split up of the projected consumer mix and sales projection for the control period as follows

Table – 4
Number of Consumers for the control period

Particulars	2016-17 As per accounts	2017-18 As per accounts	2018-19 (Projected)	2019-20 (Projected)	2020-21 (Projected)	2021-22 (Projected)
HT-I	16	16	16	16	18	20
LT IV	20	23	24	24	26	28
LT VI B	1	1	1	1	1	1
LT VI F	1	2	2	2	2	1
LT VII A	16	14	14	14	14	14
Street Light	1	1	6	6	6	6
Total	55	58	63	63	67	71

Table – 5
Category wise Energy sales for the control period

Particulars	2016-17 As per accounts	2017-18 As per accounts	2018-19 (Projected)	2019-20 (Projected)	2020-21 (Projected)	2021-22 (Projected)
	MU	MU	MU	MU	MU	MU
HT-I	29.39	26.95	27.40	27.40	28.77	30.21
LT IV	1.97	2.50	3.19	3.19	3.35	3.51
LT VI B	0.01	0.02	0.01	0.01	0.01	0.01
LT VI F	0.01	0.10	0.11	0.11	0.11	0.11
LT VII A	0.12	0.04	0.05	0.05	0.05	0.05
Street Light	0.02	0.02	0.02	0.02	0.02	0.02
Total	31.51	29.63	30.78	30.78	32.31	33.91

15. The major quantum of sale pertains to the HT category which is about 93% of total sale of power. It may be seen that the licensee has not proposed any increase for the year 2019-20, compared to the previous year, whereas has proposed a 5% increase for each subsequent years of the control period. The licensee expects two consumers each for HT-I and LT VI categories in 2020-21 & 2021-22. As per the details submitted, it may be seen that the sale to HT-I has reduced in 2017-18 compared to the previous year. With regard for not proposing any increase for the year 2019-20, the licensee has stated that the percentage increase from 2017-18 to 2018-19 was only 1%, and the implication of open access by the major consumer has been considered. There was a decrease in the sales of the licensee during the year 2017-18 compared to the previous year. The licensee vide letter dated 20-03-2019 submitted that various structural and domestic factors and after effects of

demonetization and problems of GST had significantly impacted the industrial growth which in turn resulted in the decrease and drastic change in the energy sales to the industrial consumers in HT category.

16. **Energy requirement & Distribution Loss:** As per Regulation 72, the licensee is to provide voltage level distribution loss and distribution loss trajectory for the control period with supporting studies along with the application. The Commission has to approve the target level of losses based on the opening level of losses, the figures filed by licensee and other relevant factors. The distribution loss proposed by the licensee is as shown below.

Table – 6
Distribution loss and energy input projected for the control period

Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
	As per accounts	As per accounts	Projected	Projected	Projected	Projected
Energy Requirement (MU)	32.22	30.21	31.41	31.41	32.97	34.61
Energy sales (MU)	31.51	29.63	30.78	30.78	32.31	33.92
Distribution loss (MU)	0.71	0.58	0.63	0.63	0.66	0.69
Distribution loss (%)	2.20	1.94	2.00	2.00	2.00	2.00

17. As per the details submitted in the petition, the licensee proposes a distribution loss of 2% for each year of the control period. The distribution loss approved for the previous control period was also 2.00%. The licensee has not proposed any distribution loss reduction targets for the control period. It is seen that the actual distribution loss for the year 2017-18 is 1.94%, whereas the distribution loss projected for the control period is 2.00% which is higher than the actual distribution loss for the previous year.

18. Since, reduction in distribution loss is an important parameter which has a direct impact on power purchase cost and available energy for distribution; it is a criterion that the licensees should continuously strive to improve upon. In the instant case, taking into consideration the limited geographical area of its operation and the nature of infrastructure build up, the Commission is of the opinion that distribution loss is to be reduced. On the basis of the above facts, the approved level of distribution loss and the energy requirement approved for the control period is shown below. In the mean time, the licensee may analyze and study the data obtained from meter readings and prepare methodology for loss reduction and to justify the projected loss levels.

Table – 7
Distribution loss and energy input approved for the control period

Year	2018-19	2019-20	2020-21	2021-22
	Projected	Projected	Projected	Projected
Energy Requirement (MU)	31.38	31.38	32.94	34.58
Energy sales (MU)	30.78	30.78	32.31	33.92
Distribution loss (MU)	0.60	0.60	0.63	0.66
Distribution loss (%)	1.90%	1.90%	1.90%	1.90%

19. **Power Purchase Cost:** -The licensee has proposed the power purchase cost for each year of the control period. The licensee has estimated the power purchase cost for the control period by considering the cost for meeting the Renewable Power Purchase Obligation also. The details of the power purchase cost are tabulated hereunder.

Table-8
Power purchase cost projected for the control period

Particulars	Purchase in MU	Demand charge (Rs.lakh)	Variable Charge (Rs.lakh)	Cost for RPO (Rs.lakh)	Total cost (Rs.lakh)	Average cost
2016-17 (As per accounts)	32.22	221.71	1465.91	71.84	1759.46	5.46
2017-18 (As per accounts)	30.21	215.24	1374.36	-	1589.60	5.26
2018-19 (Projection)	31.41	238.61	1429.24	73.27	1741.11	5.54
2019-20 (Projection)	31.41	238.61	1429.24	39.52	1707.36	5.54
2020-21 (Projection)	32.97	256.61	1500.25	41.47	1798.33	5.45
2021-22 (Projection)	34.61	276.41	1574.80	43.54	1894.75	5.47

20. The amount of Rs.73.27 lakh projected as the cost for meeting the Renewable Power Purchase Obligation in the year 2018-19 is for the year 2017-18 & 2018-19. It may see that the Commission has fixed the RPO target only till 2018-19 and the target thereof is in the process of being notified. The licensee has projected the RPO for the subsequent years of the control period at the same rates fixed by the Commission for the year 2018-19. The licensee in the write up has stated that they are not having sufficient area to install renewable energy sources for generation of power.
21. The Commission in the order on the truing up for 2015-16 dated 26-07-2017 had observed that,

*“RPO refers to the **obligation** imposed by law on the entities to either buy electricity generated by specified 'green' sources, or buy, in lieu of that,*

RECs from the market. The obligation imposed by the law on the licensee is to purchase certain percentage of power from renewable energy sources and to create demand for renewable energy. RECs are aimed at addressing the mismatch of renewable energy resources in the State and its RPO requirements. It is, therefore, the statutory duty of the licensee to purchase the specified percentage of power from the renewable energy sources which cannot be fulfilled by means of purchase of RECs alone. If there is any mismatch of renewable energy generation in the State and their RPO requirements, then such mismatch can be addressed by purchase of RECs. Hence, the priority of the licensee should always be to purchase of renewable energy than that of purchase of RECs. Purchase of RECs may simplify the statutory duty of the licensee but will create burden to the consumers. Hence, the licensee shall endeavour to take concrete measures for sourcing renewable energy for meeting the RPO.”

22. **The Commission reiterates the same and directs the licensee to endeavour and take concrete measures for sourcing renewable energy for meeting the RPO than purchasing renewable energy certificates.** The Commission is of the considered view that the cost of purchase of REC, if any, shall be considered while truing up of accounts after considering the steps taken by the licensee to procure renewable energy.
23. The Commission vide order dated 08-07-2019 in OA No.15/2018 has revised the BST applicable to M/s.Rubber Park India (P) Limited as shown below.

Energy Charge (Rs. per unit)	Pre revised Tariff	4.55
	Revised/Existing Tariff	4.75
Demand Charge (Rs. kVA per month)	Pre revised Tariff	300.00
	Revised/Existing Tariff	340.00

24. Based on the revised tariff, the licensee submitted the revised power purchase cost for each year of the control period is shown below.

Table-9
Projected Power purchase cost as per revised tariff

Particulars	2018-19	2019-20	2020-21	2021-22
	Projected	Projected	Projected	Projected
Energy purchase (MU)	31.41	31.41	32.97	34.61
Maximum Demand (kVA)	6628	6628	7128	7678
Demand Charge (Rs.kVA)	300	300/340	340	340
Demand Charges (Rs in Lakh)	238.61	261.88	290.82	313.26
Energy Charge (Rs/kWh)	4.55	4.55/4.75	4.75	4.75
Energy Charges (Rs in Lakh)	1429.24	1475.20	1566.19	1644.02
Total (Rs in Lakh)	1667.85	1737.08	1857.01	1957.29

25. The licensee while estimating the power purchase cost for the control period has proposed increase in the contract demand. The licensee stated that it had already got approval of the Commission for additional PPA for 1300 kVA totaling to 8000 kVA and the PPA will be executed with KSEB Ltd during the year 2018-19. Accordingly the contract demand considered for 2019-20 is 7128 kVA and for 2021-22 is 7678 kVA. Considering the power purchase from KSEB Ltd at the distribution loss reduction targets approved for the control period, the increase in the contract demand and the relevant tariff applicable for the years of the control period, the power purchase cost approved is shown below.

Table-10
Power purchase cost approved for the control period

Particulars	2018-19	2019-20	2020-21	2021-22
	Projected	Projected	Projected	Projected
Energy purchase (MU)	31.38	31.38	32.94	34.58
Maximum Demand (kVA)	6628	6628	7128	7678
Demand Charge (Rs.kVA)	300	300/340	340	340
Demand Charges (Rs in Lakh)	238.61	261.88	290.82	313.26
Energy Charge (Rs/kWh)	4.55	4.55/4.75	4.75	4.75
Energy Charges (Rs in Lakh)	1427.79	1473.70	1564.65	1642.55
Total (Rs in Lakh)	1666.40	1735.58	1855.47	1955.81

26. **O&M Expenses:** Operation & maintenance expenses include controllable expenses like Employee cost, Repair & Maintenance Expenses & Administrative & General Expenses. The Commission as per Regulation 79(5) of the KSERC (Terms and conditions for determination of tariff) Regulations, 2018 has approved the operation & maintenance cost of RPIL for the control period. The licensee has projected the Operation and maintenance expenses over and above the normative limit specified in the regulation. A comparison of the projections made by the licensee and the normative amount approved by the Commission is shown below.

Table-11
Comparison of Normative O&M Expenses& O&M Expenses projected

Particulars	2018-19		2019-20		2020-21		2021-22	
	Projection (Rs.lakh)	Norms (Rs.lakh)	Projection (Rs.lakh)	Norms (Rs.lakh)	Projection (Rs.lakh)	Norms (Rs.lakh)	Projection (Rs.lakh)	Norms (Rs.lakh)
Employee cost	61.65	106.94	64.64	112.12	67.77	117.55	71.05	123.24
R&M Expenses	39.58		41.28		42.95		41.56	
A&G Expenses	56.03		57.85		60.44		63.35	
Total	157.26	106.94	163.77	112.12	171.16	117.55	175.96	123.24

27. Based on the projections made by the licensee, the per unit O&M cost is tabulated hereunder

Table-12
Per unit O&M cost based on projections

SI.No	Particulars	2018-19	2019-20	2020-21	2021-22
1	Total Sales (MU)	30.78	30.78	32.31	33.92
2	Projected Employee cost (Rs.lakh)	61.65	64.64	67.77	71.05
3	Projected R&M Expenses (Rs.lakh)	39.58	41.28	42.95	41.56
4	Projected A&G Expenses (Rs.lakh)	56.03	57.85	60.44	63.35
5	Projected O&M Expenses (Rs.lakh)	157.26	163.77	171.16	175.96
6	Per unit Employee cost - Rs/unit (2/1)	0.20	0.21	0.21	0.21
7	Per unit R&M Expenses - Rs/unit (3/1)	0.13	0.13	0.13	0.12
8	Per unit A&G Expenses - Rs/unit (4/1)	0.18	0.19	0.19	0.19
9	Per unit O&M Expenses - Rs/unit (5/1)	0.51	0.53	0.53	0.52

28. The detailed analysis of each head under operation and maintenance expense projected by the licensee for each year of the control period is conducted below.

29. **Employee cost:** The split up of the actual employee cost for the period 2016-17, 2017-18 and the projected employee cost for the years of the Control period are shown below.

Table-13
Comparison of the actual and projected Employee cost

Particulars	2016-17 As per accounts (Rs.lakh)	2016-17 Trued Up (Rs.lakh)	2017-18 As per accounts (Rs.lakh)	2018-19 Projection (Rs.lakh)	2019-20 Projection (Rs.lakh)	2020-21 Projection (Rs.lakh)	2021-22 Projection (Rs.lakh)
Basic Salary	20.22	37.86	25.18	26.39	27.67	29.01	30.41
Dearness Allowance (DA)	16.72		15.73	16.49	17.29	18.12	19.00
House Rent Allowance	1.58		1.66	1.74	1.83	1.92	2.01
Conveyance Allowance	0.26		0.88	1.05	1.10	1.15	1.21
Earned Leave Encashment	3.46		5.03	5.27	5.53	5.79	6.07
Other Allowances	0.13		0.19	0.20	0.21	0.22	0.23
Medical Reimbursement	2.88		3.64	3.82	4.00	4.20	4.40
Interim Relief / Wage Revision	5.50		-	-	-	-	-
Staff welfare expenses	0.30		0.32	0.33	0.35	0.36	0.38
Net Employee Costs	51.04		52.62	55.29	57.97	60.77	63.71
Provident Fund Contribution	3.72		4.67	4.84	5.08	5.32	5.58
Gratuity Payment	0.49		1.45	1.52	1.60	1.67	1.75
Gross Employee Cost	55.26		37.86	58.74	61.65	64.64	67.77
% Increase over previous year				4.84%	4.84%	4.84%	4.84%

30. The licensee has stated that they have worked out the employee expenses for the year 2017-18 based on the revised actual salary of 2016-17. For calculating the employee expenses for each year of the control period, RPIL had further escalated the employee expenses from the year 2017-18 at the approved escalation rate of 4.84% in the KSERC MYT regulation 2018 for arriving the employee expenses for each year of the control period. The Commission has carefully considered the licensees submission above and notes that the additional expenses due to posting of a Managing Director as well as the impact of wage revision has been allowed in 2016-17 trued up statement in addition to the normative figure. Hence the Commission is inclined to consider the licensees submission of wage revision, if any, at the stage of truing up of relevant years.
31. **R&M Expenses:** The licensee, for the control period has projected the repair and maintenance cost higher than the previous years. The Repair and maintenance cost incurred by the licensee for the year 2016-17 is Rs.31.35 lakh and for the year 2017-18 is Rs.31.25 lakh. The expense is for the maintenance of lines and cable works. The amount projected for the control period is tabulated hereunder.

Table-14
Comparison of the actual and projected R&M Expenses

Particulars	2016-17 As per accounts (Rs.lakh)	2016-17 Trued Up (Rs.lakh)	2017-18 As per accounts (Rs.lakh)	2018-19 Projected (Rs.lakh)	2019-20 Projected (Rs.lakh)	2020-21 Projected (Rs.lakh)	2021-22 Projected (Rs.lakh)
Lines and Cables	28.22	25.75	31.25	35.15	36.85	38.63	40.50
One time R&M expenditure	3.13	3.13	2.62	4.43	4.43	4.32	1.06
Gross R&M Expenses	31.35	28.88	33.87	39.58	41.28	42.95	41.56

32. While projecting the repair and maintenance expenses for the control period, the licensee has separately shown the one time R&M expense proposed for each year of the control period as follows.

Table-15
Comparison of the actual and projected R&M Expenses

Year	Details of work	Amount (Rs.Lakh)
2018-19	Overhauling of Power Transformer-1	4.43
2019-20	Overhauling of Power Transformer-2	4.43
2020-21	Painting of the Substation	4.32
2021-22	Overhauling of 5 Nos of distribution transformer	1.06

33. The licensee in the petition has stated that they own two numbers of 12.5 MVA Power transformers for catering power supply to the consumers. The Power transformers of the company were commissioned during the year 2005. The licensee has stated that the major repair works of like the overhauling maintenance of the transformers and painting of the substation equipments are normally carried out on a period of 10 years. With regard to the overhauling, the licensee has stated that the power transformers of the company were showing oil leakages and rusting. The overhauling maintenance of the said transformers was due in 2015. The licensee had deferred the said maintenance mentioning insufficient normative R&M cost approved in the first control period without considering the one time R&M expenditures. Hence, the major one time R&M expenditures was deferred due to insufficient R&M cost in the first control period was not covered in the R&M cost for the second control period. The licensee has also stated that they will be forced to defer such statutory one time maintenance if sufficient one time R&M expenses is to be approved by the Commission. This may result in unnecessary failure of the equipment in the absence of required maintenance, which will in turn result in unnecessary capital expenditure for the procurement of new equipments and ultimately in a huge expenditure on account of the capital addition which will have to be passed on to the consumers in the form of tariff hike.
34. Commission takes a serious note on the comments made by the licensee regarding R&M expenses. The Commission is of the view that the statements made by the licensee are contrary to the provisions in the existing Act, regulations and conditions of licence. Providing uninterrupted power supply to their consumers as per the existing standards is the primary responsibility of a distribution licensee under its licence. The conditions of licence stipulates such responsibilities in unequivocal terms. While doing so, the licensee has to incur expenses in the most prudent manner within the existing regulatory framework. It is the obligation of the licensee to assess and prioritise urgent, essential and unavoidable works and thereafter conduct due diligence while incurring the expenses, so as to reduce the burden to the consumers. If the licensee failed in such a primary responsibility, there are enough provisions in the existing Act and Regulations for remedy and corrective action.
35. The Commission is vested with the powers to determine the allowable expenses and in turn the tariff to be realized from the consumers as per the Section 61 and section 62 of the Act. While exercising such legislative powers, the Commission is also

vested with powers to determine the allowable expenses as per the provisions of the Act. The normative R&M expenses are determined based on the approved past R&M expenses of the licensee duly allowing for inflation. If the licensee is not satisfied with such normative determination of expenses, it is their prerogative to go to appeal as per the provisions of the law in force. It is not prudent or fair to include unforeseen expenses or one time expenses as a matter of right as part of the normative expenses, which is realized on a yearly basis.

36. The licensee has stated that the maintenance of the power transformers were due in 2015. The licensee has not so far incurred the expenses or not approached the Commission for specific approval of the same so far. It is reiterated that the Commission had allowed one time maintenance expenses to the licensee in the past during the truing up process. For instance, the licensee during the truing up of accounts for the year 2016-17 had claimed Rs. 3.13 lakh towards the one time repair and maintenance for overhauling two current transformers which was allowed in the order dated 15-07-2019. It is not on record that the licensee had deferred this expenses. Further Sub Regulation 10 to Regulation 79 of the Tariff Regulations 2018 provides for allowing one time maintenance of special nature not in the form of routine repair and maintenance by the Commission after prudence check considering the details and justification furnished by the Distribution business/licensee for incurring such an expenditure to the satisfaction of the Commission. The Commission is of the view that the licensee is required to exercise such provisions in the Regulations rather than failing in the statutory responsibilities cast upon them under the licence.
37. Compared to the previous year, the repair and maintenance cost projections of the licensee is significantly high, which is mainly due to incorporating of high projections of controllable expenses. Commission is of the view that the licensee should take all efforts to limit the R&M expenses within the normative level.
38. **A&G Expenses:** The A & G Expenses proposed includes Insurance, telephone, audit charge, vehicle expenses, security charges, licensee fee, Electricity Duty under Section 3 etc. The licensee has stated that the escalation rate of 4.84% is considered for projecting the A&G expenses for the control period. The licensee has also stated that 50% of the common expenses are considered for ARR purpose. A comparison of the split up of the actual administrative and general expenses and the projections for the control period is tabulated hereunder.

Table-16
Comparison of the actual and projected A&G Expenses

Particulars	As per accounts		Projection			
	2016-17 (Rs.lakh)	2017-18 (Rs.lakh)	2018-19 (Rs.lakh)	2019-20 (Rs.lakh)	2020-21 (Rs.lakh)	2021-22 (Rs.lakh)
Rent Rates & Taxes	0.48	0.90	0.95	0.99	1.04	1.09
Insurance	2.80	4.83	5.07	5.31	5.57	5.84
Telephone & Postage	0.47	0.35	0.37	0.38	0.40	0.42
Legal charges	0.32	1.03	1.08	1.13	1.19	1.24
Audit Fees	0.80	1.18	1.24	1.30	1.36	1.42
Conveyance	0.39	0.78	0.82	0.86	0.90	0.95
Vehicle Running Expenses Truck / Delivery Van	9.26	4.28	4.49	4.71	4.93	5.17
Electricity charges	1.20	1.09	1.14	1.20	1.25	1.31
Water charges	0.10	0.74	0.77	0.81	0.85	0.89
Printing & Stationery	0.71	-	0.59	0.62	0.65	0.68
Advertisements, exhibition publicity	0.38	1.12	1.18	1.23	1.29	1.36
Training expenses	0.28	0.12	0.13	0.14	0.14	0.15
Miscellaneous Expenses	0.09	1.14	1.62	1.70	1.78	1.86
Office Expenses	1.62	0.22	0.23	0.24	0.25	0.27
License Fee and other related fee	0.64	3.01	3.16	3.31	3.47	3.64
V-sat, Internet and related charges	0.19	0.18	0.19	0.20	0.20	0.21
Security arrangements	6.63	9.15	9.60	10.06	10.55	11.06
Loss on GST Input Reversal	0.00	0.00	4.57	4.79	4.79	5.02
Others	0.75	0.57	0.61	0.63	0.67	0.70
Section 3 Duty	18.92	17.80	18.24	18.24	19.14	20.06
A&G Expenses	47.07	48.50	56.03	57.85	60.44	63.35

39. As per the detailed split up, the major share of the claim is for security arrangements and the other major claim is the Electricity Duty under section 3 of the Kerala Electricity Duty Act 1963. The Commission in the previous orders had already taken a considered stand and had decided 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. If considered appropriate, the licensee may approach the Government of Kerala with regard to the Duty under section 3 for an appropriate decision on the matter. Until then Section 3 Duty cannot be considered as a

pass-through as part of ARR. Such high administrative expenses could also due to unreasonable allocation under the head 'office expenses' to the licensed business.

40. The administrative and general expenses excluding the section 3 duty is tabulated hereunder.

Table-17
A&G excluding section 3 Duty

Particulars	Projection			
	2018-19 (Rs.lakh)	2019-20 (Rs.lakh)	2020-21 (Rs.lakh)	2021-22 (Rs.lakh)
A&G excluding section 3 Duty	37.79	39.61	41.30	43.29

41. While truing up the accounts of the financial year 2016-17 the Commission had approved an amount of Rs.19.07 lakh as per the Tariff Regulations 2014 considering the limited area of the licensee and the norms of operation specified under these Regulations. The licensee is directed to take earnest efforts to reduce the administrative and general expenses for each year of the control period to bring it within the normative level.
42. **O&M Expenses Approved:** The Commission has fixed the normative O&M expense in the Tariff Regulations, 2018. As per the Regulation 79(5) of the Tariff Regulations, 2018 all components of O&M expenses are controllable expenses and as per Regulation 14 (2), the aggregate loss on account of controllable factors shall be borne by the distribution licensee and shall not be passed on to the consumer in any manner. Accordingly Commission is of the considered view that the O&M expense is to be approved only in line with Regulation 79(5). The approved O&M expense for the control period is shown below.

Table-18
O&M Approved for the control period

Year	Rs.lakh
2018-19	106.94
2019-20	112.12
2020-21	117.55
2021-22	123.24

43. The licensee is directed to limit the operation and maintenance expenses at the normative amount approved by the Commission.

44. **Capital Investment plan for the Control Period:-**The licensee has submitted a detailed capital investment plan for the control period. The details as submitted are shown below.

Table -19
Capital Investment plan for the year 2018-19 (Rs. Lakh)

Particulars	Proposed	Approved
	(Rs. Lakh)	(Rs. Lakh)
Augmentation of Unitized Sub Station	3.50	3.50
Purchase of Earth tester	3.50	3.50
Thermal image Sensor	7.50	7.50
Website Modification	3.00	3.00
UPS system in the Office	0.80	0.80
Unitized Substation	27.00	Not Approved
Underground Cable Locator	2.00	
Lightning Arrestor	0.55	0.55
Aluminium bus bar tube	0.75	0.75
Total	48.60	19.60

45. It may be seen that the Commission in the order dated 29-08-2018 had approved an amount of Rs.19.60 lakh for the year 2018-19 based on the capital investment plan for 2018-19 already submitted before the Commission. The licensee has now sought approval for the purchase 16 nos of 12V SMF battery (Rs.0.55 lakh) for the UPS system in the office (UPS purchase already approved by the Commission).
46. The capital expenditure proposed for the years 2019-20, 2020-21 and 2021-22 are tabulated hereunder.

Table-20
Capital Investment plan for the year 2019-20(Rs. Lakh)

Particulars	Estimate
11 kV Ring Main Unit	7.50
2 Nos of Desktop	1.60
Advance Metering Infrastructure (AMI)-Phase-1 (Billing Software)	30.00
Underground cable locator	2.50
Total	41.60

Capital Investment plan for the year 2020-21(Rs. Lakh)

Particulars	Estimate
11 kV Indore VCB	6.00
Laptop & Desktop- 3 Nos	2.70
5 Nos of 110 kV Support Insulators	2.50
Advance Metering Infrastructure (AMI)-Phase-2 (Meter & Communication)	30.00
Total	41.20

Capital Investment plan for the year 2021-22(Rs. Lakh)

Particulars	Estimate
110 kV Isolator	2.00
Heavy duty Photocopier	2.00
Total	4.00

47. The licensee has stated that the capital works are proposed to be financed from the equity of the company. The major capital investment proposed is the Advance Metering Infrastructure of Rs. 60.00 lakh proposed to be conducted in two stages. As Phase 1 the licensee has proposed Rs.30.00 lakh for billing software for the year 2019-20 and as phase 2 an expenditure of Rs.30.00 lakh for Meter & Communication system in 2020-21. The licensee in the petition has submitted a detailed project report prepared by CMS Computers Limited. The proposal also includes cost estimates for the Advance Metering Infrastructure (AMI). The Commission had gone through the proposal in detail. Based on the cost estimates submitted, the per consumer cost is significantly high. It seems that the licensee has approached only one agency for preparation and execution of works. It is to be reiterated that the licensee should follow transparent process in the design tendering and execution of works. It is also to be reiterated that proper due diligence is to be exercised while executing such works so that such works are finalized in a competitive and economic manner. The Commission during the hearing had commented on the capital investment proposal of Rs.60.00 lakh for automated metering infrastructure, and suggested that the licensee may study the latest developments in the sector and frame suitable proposal for implementation in the park considering the limited area and number of consumers. The licensee may seek assistance of KSEB Ltd in this regard, if required. Accordingly the Commission is of the view that the expenditure on Advance Metering Infrastructure (AMI) is to be deferred till such time the above direction is satisfactorily complied with.
48. The licensee for the year 2019-20 has proposed an investment on underground cable locator at a cost of Rs.2.50 lakh. The licensee has stated that the buried cables are often getting damaged during excavations and other works causing long duration power outages and damages to equipment. The Commission vide order dated 29-08-2018 while considering the capital expenditure for the year 2018-19 had denied the proposal stating that the underground cable fault locator is not necessary as RPIL has laid the underground cable only inside the park area for which the licensee is expected to have a layout sketch. The Commission in the

order had also noted that, the item is for facilitating the R&M work in the licensed area of RPIL. The R&M works in the licensed area of RPIL are outsourced and it is the responsibility of the R&M contractor to carry out the R&M works with necessary equipments etc. Commission has also mentioned that in order to ensure availability of these equipments on 24 hour basis, the company can insist for the same in the future R&M tenders.

49. With regard to the other capital investments proposed, the Commission views that the same is necessary for maintenance and improvement of the distribution system. Such capital investments include 11kV ring main unit, 11kV indoor VCB , 110Kv support insulators desktops, heavy duty photocopier etc. With regard to the 11 kV ring main unit the licensee stated that the company proposes to purchase a SF6 type Ring Main unit as a spare RMU for emergency replacements. The licensee also proposes the purchase of compatible 11 kV vacuum circuit breakers as spare for the existing 11 kV vacuum and SF6 circuit breakers in the substation. The Commission directs the licensee to conduct competitive tendering mechanism with due diligence while incurring capital expenditure. Accordingly the Commission grants approval for the capital investment except the Advance Metering Infrastructure (AMI) and the underground cable locator. The capital investments approved for the control period are the following

Table -21
Capital Investment plan approved for the control period

Particulars	2018-19 Rs.lakh	2019-20 Rs.lakh	2020-21 Rs.lakh	2021-22 Rs.lakh
Augmentation of Unitized Sub Station	3.50			
Purchase of Earth tester	3.50			
Thermal image Sensor	7.50			
Website Modification	3.00			
UPS system in the Office	0.80			
Lightning Arrestor	0.55			
Aluminium bus bar tube	0.75			
16 nos of 12V SMF battery	0.55			
11 kV Ring Main Unit		7.50		
2 Nos of Desktop		1.60		
11 kV Indore VCB			6.00	
Laptop& Desktop- 3 Nos			2.70	
5 Nos of 110 kV Support Insulators			2.50	
110 kV Isolator				2.00
Heavy duty Photocopier				2.00
	20.15	9.10	11.20	4.00

50. **Depreciation:** - The licensee in the petition has claimed depreciation in the straight line method as per the schedule prescribed in the Tariff Regulations 2018. The licensee has projected depreciation for each year of the control period including the capital expenditure for each year of the control period as mentioned above. The claim made by the licensee is shown below.

Table 22
Depreciation proposed for the control period

Particulars	Depreciation (%)	2018-19			2019-20		
		GFA at the beginning (Rs.lakh)	Asset Addition (Rs.lakh)	Depreciation for the year (Rs.lakh)	GFA at the beginning (Rs.lakh)	Asset Addition (Rs.lakh)	Depreciation for the year (Rs.lakh)
Land & land rights	0.00	26.85	-	0.00	26.85	-	-
Civil works for EHT Substation	3.34	9.26	-	0.31	9.26	-	0.31
HV Distribution system/Transmission line	5.28	99.00	-	3.04	99.00	-	2.84
HT Distribution lines	5.28	122.04	-	4.12	122.04	-	3.90
Sub-station equipments	5.28	481.46	4.80	25.37	486.26	7.50	24.32
Transformers	5.28	0.00	-	0.00	0.00	-	0.00
Switchgears, Control gear & Protection	5.28	3.50	-	0.18	3.50	-	0.18
Batteries	5.28	0.00	-	0.00	0.00	-	0.00
Others (Testing Equipments)	5.28	9.79	11.00	1.05	20.79	2.50	1.22
Switchgears, Control gear & Protection	5.28	30.38	-	0.88	30.38	-	0.82
LT Distribution System	5.28	0.28	-	0.01	0.28	-	0.01
Meters	5.28	1.18	-	0.06	1.18	-	0.06
Furniture & fixtures for Substation	6.33	0.77	-	0.05	0.77	-	0.05
Office Equipments	6.33	0.00	1.35	0.08	1.35	-	0.09
IT Equipments	15.00	2.02	3.00	0.71	5.02	31.60	5.10
Any other items		228.00	-	8.70	228.00	-	8.34
Total		1014.51	20.15	44.57	1034.66	41.60	47.30

Particulars	Depreciation (%)	2020-21			2021-22		
		GFA at the beginning (Rs.lakh)	Asset Addition (Rs.lakh)	Depreciation for the year (Rs.lakh)	GFA at the beginning (Rs.lakh)	Asset Addition (Rs.lakh)	Depreciation for the year (Rs.lakh)
Land & land rights	0.00	26.85	-	-	26.85	-	-
Civil works for EHT Substation	3.34	9.26	-	0.31	9.26	-	0.31
HV Distribution system/Transmission line	5.28	99.00	-	2.65	99.00	-	2.47
HT Distribution lines	5.28	122.04	-	3.68	122.04	-	3.49
Sub-station equipments	5.28	493.76	8.50	23.65	502.26	2.00	22.73
Switchgears, Control gear & Protection	5.28	3.50	-	0.18	3.50	-	0.18

Others (Testing Equipments)	5.28	23.29	-	1.23	23.29	-	1.23
Switchgears, Control gear & Protection	5.28	30.38	-	0.77	30.38	-	0.72
LT Distribution System	5.28	0.28	-	0.01	0.28	-	0.01
Meters	5.28	1.18	-	0.06	1.18	-	0.06
Furniture & fixtures for Substation	6.33	0.77	-	0.05	0.77	-	0.05
Office Equipments	6.33	1.35	-	0.09	1.35	-	0.09
IT Equipments	15.00	36.62	32.70	9.99	69.32	2.00	10.67
Any other items		228.00	-	8.01	228.00	-	7.71
Total		1076.26	41.20	50.68	1117.46	4.00	49.72

51. The licensee has submitted that no assets are created out of consumer contribution. The licensee in the petition has not submitted the details of the age of the assets and the date of commissioning of the assets. Considering the in-principle approval of the proposed capital expenditure in para 49 and the average depreciation on the assets, the depreciation approved for the control period is as shown below.

Table 23
Depreciation for the asset as on 01-04-2018

Particulars	GFA at the beginning Rs.lakh	2018-19 Rs.lakh	2019-20 Rs.lakh	2020-21 Rs.lakh	2021-22 Rs.lakh
Land & land rights	26.85	0.00	0.00	0.00	0.00
Civil works for EHT Substation	9.26	0.31	0.31	0.31	0.31
HV Distribution system/Transmission line	99.00	2.75	2.75	2.75	2.75
HT Distribution lines	122.04	3.80	3.80	3.80	3.80
Sub-station equipments	481.46	23.58	23.58	23.58	23.58
Switchgears, Control gear & Protection	3.50	0.18	0.18	0.18	0.18
Others (Testing Equipments)	9.79	0.67	0.67	0.67	0.67
Switchgears, Control gear & Protection	30.38	0.80	0.80	0.80	0.80
LT Distribution System	0.28	0.01	0.01	0.01	0.01
Meters	1.18	0.06	0.06	0.06	0.06
Furniture & fixtures for Substation	0.77	0.05	0.05	0.05	0.05
Office Equipments	0.00	0.00	0.00	0.00	0.00
IT Equipments	2.02	0.30	0.30	0.30	0.30
Any other items	228.00	8.19	8.19	8.19	8.19
Total	1014.51	40.69	40.69	40.69	40.69

Table 24
Depreciation for the capital additions during the control period

Particulars	Rate %	Asset Addition for 2018-19 (Rs.lakh)	Depreciation for Asset Addition for 2018-19 (Rs.lakh)	Asset Addition for 2019-20 (Rs.lakh)	Depreciation for Asset Addition for 2019-20 (Rs.lakh)	Asset Addition for 2020-21 (Rs.lakh)	Depreciation for Asset Addition for 2020-21 (Rs.lakh)	Asset Addition for 2021-22 (Rs.lakh)	Depreciation for Asset Addition for 2021-22 (Rs.lakh)
Sub-station equipments	5.28%	4.80	0.13	7.50	0.45	8.50	0.87	2.00	1.15
Others (Testing Equipments)	5.28%	11.00	0.29		0.58		0.58		0.58
Office Equipments	6.33%	1.35	0.04		0.09		0.09		0.09
IT Equipments	15.00%	3.00	0.23	1.60	0.56	2.70	0.87	2.00	1.22
Total		20.15	0.68	9.10	1.68	11.20	2.41		3.04

52. Accordingly the depreciation approved for each year of the control period is tabulated hereunder.

Table 25
Total Depreciation approved for the control period

Particulars	2018-19 Rs.lakh	2019-20 Rs.lakh	2020-21 Rs.lakh	2021-22 Rs.lakh
Depreciation for the asset as on 01-04-2018	40.69	40.69	40.69	40.69
Depreciation for the capital additions	0.68	1.68	2.41	3.04
Total depreciation approved	41.37	42.37	43.10	43.73

53. The Commission directs the licensee to furnish full details of the age of the assets along with the date of commissioning of the asset while submitting the petition for the truing up of accounts for each year of the control period.

54. **Interest and Finance Charges:** -The licensee has projected interest and financing charges for each year of the control period which includes interest on normative loan and bank charges for the security provided to KSEB Ltd. The details of the projections made by the licensee for each year are shown below.

Table-26
Interest and Finance Charges proposed for the control period

Particulars	2018-19 Rs.lakh	2019-20 Rs.lakh	2020-21 Rs.lakh	2021-22 Rs.lakh
Interest & Finance Charges	2.19	2.19	2.19	2.19
Interest on normative loan	58.30	60.06	62.42	63.71

55. The licensee has projected an amount of Rs.2.19 lakh for each year of the control period on account of bank guarantee and letter of credit charges as demanded by

KSEB Ltd. The claim is for the double security mechanism for executing the PPA as required by KSEB Ltd. The licensee has stated that though they had approached KSEB Ltd to relax the double security mechanism proposed in Article 8.9 and 8.12 of the power purchase agreement, KSEB Ltd had insisted for double security mechanism. Considering the statement of the licensee, the Commission approves the interest and finance charge of Rs.2.19 lakh for each year of the control period.

56. **Interest on normative loan:** The licensee has also claimed interest on normative loan for each year of the control period as shown below.

Table-27
Interest on normative loan proposed for the control period

Particulars	2018-19	2019-20	2020-21	2021-22
	Projected Rs.lakh	Projected Rs.lakh	Projected Rs.lakh	Projected Rs.lakh
Gross Normative loan - Opening	1024.59	1055.46	1096.86	1119.46
70% Capital cost approved by Commission	717.21	738.82	767.80	783.62
Cumulative repayment of Normative Loan upto previous year	-	-	-	-
Net Normative loan - Opening	717.21	738.82	767.80	783.62
Increase/Decrease due to ACE/decapitalization of assets	-	-	-	-
Net Normative loan - Closing	717.21	738.82	767.80	783.62
Average Normative Loan				
Weighted average Rate of Interest of actual Loans	8.15	8.15	8.15	8.15
Interest on Normative loan	58.45	60.21	62.58	63.87

57. The Commission while trying up the accounts for the year 2015-16 and 2016-17 had considered the claim of RPIL for interest on normative loan and after detailed analysis had decided that the licensee is not eligible for interest on normative loan for the existing assets. The relevant portion of the order on trying up of accounts for the year 2016-17 dated 15-07-2019 is quoted hereunder

65. In this context it is to be noted that the Commission as per the order dated 26-07-2017 on trying up of accounts for the year 2015-16 had taken a stand on the interest on normative loan as follows.

*“21. As per the details furnished by the licensee, there is no loan portfolio in the accounts of the licensee and the assets are funded by equity. Thus, as per regulation 27(4), in order to qualify **for the normative loan** for the*

assets capitalised prior to 1-4-2015, the debt equity ratio allowed by the Commission for determination of tariff for the period ending 31-3-2015 shall be considered. Hence the debt-equity ratio or the loan portfolio approved by the Commission in the truing up of accounts for the year 2014-15 shall be used for allowing normative loan if any.

22. In the order dated 9-3-2016 on truing up of accounts of the licensee for the year 2014-15, the Commission has noted that 'the licensee has not booked any amount under interest and financing charges for the truing up of accounts for the year 2014-15'. Further, the Commission had allowed only Rs.10 lakh as return on equity stating the reason that there is no convincing reason to substantiate higher return. It is also to be noted that the order on truing up of accounts for 2013-14 dated 1-3-2016 neither considered normative loan nor allowed any interest charges. Hence, as per the provision of the Tariff regulations, the licensee will be eligible for normative loan for the assets created after 1-4-2015 if the equity is more than 30% of the approved project cost or in the case of existing assets as on 1-4-2015, the debt: equity ratio approved by the Commission is to be considered. In the instant case, as per the orders of truing up for 2014-15, the Commission has not approved any interest cost and hence there is no normative loan existing, as per the regulatory accounts. Accordingly, no interest on normative loan can be admissible.

23. As per the audited accounts submitted by the licensee for the financial year 2015-16, there is no long-term borrowings under the head "Non-current liabilities" and no short-term borrowings under the head "Current Liabilities". Hence there is no outflow on this account to the licensee."

66. As shown above, Rubber park has no actual loan portfolio as per the accounts from the 2004-05, the period from where, the Commission has been approving the ARR&ERC and Truing up of accounts. Till 2015-16, the licensee had neither raised any claim on interest charges in the ARR&ERC petitions, nor had the Commission approved any interest charges as there were no loans or cash out flow. Until 2015-16, the licensee has not challenged any of the truing up orders of the Commission and had not raised any dispute regarding interest charges. Hence the decision of the Commission has become final which is consistent with the provisions of the Regulation 12 of the KSERC (terms and conditions of tariff for retail sale of electricity) Regulations 2006. It is to be noted that the provisions of the Tariff Regulations 2014 is a continuation of the earlier Regulations.

67. It is worthwhile to note that the RPL was established with the grants from Government of India and State Government for Research activities relating to Rubber and rubber industries. The licence was granted for providing reliable power to the rubber based industries in the park at lower cost. There is no profit

motive behind the establishment of the enterprise as the company has so far not declared any dividend to the promoter Kinfra or Rubber Board. In such circumstances, providing interest on free money would be undue enrichment for the licensee as there is no corresponding cash outflow. In this context it is pertinent to note that the licensee has not claimed any interest and financing charges either normative or actual till the year 2014-15 in the ARR&ERC petition and truing up petitions as per the provisions of KSERC (terms and conditions of tariff for distribution and retail sale of electricity under MTY framework) Regulation 2006. Since there is no normative loan outstanding as on 31-3-2015 as per the regulatory accounts, the Commission is of the considered view that the licensee is not eligible for interest on normative loan under the provisions of Regulation 27(4) of Tariff Regulations, 2014. Accordingly no interest on normative loan is admissible.

58. The Commission notes that the licensee has approached Hon'ble APTEL on the issue and the issue of interest on normative loan upto 01-01-2018 is sub judice and hence not considered. Accordingly Commission is of the considered view that the licensee is not eligible for normative loan on the assets created prior to 01-04-2018.

59. However as per the Regulations, the licensee is eligible for interest on normative loan for the assets created after 01-04-2018. 2nd proviso to Regulation 29(4) provides that if there is no actual loan, the interest charges shall be at the base rate. The base rate /SBI MCLR for one year tenor is 8.15%. Accordingly, the Commission considers the assets created during the control period for computation of interest on normative loan and the interest on normative loan approved at the rate of 8.15% is shown below.

Table-28
Normative loan approved for the control period

Particulars	2018-19	2019-20	2020-21	2021-22
	Rs.lakh	Rs.lakh	Rs.lakh	Rs.lakh
Asset Addition approved during the year	20.15	9.10	11.20	4.00
Normative loan for the year (70% of asset addition)	14.11	6.37	7.84	2.80
Cumulative Normative loan at the beginning of the year	-	13.42	18.11	23.54
Less : Repayment/ Depreciation for the asset added for the year	0.68	1.68	2.41	3.04
Closing Normative loan for the year	13.42	18.11	23.54	23.30
Average Loan for the year	6.71	15.77	20.83	23.42
Rate of Interest (Base rate)	8.15%	8.15%	8.15%	8.15%
Interest charges for the year	0.55	1.28	1.70	1.91

60. **Return on Equity**:-The licensee states that the business of Rubber Park is entirely funded by the equity contribution from Kinfra and Rubber Board. The Commission in its order on ARR & ERC for the previous control period and truing up of accounts had allowed the licensee a RoE which was 14% of the normative equity. Regulation 28 of the Tariff Regulations, 2018 provides for Return on equity share capital or net fixed assets. .

“28.Return on equity share capital or net fixed assets. – (1) Return on equity shall be computed in rupee terms, on the paid up equity capital determined in accordance with the regulation 26 and shall be allowed at the rate of fourteen percent for generating business/companies, transmission business/licensee, distribution business/licensee and state load dispatch centre:

Provided that, return on equity for generating business/company, transmission business/licensee, distribution business/licensee and state load dispatch centre, shall be allowed on the amount of equity capital approved by the Commission for the assets put to use at the commencement of the financial year and on fifty percent of equity capital portion of the approved capital cost for the investment put to use during the financial year:

Provided further that at the time of truing up for the generating business/company, transmission business/licensee, distribution business/licensee and state load dispatch centre, return on equity shall be allowed on pro-rata basis, taking into consideration the documentary evidence provided for the assets put to use during the financial year.

61. The licensee has projected RoE at the rate of 14% on 30% is shown below.

Table-29
Return on Equity projected

Particulars	2018-19	2019-20	2020-21	2021-22
Equity at the beginning of the year	1024.59	1055.46	1096.86	1119.46
30% of the Equity	307.38	316.64	329.06	335.83
Return on Equity at 14%	43.03	44.33	46.07	47.02

62. The licensee has shown increase in the equity for each year of the control period, whereas they have not substantiated the increase appropriately. While truing up the accounts for the year 2016-17, the amount of equity is Rs.966.00 lakh. Considering

30% of the approved capital expenditure as equity, along with Rs.966.00 lakh, the return on equity approved for the control period is shown below.

Table-30
Return on Equity approved

Particulars	2018-19	2019-20	2020-21	2021-22
Share capital	966.00	986.15	995.25	1006.45
Asset Addition approved during the year	20.15	9.10	11.20	4.00
Gross Asset eligible	976.08	990.70	1000.85	1008.45
30% of assets eligible for return	292.82	297.21	300.26	302.54
Return on Equity at 14%	41.00	41.61	42.04	42.35

63. **Total Expenses:** Based on the approvals above, the total expenditure approved for each year of the control period is shown below.

Table – 31
Aggregate Revenue Requirement approved for the control period

Particulars	2018-19		2019-20	
	Projection (Rs. Lakh)	Approved (Rs. Lakh)	Projection (Rs. Lakh)	Approved (Rs. Lakh)
Power Purchase Cost	1741.11	1666.40	1707.36	1735.58
R&M Expenses	39.58	106.94	41.28	112.12
Employee cost	61.65		64.64	
A&G Expenses	56.03		57.85	
Depreciation	44.57	41.37	47.31	42.37
Interest and finance charges	2.19	2.19	2.19	2.19
Interest on normative loan	58.45	0.55	60.21	1.28
Return on equity	43.03	41.00	44.33	41.61
Total Expenditure	2046.61	1858.45	2025.17	1935.15

Particulars	2020-21		2021-22	
	Projection (Rs. Lakh)	Approved (Rs. Lakh)	Projection (Rs. Lakh)	Approved (Rs. Lakh)
Power Purchase Cost	1798.33	1855.47	1894.75	1955.81
R&M Expenses	42.95	117.55	41.56	123.24
Employee cost	67.77		71.05	
A&G Expenses	60.44		63.35	
Depreciation	50.68	43.10	49.72	43.73
Interest and finance charges	2.19	2.19	2.19	2.19
Interest on normative loan	62.58	1.70	63.87	1.91
Return on equity	46.07	42.04	47.02	42.35
Total Expenditure	2131.01	2062.05	2233.51	2169.23

64. **Total Revenue:** - The total revenue includes revenue from the sale, wheeling charges and non tariff income.
65. **Revenue from Sale of Power:** The licensee has projected increase in the revenue from sale of power based on the increase in the sale expected for the years of the control period. For the years 2019-20, the licensee has not proposed any increase in the sale nor in the revenue compared to the year 2018-19. The licensee has proposed an increase of 5% in the revenue during each year. The revenue from sale of power projected by the licensee for each year of the control period is as shown below.

Table-32
Revenue Projections for the control period

Year	Revenue from Sale Rs.lakh
2018-19	1923.51
2019-20	1923.51
2020-21	2018.24
2021-22	2118.49

66. The Commission vide order dated 08-07-2019 in OA No.15/2018 has revised the retail supply tariff applicable to consumers across the state. The revenue projection based on the relevant tariff applicable for the years of the control period is tabulated hereunder.

Table-33
Revised Revenue Projections for the control period after tariff revision

Particulars	2018-19(Projected)				2019-20 (Projected)			
	No. of Consumers	Sales MU	Revenue Rs.lakh	Avg. Realisa	No. of Consumers	Sales MU	Revenue Rs.lakh	Avg. Realisa
HT-1	16	27.399	1703.78	6.22	16	27.399	1744.49	6.48
LT IV	24	3.188	203.03	6.37	24	3.188	211.26	6.63
LT VI B	1	0.011	0.90	8.18	1	0.011	1.09	9.96
LT VI F	2	0.112	10.45	9.33	2	0.112	10.49	9.37
LT VII A	14	0.052	4.51	8.76	14	0.052	4.60	8.93
Street Light	6	0.023	0.85	3.69	6	0.023	1.00	4.34
Total	63	30.78	1923.51		63	30.78	2002.93	

Particulars	2020-21 (Projected)				2021-22(Projected)			
	No. of Consumers	Sales MU	Revenue Rs.lakh	Avg. Realisa	No. of Consumers	Sales MU	Revenue Rs.lakh	Avg. Realisa
HT-1	18	28.77	1888.78	6.57	20	30.21	1982.53	6.56
LT IV	26	3.35	225.98	6.75	28	3.51	238.16	6.78
LT VI B	1	0.01	1.11	10.06	1	0.01	1.11	10.06
LT VI F	2	0.11	10.51	9.39	1	0.11	10.51	9.39
LT VII A	14	0.05	4.63	8.99	14	0.05	4.63	8.99
Street Light	6	0.02	1.02	4.46	6	0.02	1.02	4.46
Total	67	32.31	2132.04		71	33.91	2297.40	

67. The major revenue is realized from HT I Industrial category. It may be seen that the licensee has not proposed any increase in the sale of power for the year 2019-20, compared to the previous year. The licensee has stated that there was only 1% increase in the sale from 2017-18 to 2018-19. Considering the revised tariff, the Commission approves the revenue from sale of power as projected by the licensee for the years of the control period.

68. **Wheeling charges:-**The licensee has also projected for wheeling charges for each year of the control period. The licensee has shown that open access consumer M/s. M Fuels to wheel 0.067 MU of power through the distribution network of Rubber Park. Accordingly the wheeling charges projected for the control period Rs.0.207 lakh for each year of the control period. The forecast is based on the actual income received during the year 2017-18. The licensee has not proposed any increase in the wheeling charges for the control period. The Commission approves the wheeling charges of Rs.0.207 lakh as projected by the licensee for each year of the control period.

69. **Non-Tariff Income:** The non-tariff income proposed by the licensee for each year of the control period is Rs.0.61 lakh which is the actual non-tariff income for 2017-18. The amount includes miscellaneous receipts of Rs.0.07 lakh and an amount of Rs.0.54 lakh as commission for collection of electricity duty. The licensee has not proposed any interest on security deposit for the control period. The licensee has not proposed any increase in the non-tariff income for the control period over the previous year.

70. In 2015-16, the actual non tariff income approved was Rs.48.46 which included Rs.10.40 as interest on investments. The licensee in the letter dated 9-5-2018 submitted as part of the truing up of accounts for the year 2015-16 stated that

“security deposit with KSEB was met from the funds of Rubber park only and so the interest earned thereon is also considered as income of Rubber park only. Hence interest received from KSEB is not being included in the truing up statements for FY 2016-17 onwards”

71. The Commission during the year had examined the claim of the licensee regarding non-tariff income including interest from security provided to KSEB Ltd. The relevant portion of the order is quoted hereunder.

“23. According to the licensee, the interest on investments, which represents the interest on the security provided to KSEB Ltd is from the Rubber park’s main business and hence, interest is also accounted in the Rubber park main business. The Commission notes that, the licensee has been accounting security deposit paid to KSEB Ltd continuously under the head ‘loans and advances’ in the balance sheet of licensed business as shown below.

Particulars	As on 31-3-2014	As on 31-3-2015	As on 31-3-2016	As on 31-3-2017
Loans and advances (Rs. Lakhs)	115.53	115.53	117.00	191.00

24. Further, in reply to the clarification sought by the Commission, the licensee vide letter dated 20-12-2018 had given the split up details of ‘Loans and advances’ in the balance sheet as shown below:

Table 7
Details of Loans and advances

Particulars	2015-16 Rs.lakh	2016-17 Rs.lakh
KSEB Ltd	115.53	173.37
Tax deducted by KSEB Ltd	1.04	0.98
Receivable from M/s Telenova Networks	0.00	16.66
Total	116.57	191.01

25. The Commission also notes that KSEB Ltd had also communicated as part of the comments on the truing up of accounts of M/s RPL for the year 2014-15, that the amount of security deposit available with them from M/s RPL at the end 31-3-2014 was Rs. 115.53 lakh. Hence it is clear that the amount of security deposit paid to KSEB Ltd is booked consciously under the head ‘loans and advances’ which is part of the asset side of the balance sheet of RPL’s licensed business. Since, the amount is continuously shown as part of the

balance sheet of distribution business, the licensee now cannot claim that the said amount is part of the main business of RPL. Accordingly, the argument of the licensee cannot be accepted and the interest accrued on the security deposit shall be accounted as part of the distribution business. Since the amount outstanding at the beginning of previous year 2015-16 and 2016-17 is almost same, the amount of interest of Rs.10.40 lakh booked for the previous year is taken for the purpose of truing up for 2016-17.

26.The Commission also notes that licensee has not properly apprised the audit team on the changes in accounting of interest charges and hence the same was not figured in the audit report. It is also reminded that the details furnished by the licensee are under affidavit and in future Commission will be constrained to invoke punitive clauses for such wrong declarations.”

72. Based on the decision of the Commission while truing up of accounts for 2016-17, an amount of Rs.10.40 lakh has been accounted as part of non-tariff income as interest on security deposits with KSEB Ltd. The licensee after the truing up of accounts for the year 2016-17 has an accumulated surplus of Rs.26.81 lakh. In the projections for the control period, the interest on the accumulated surplus is not shown as part of the proposed income for the control period. Considering the bank rate of 6.25% prevailing as on 01-04-2018 Commission considers interest on accumulated surplus as part of non-tariff income. Accordingly, the non-tariff income approved for the control period is shown below.

Table 34
Non Tariff Income approved for the control period

Particulars	2018-19 Rs. Lakh	2019-20 Rs. Lakh	2020-21 Rs. Lakh	2021-22 Rs. Lakh
Interest on security deposits with KSEB Ltd	10.40	10.40	10.40	10.40
Interest on the accumulated surplus	1.68	1.68	1.68	1.68
Miscellaneous receipts	0.07	0.07	0.07	0.07
Commission for collection of electricity duty	0.54	0.54	0.54	0.54
Total Non Tariff Income	12.69	12.69	12.69	12.69

73. **Revenue Surplus/Gap:** Based on the above, the revenue surplus/gap for the control period estimated by the licensee and that approved by the Commission are as follows.

Table -35
Revenue Surplus/ Gap, Projected by the licensee and
Approved by the Commission for the control period

Particulars	2018-19		2019-20	
	Projection (Rs. Lakh)	Approved (Rs. Lakh)	Projection (Rs. Lakh)	Approved (Rs. Lakh)
Power Purchase Cost	1741.11	1666.40	1707.36	1735.58
R&M Expenses	39.58	106.94	41.28	112.12
Employee cost	61.65		64.64	
A&G Expenses	56.03		57.85	
Depreciation	44.57	41.37	47.31	42.37
Interest and finance charges	2.19	2.19	2.19	2.19
Interest on normative loan	58.45	0.55	60.21	1.28
Return on equity	43.03	41.00	44.33	41.61
Total Expenditure	2046.61	1858.45	2025.17	1935.15
Revenue from sale of power	1923.51	1923.51	1923.51	2002.93
Wheeling charges	0.21	0.21	0.21	0.21
Other income	0.604	12.69	0.604	12.69
Total income	1924.32	1936.41	1924.32	2015.83
Revenue Surplus (+)/ Gap (-)	(-122.29)	(+77.96)	(-100.85)	(+80.68)

Particulars	2020-21		2021-22	
	Projection (Rs. Lakh)	Approved (Rs. Lakh)	Projection (Rs. Lakh)	Approved (Rs. Lakh)
Power Purchase Cost	1798.33	1855.47	1894.75	1955.81
R&M Expenses	42.95	117.55	41.56	123.24
Employee cost	67.77		71.05	
A&G Expenses	60.44		63.35	
Depreciation	50.68	43.10	49.72	43.73
Interest and finance charges	2.19	2.19	2.19	2.19
Interest on normative loan	62.58	1.70	63.87	1.91
Return on equity	46.07	42.04	47.02	42.35
Total Expenditure	2131.01	2062.05	2233.51	2169.23
Revenue from sale of power	2018.24	2132.04	2118.49	2297.40
Wheeling charges	0.21	0.21	0.21	0.21
Other income	0.604	12.69	0.604	12.69
Total income	2019.05	2144.94	2119.30	2310.30
Revenue Surplus (+)/ Gap (-)	(-111.96)	(+82.89)	(-114.21)	(+141.04)

Order of the Commission

74. The Commission considered the application for approval of ARR & ERC for the Control Period 2018-19 to 2021-22, the additional clarifications and submissions furnished by the licensee along with the comments of KSEB Ltd. Accordingly the

approved ARR & ERC for the Control Period 2018-19 to 2021-22 are as shown below.

Particulars	2018-19 Approved (Rs. Lakh)	2019-20 Approved (Rs. Lakh)	2020-21 Approved (Rs. Lakh)	2021-22 Approved (Rs. Lakh)
Total income	1936.14	2015.83	2144.94	2310.30
Total Expenditure	1858.45	1935.15	2062.05	2169.23
Revenue Surplus (+)/ Gap (-)	(+)77.96	(+)80.68	(+)82.89	(+)141.04

Directives of the Commission

75. In view of the facts and reasons explained in earlier paragraphs, the Commission gives the following directives. The licensee shall,

- (i) Promote demand side management and energy efficiency measures within its area of license.
- (ii) Bring down the distribution loss to the level as stipulated in this order.
- (iii) Limit the expenditure to the amounts as approved in this order.
- (iv) The licensee while submitting the petitions for the truing up the accounts of the relevant years shall submit the details of the age of assets of the distribution licensee along with the date of the commissioning of the assets.

Sd/-
K.Vikraman Nair
Member

Sd/-
Preman Dinaraj
Chairman

Approved for issue
Sd/-
G.Jyothichudan
Secretary