

**KERALA STATE ELECTRICITY REGULATORY COMMISSION  
THIRUVANANTHAPURAM**

**Petition No: OP 56/2022**

**Present** : **Sri.T.K.Jose, Chairman**  
**Adv. A. J. Wilson, Member**  
**Sri. B. Pradeep, Member**

**In the matter of** : Petition for approval of ARR & ERC for the Control  
Period 2022-23 to 2026-27

**Petitioner** : M/s Thrissur Corporation Electricity Department

**Represented by** : Smt. Sheeba Babu, Chairman, Public Works  
Standing Committee  
Sri.Krishnakumar, Asst.Secretary  
Sri. T.S Jose, Electrical Engineer  
Sri. Muhamed Munaz, Consultant

**Respondent** : M/s Kerala State Electricity Board Limited

**Represented by** : Sri. Rajan, Deputy Chief Engineer, TRAC, KSEB Ltd  
Sri. Ajith Kumar K.N, Executive Engineer, KSEB Ltd  
Sri. Rajesh R, Asst. Executive Engineer, KSEB Ltd  
Sri. Shine Raj, Asst. Engineer, KSEB Ltd

**First Hearing:** : 03.03.2023 at the Conference Hall  
PWD Rest House, Thrissur

**Second Hearing:** : 05.10.2023 at the Court Hall,  
Office of the Commission

**Order Dated 27.02.2024**

1. M/s Thrissur Corporation Electricity Department under Thrissur Municipal Corporation (*hereinafter referred as TCED or the Licensee*) is a deemed distribution licensee under the Electricity Act, 2003, having an operational history since August 1937, when the generation & distribution business of Cochin State Power & Light Corporation Ltd was purchased by the then Thrissur Municipality. The current license area of the TCED corresponds to the administrative limits of the old Thrissur Municipality limits covering an area of approximately 12.65 sq.km.
2. The Commission had notified the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021 (*hereinafter referred to as Tariff*

Regulations, 2021) on 16-11-2021 for the five year Control Period starting from the first day of April 2022 and ending on the thirty first day of March 2027. As per Regulation 10(1) of the said regulations, every distribution business/licensee shall file, on or before the thirty first day of December 2021, the petition for approval of Aggregate Revenue Requirement and determination of tariff for each year of the Control Period.

3. The licensee has filed the present petition for the approval of ARR & ERC for the Control Period 2022-23 to 2026-27 as per the provisions of Tariff Regulations 2021. The Commission vide Order dated 25th June 2022 in OP 11/2020 had approved the ARR & ERC of KSEB Ltd for the Control Period and the Tariff Order applicable to the consumers and other distribution licensees. As per the petition submitted, ***the licensee has projected a Revenue Gap for each year of the Control Period as shown below.***

**Table 1**  
**Projections for the Control Period (Rs. lakh)**

Particulars	2022-23 (Projected)	2023-24 (Projected)	2024-25 (Projected)	2025-26 (Projected)	2026-27 (Projected)
Purchase of power	12349.92	12962.86	13227.68	13487.76	13754.09
Employee Cost	1413.47	1455.87	1499.55	1544.54	1590.87
R & M Expenses	135.76	121.68	133.69	146.89	186.40
A & G Expenses	288.46	276.87	287.99	300.46	313.91
Depreciation	307.50	486.65	608.91	677.47	933.83
Interest & Finance Charges	187.14	189.95	192.79	195.69	198.62
Other Debits	-	-	-	-	1250.00
Return on Equity	149.99	197.94	478.75	510.26	545.53
<b>Total Expenditure</b>	<b>14832.25</b>	<b>15691.83</b>	<b>16429.36</b>	<b>16863.05</b>	<b>18773.26</b>
Revenue from Sale of Power	13661.71	14102.98	14298.86	14498.47	14746.42
Non tariff Income	464.05	320.75	288.28	250.31	262.69
<b>Total Income</b>	<b>14125.76</b>	<b>14423.73</b>	<b>14587.14</b>	<b>14748.78</b>	<b>15009.11</b>
<b>Revenue Gap</b>	<b>-706.49</b>	<b>-1268.10</b>	<b>-1842.22</b>	<b>-2114.27</b>	<b>-3764.15</b>

4. The Commission admitted the petition as OP No.56/2022.

### **Public Hearing on the Petition**

5. The public hearing on the petition was conducted on 03-03-2023 at the Conference Hall of PWD Rest House, Thrissur. The licensee was represented by Smt. Sheeba Babu, Chairman, Public Works Standing Committee, Sri. Krishnakumar, Asst. Secretary, Sri. T.S Jose, Electrical Engineer, Sri. Muhamed Munaz, Consultant and other officers of the licensee. Sri. Rajan, Deputy Chief Engineer, TRAC, Sri. Ajith Kumar K.N, Executive Engineer, Sri. Rajesh R, Assistant Executive Engineer and Sri. Shine Raj, Assistant

Engineer represented KSEB Ltd. Sri. Muhamed Munaz presented the petition before the Commission and clarified the queries of the Commission.

6. The main points of the petition for approval of ARR & ERC are briefed below.
- The licensee has projected increase in the number of consumers and sales during the control period . The licensee has stated that growth is expected for the control period considering additional load expected from new consumers.
  - The licensee has not projected any year on year distribution loss reduction targets.
  - Power purchase cost increases year on year, duly considering the increase in sales and contract demand.
  - The O&M expenses projected for the years of the control period is higher than norms approved by the Commission. The licensee submitted that O&M expenses may be allowed, as proposed in the petition as against the norms prescribed in the Tariff Regulations 2021.
  - With regard to employee cost, the licensee submitted that the cost includes salary, DA and other benefits to employees and terminal benefits to its retired employees. The licensee has stated that they expect two pay revisions for its employees and has projected a provision for the control period and the same is claimed as other expenses.
  - The Administrative and General Expenses projected for the control period includes items such as rent, rates and taxes, insurance, telephone charges, interest and related charges, legal charges, audit fee consultancy charges, printing and stationary, advertisement charges statutory fee including payments to the Commission. Electricity duty under Section 3 (1) paid to the Government is also considered as part of A&G expense.
  - The R&M expenses claimed is for Plant & Machinery, Lines & Cable Networks and Office Equipment. The licensee in the petition has stated that 10%-12% increase is projected during the Control Period.
  - The licensee in the petition for approval of ARR&ERC has proposed a capital investment plan for the years of the control period which includes projects for loss reduction, for modernisation, Solar Projects, EV Charging Stations etc. The licensee has also filed separate petition for approval of the Capital investments for the Control Period.
  - The licensee has claimed depreciation as per the provisions of the Tariff Regulations, 2021. The licensee has also claimed depreciation for the capital expenditure for the years of the control period.
  - The interest and finance charges claimed by the licensee include interest on security deposit

- RoNFA for each year of the Control Period is projected @ 5.5%
  - The licensee has projected the Revenue from Sale of Power as per the revised tariff. The major sale of power and revenue realisation is from LT I A, LT VII A, HT II B and HT IV category of consumers.
  - Major components of Non-Tariff Income include Interest on investments, fixed and call deposits and bank balances, Miscellaneous Charges, Commission for collection of electricity duty, Interest on delayed or deferred payment of bills, Pole Rent Income, Recovery of theft and pilferage of energy, Meter/metering equipment/service line rentals and SD interest from KSEB. The projected non-tariff income is decreasing year on year during the Control period.
7. Sri. Shine Raj, Assistant Engineer submitted the views of KSEB Ltd on the petition before the Commission and submitted that the written comments would be submitted subsequently.
8. After hearing the licensee and the respondent, the Commission sought clarifications on the petition. The Commission viewed that the business plan of the licensee is not proper and took a serious note on the fact that the gross expenditure has been increasing abnormally. With regard to projection on sales, Commission noted that the estimations are not realistic. The Commission directed that the Electricity Department and the Consultants engaged in the preparation of the petition shall sit together and after proper discussion submit revised petition in line with the projected capital investments. The Commission sought clarifications on the petition and directed TCED to revise petitions with all proper details to substantiate their projections in the petition and submit the reply to the clarifications. Accordingly the licensee has submitted the revised projections which is tabulated below;

**Table 2**  
**Revised Projections for the Control Period (Rs. lakh)**

Particulars	2022-23 (Projected)	2023-24 (Projected)	2024-25 (Projected)	2025-26 (Projected)	2026-27 (Projected)
Purchase of power	12,198.43	12,942.21	13,179.82	13,429.55	13,695.03
Employee Cost	1,413.47	1,455.87	1,499.55	1,544.54	1,590.87
R & M Expenses	135.76	121.68	133.69	146.89	186.40
A & G Expenses	288.46	276.87	287.99	300.46	313.91
Depreciation	287.03	320.29	429.94	626.09	752.91
Interest & Finance Charges	187.14	277.39	457.39	577.69	535.28
Other Debits	0.00	0.00	0.00	0.00	1250.00
Return on Equity	155.61	146.83	188.15	282.48	342.96
<b>Total Expenditure</b>	<b>14,665.91</b>	<b>15,541.14</b>	<b>16,176.53</b>	<b>16,907.69</b>	<b>18,667.36</b>
Revenue from Sale of Power	13,526.40	14,102.98	14,298.86	14,498.47	14,746.42
Non tariff Income	514.76	339.72	232.42	243.12	297.26
<b>Total Income</b>	<b>14,041.16</b>	<b>14,442.70</b>	<b>14,531.28</b>	<b>14,741.59</b>	<b>15,043.68</b>
<b>Revenue Gap</b>	<b>(-)624.75</b>	<b>(-)1,098.44</b>	<b>(-)1,645.25</b>	<b>(-)2,166.10</b>	<b>(-)3,623.68</b>

9. The Commission conducted the second hearing on the revised petition on 05.10.2023 at the Court Hall, Office of the Commission. The licensee was represented by Sri.Krishnakumar, Asst.Secretary, Sri. T.S Jose, Electrical Engineer, Sri. Muhamed Munaz, Consultant and other officers of the licensee. Sri. Ajith Kumar K.N, Executive Engineer, TRAC and Sri. Shine Raj, Assistant Engineer, TRAC represented KSEB Ltd.
10. Sri. T.S Jose presented the revised petition before the Commission and replied the queries of the Commission. The Commission took serious note on the fact that the revised petition submitted before the Commission was a half-hearted attempt to comply with the direction of the Commission and directed the licensee to submit the details, properly explaining the methodology/reasoning for the projections under each head after duly considering the actuals for the financial year 2022-23. The Commission also directed TCED to further revise the petition with all proper details to substantiate their projections in the petition and submit the clarifications on the petition duly capturing the benefits expected of the proposed capital investments. The licensee vide letter dated 01.11.2023 submitted the projections based on actuals for the financial year 2022-23. The summary of the projected ARR&ERC of the licensee based on actuals for 2022-23 and a comparison of the previous years (Truing up Petition and Order on Truing Up) is shown below;

**Table 3**  
**Projections for the Control Period based on actuals for 2022-23 (Rs. lakh)**

<b>Particulars</b>	<b>2022-23 (Actuals)</b>	<b>2023-24 (Projected)</b>	<b>2024-25 (Projected)</b>	<b>2025-26 (Projected)</b>	<b>2026-27 (Projected)</b>
Purchase of power	11632.97	12133.24	12375.45	12577.65	12946.91
Employee Cost	1081.90	1274.53	1225.13	1278.01	1343.08
Provision for pay revision	127.50	-	-	625.00	625.00
R & M Expenses	85.76	88.14	92.13	96.29	90.92
A & G Expenses	304.41	315.32	323.27	351.78	532.58
Depreciation	232.25	303.74	292.64	325.40	805.36
Interest & Finance Charges on long term loans	-	-	-	-	310.65
Interest on consumer security deposits	174.21	189.95	189.95	189.95	189.95
Other Debits (Smart meter)	-	-	-	-	126.89
Return on Equity	148.91	141.13	123.60	106.60	110.60
<b>Total Expenditure</b>	<b>13787.92</b>	<b>14446.05</b>	<b>14622.16</b>	<b>15550.67</b>	<b>17081.94</b>
Revenue from Sale of Power	13237.58	13504.33	13779.42	14063.03	14747.46
Non-tariff Income	535.79	465.06	454.09	455.97	415.58
<b>Total Income</b>	<b>13773.37</b>	<b>13969.39</b>	<b>14233.51</b>	<b>14519.00</b>	<b>15163.04</b>
<b>Revenue Surplus/ (-) Gap</b>	<b>(-) 14.55</b>	<b>(-) 476.65</b>	<b>(-) 388.65</b>	<b>(-) 1031.67</b>	<b>(-) 1918.90</b>

**Table 4**  
**Income and Expenditure for the previous years** (Rs. lakh)

Particulars	2020-21		2021-22	
	Truing up petition	Trued Up	Truing up petition	Trued Up
Purchase of power	8886.06	8886.06	9511.93	9511.93
Employee Cost	1200.92	-	1273.18	1259.05
Prior Period Employee Cost	-	-	-	1200.92
R & M Expenses	89.91	89.91	74.51	74.51
A & G Expenses	217.24	87.56	221.20	91.80
Depreciation	264.95	263.90	207.39	207.39
Prior Period Depreciation	-	-	-	1.05
Interest & Finance Charges	179.80	213.66	168.60	158.08
Provision	796.98	-	107.07	-
Return on Equity	96.80	96.80	89.30	89.30
<b>Total Expenditure</b>	<b>11799.11</b>	<b>9637.89</b>	<b>11653.18</b>	<b>12594.03</b>
Revenue from Sale of Power	10269.74	10269.74	11033.50	11033.50
Non-tariff Income	643.85	1062.21	570.44	1001.90
<b>Total Income</b>	<b>10913.59</b>	<b>11331.95</b>	<b>11603.94</b>	<b>12035.40</b>
<b>Revenue Gap/ Surplus</b>	<b>(-)885.52</b>	<b>1694.06</b>	<b>(-)49.24</b>	<b>(-)558.63</b>

#### Analysis and decision of the Commission

11. The Commission considered the application for approval of ARR & ERC for the Control Period 2022-23 to 2026-27, the additional clarifications and the revised submission furnished by the licensee along with the comments of KSEB Ltd. The Commission notes that the ARR&ERC projections for 2022-23 are the actual expenses/income and the licensee has filed the petition for truing up of accounts for the first year of the control period ie 2022-23 and the Commission has admitted the same as OP 79/2023. Therefore, the Commission is of the considered view that the ARR&ERC for the year 2022-23 would be approved as per the norms fixed in the Regulations and prudence check for ensuring the veracity of the items of expenses/income would be done while considering the truing up petition. The analysis and decisions of the Commission on the application for approval of ARR & ERC for the Control Period are detailed below:

#### No. of Consumers & Sale of power: -

12. As per Regulation 10 (8) of Tariff Regulations 2021, the 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 72 provides as follows:

72. Sales Forecast. – (1) The distribution business/ licensee shall file, along with the petition for approval of Aggregate Revenue Requirement and determination of tariff, a forecast of the 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 proposed growth in number of consumers and proposed consumption per consumer, the demand for electricity in the preceding financial years, anticipated growth in the succeeding financial years and any other factor, which the Commission may consider relevant and thereafter approve the distribution licensee's forecast of sale of electricity to the consumers, with such modifications as deemed appropriate.

13. The licensee has projected increase in the number of consumers and sale of power for each year of the Control period. The licensee has stated that the energy sale forecast is based on annual growth rate. The licensee has also stated that the projection is also considering the impact of solar generation and the electric vehicles registered and considering the actuals of 2022-23. The comparison of the number of consumers and sales is tabulated below.

**Table 5**  
**Comparison of consumers and sales**

Year	No of Consumers	Lakh Units
2018-19	39594	1449.00
2019-20	39955	1511.90
2020-21	40436	1211.90
2021-22	41068	1291.60
2022-23	41831	1483.61
2023-24	42666	1513.28
2024-25	43513	1543.55
2025-26	44380	1575.88
2026-27	45268	1649.08

14. As per the details provided in the petition, the major sale of the licensee is to the LT VII A, LT I Domestic category, HT II B, HT IV A AND HT IV B category of consumers. The Commission notes that the markets and economic activity is picking up as of late in the licensed distribution area. **Considering the increase in the sales proposed for the control period, the Commission hereby approves the sales units as projected by the licensee for the Control Period.**

## Energy requirement and Distribution Loss

15. As per Regulation 73, the licensee is to provide voltage level distribution loss and distribution loss reduction trajectory for the Control Period with supporting studies along with the petition. 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 licensee in the petition has proposed distribution loss reduction for the Control Period. The distribution loss proposed by the licensee considering the actual distribution loss of 2022-23 is as shown below.

**Table 6**  
**Distribution loss and energy input projected for the Control Period**

	<b>Particulars</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>
1	Energy Requirement (lakh units)					
	(a) Purchase from KSEB Ltd	1586.05	1617.57	1648.67	1674.70	1740.26
	(b) Self-generation (solar)	5.50	5.80	5.80	8.50	8.50
	(c) Solar energy purchase	5.10	5.30	5.40	5.50	5.60
	Total	1596.65	1628.67	1659.77	1688.70	1754.36
2	Energy sales (lakh units)	1483.61	1513.28	1543.55	1575.88	1649.08
3	Distribution loss (lakh units) (1-2)	113.04	115.39	116.22	112.82	105.28
4	<b>Distribution loss (%)</b>	<b>7.08</b>	<b>7.08</b>	<b>7.00</b>	<b>6.68</b>	<b>6.00</b>

16. The energy banked by the solar prosumers and the own generation of TCED are taken into consideration for computation of distribution loss. The licensee has stated that, in order to curtail the loss, the licensee has started conducting regular annual energy audits and submit the same to the BEE and PFC and implementing the recommendations of the audit. The licensee has also stated that the T&D loss approved by the Govt of Kerala vide Corrigendum number 6474/10/PD dated 18/12/2015 is 8.00%. The licensee has requested the Commission to reset the T&D loss reduction targets according to the corrigendum approved by Govt of Kerala.
17. The Commission while truing up the accounts for 2021-22 had approved the actual distribution loss of 6.70% and had directed the licensee to continue all efforts to further reduce the distribution loss. The licensee in the petition has also submitted for approval of AT&C loss for the control period. The licensee has stated that the AT&C loss targets approved under RDSS by the Union Ministry of Power for the FY 2022-23 is 8.35% as per notification number 12/11(01)/2021-UR SSI-II(263835). The AT&C loss projected for the Control period is tabulated below;



**Table 7**  
**AT&C loss projected for the Control Period**

	Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
1	Energy Requirement (lakh units)					
	(a) Purchase from KSEB Ltd	1586.05	1617.57	1648.67	1674.70	1740.26
	(b) Self-generation (solar)	5.50	5.80	5.80	8.50	8.50
	(c) Solar energy purchase	5.10	5.30	5.40	5.50	5.60
	Total	1596.65	1628.67	1659.77	1688.70	1754.36
2	Energy sales (lakh units)	1483.61	1513.28	1543.55	1575.88	1649.08
3	Billing Efficiency	92.92%	92.92%	93.00%	93.32%	94.00%
4	Collection Efficiency	97.36%	97.37%	97.38%	97.40%	98.32%
5	AT&C loss	<b>9.53%</b>	<b>9.52%</b>	<b>9.44%</b>	<b>9.11%</b>	<b>7.58%</b>

18. The Commission has been consistently approving target for T&D loss reduction and the power purchase cost is approved accordingly. Further, the Commission is considering revenue from sale of power on accrual basis. Instead, if AT&C loss is to be considered, then the Commission has to consider Revenue from sale of power on cash basis which will be a paradigm shift from the consistently adopted methodology. Therefore, the Commission is not inclined to make such a change at present.
19. Similarly, the Regulations provide for fixing norms for T&D loss reduction trajectory and TCED being a distribution licensee within a limited geographical area should endeavour to achieve 100% collection efficiency. It is also pertinent to note that distribution loss reduction is a factor which is having direct impact on power purchase cost and available energy for distribution; it is a criterion that the licensees should continuously strive to improve upon.
20. The Commission further noted that, the licensee has proposed the capital investment plan for the Control Period as a separate petition (OP 52/2022). The licensee further stated that, the major benefits from these investments are reduction in distribution loss in their system. Based on the above observation the Commission noted that, distribution loss being a controllable parameter which is having direct impact on power purchase cost and available energy for distribution; it is a criterion that the licensees should continuously strive to improve upon. **Accordingly, the Commission fixes the distribution loss for first Control Period (2022-23) at 6.70% as being the distribution loss level already achieved by the licensee. Thereafter, the loss reduction target of 0.20% has to be achieved during three year of the Control Period and 0.10% for the last year of Control Period. The Commission hereby further directs the licensee to follow the guidelines issued by the CEA on 'Electricity Distribution Network Planning Criteria' regarding the measure for reducing the technical losses in the system. Accordingly, the approved distribution loss for the Control period is shown below.**

**Table 8**  
**Approved Energy input & Distribution Loss for the control period**

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Energy sales (lakh units)	1483.61	1513.28	1543.55	1575.88	1649.08
<b>Distribution loss (%)</b>	<b>6.70</b>	<b>6.50</b>	<b>6.30</b>	<b>6.10</b>	<b>6.00</b>
Distribution loss (lakh units)	106.54	105.20	103.78	102.37	105.26
<b>Energy Requirement (lakh units)</b>	<b>1590.15</b>	<b>1618.48</b>	<b>1647.33</b>	<b>1678.25</b>	<b>1754.34</b>
(a) Self-generation (solar)	5.50	5.80	5.70	8.50	8.50
(b) Solar energy purchase	5.10	5.30	5.40	5.50	5.60
(c) Purchase from KSEB Ltd	<b>1579.55</b>	<b>1607.38</b>	<b>1636.23</b>	<b>1664.25</b>	<b>1740.24</b>

### Power Purchase Cost

21. The licensee for the Control Period has projected increase in the power purchase cost considering the anticipated increase in the sales. The licensee has stated that they have also considered the actual power purchase from 2016-17 to 2022-23, the impact of solar generation of prosumers, consumption by electric vehicles, and generation from TCED owned solar plants are also considered in arriving at the projection.

**Table 9**  
**Details of Power Purchase Cost projected for the Control Period**

Particulars	2022-23 Actual	2023-24 Projected	2024-25 Projected	2025-26 Projected	2026-27 Projected
Energy purchased (lakh units)					
(a) KSEB Ltd	1586.05	1617.57	1648.67	1674.70	1740.26
(b) Solar energy from prosumers	5.10	5.30	5.40	5.50	5.60
<b>Total</b>	<b>1591.15</b>	<b>1622.87</b>	<b>1654.07</b>	<b>1680.20</b>	<b>1745.86</b>
Fixed charge (Rs.lakh)	1488.46	1604.93	1644.69	1677.43	1620.76
Energy charges (Rs.lakh)	10149.07	10528.31	10730.76	10900.22	11326.66
Less- Incentive (Rs.lakh)	4.56	-	-	-	-
<b>Total cost (Rs.lakh)</b>	<b>11632.97</b>	<b>12133.24</b>	<b>12375.45</b>	<b>12577.65</b>	<b>12946.91</b>
<b>Average cost (Rs./kWh)</b>	<b>7.31</b>	<b>7.48</b>	<b>7.48</b>	<b>7.49</b>	<b>7.42</b>

22. Considering the power purchase from KSEB Ltd at the distribution loss reduction targets approved for the Control Period and the anticipated sales, the power purchase cost approved for the control period is shown below.

**Table 10**  
**Power Purchase Cost approved for the Control Period**

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Energy purchased (lakh units)					
(a) KSEB Ltd	1579.55	1607.38	1636.23	1664.25	1740.24
(b) Solar energy from prosumers	5.10	5.30	5.40	5.50	5.60
<b>Total</b>	<b>1584.65</b>	<b>1612.68</b>	<b>1641.63</b>	<b>1669.75</b>	<b>1745.84</b>
Fixed charge (Rs.lakh)	1488.46	1604.93	1644.69	1677.43	1620.76
Energy charges (Rs.lakh)	10103.06	10462.23	10650.02	10832.42	11326.53
<b>Total cost (Rs. lakh)</b>	<b>11591.52</b>	<b>12067.16</b>	<b>12294.71</b>	<b>12509.85</b>	<b>12947.29</b>

## Operation & Maintenance expenses

23. Operation and Maintenance expenses consist of three components. Employee Cost, Repair and Maintenance Expenses and Administration and General Expenses. The Commission as per Regulation 80(2) of the KSERC (Terms and conditions for determination of tariff) Regulations, 2021, has approved the operation & maintenance cost for the Control Period. Commission has taken an escalation of 4.454% for the years of the Control Period considering 2020-21 as the base year. The licensee has projected the Operation and maintenance expenses over and above the normative limit specified in the regulation. A comparison of the projected O&M expenses against the approved norms is tabulated below.

**Table 11**  
**Comparison of Operation & Maintenance Expenses as per norms and projected by the licensee (Rs. lakh)**

Particulars	2022-23		2023-24		2024-25	
	Actuals	Norms	Projected	Norms	Projected	Norms
Employee Expenses	1081.90	1315.13	1274.53	1373.71	1225.13	1434.90
Provision for pay revision	127.50	-	-	-	-	-
R&M Expenses	85.76	98.71	88.14	103.11	92.13	107.70
A&G Expenses	304.41	106.85	315.32	111.61	323.27	116.59
<b>Total</b>	<b>1599.57</b>	<b>1520.70</b>	<b>1677.99</b>	<b>1588.43</b>	<b>1640.53</b>	<b>1659.19</b>

Particulars	2025-26		2026-27	
	Projected	Norms	Projected	Norms
Employee Expenses	1278.01	1498.81	1343.08	1565.58
Provision for pay revision	625.00	-	625.00	-
R&M Expenses	96.29	112.50	90.92	117.51
A&G Expenses	351.78	121.78	532.58	127.20
<b>Total</b>	<b>2351.08</b>	<b>1733.09</b>	<b>2591.58</b>	<b>1810.29</b>

24. The analysis of each head under operation and maintenance expense projected by the licensee for each year of the Control Period is detailed below.

## Employee cost

25. As per the details provided in the petition, the employee cost includes salary, DA and other benefits to employees and terminal benefits to its retired employees. The licensee has stated that TCED has been providing salary and other benefits including earned leave surrender, the DA is provided as and when the same released by the State Government to its employees, pension and other benefits as approved by the State Government and also as per the statutory rules and directions under court of law. The licensee has projected employee for the control period considering the actual employee cost for the year 2022-23. The employee cost projected for the years of the control period is tabulated below;

**Table 12**  
**Employee Cost projected for the control period (Rs. lakh)**

<b>Particulars</b>	<b>2022-23 actual</b>	<b>2023-24 Projected</b>	<b>2024-25 Projected</b>	<b>2025-26 Projected</b>	<b>2026-27 Projected</b>
Salary	749.82	783.56	818.82	855.67	894.18
Other Allowances	1.00	1.05	1.10	1.15	1.20
Employer Contribution	13.13	13.72	14.33	14.98	15.65
Earned Leave Encashment	40.87	42.71	44.63	46.64	48.74
Bonus/Festival Allowance	8.99	9.39	9.81	10.25	10.72
Wages	174.92	182.79	191.02	199.61	218.41
Pension Contribution	87.37	91.30	95.41	99.70	104.19
Grade/promotion Arrear	5.80	150.00	50.00	50.00	50.00
<b>Total</b>	<b>1,081.90</b>	<b>1,274.53</b>	<b>1,225.13</b>	<b>1,278.80</b>	<b>1,343.08</b>
<b>Norms Approved in Tariff Regulation</b>	<b>1315.13</b>	<b>1373.71</b>	<b>1434.90</b>	<b>1498.81</b>	<b>1565.58</b>

26. The licensee, in addition to the employee cost projected above has also projected provision for pay revision. The licensee in the petition has shown a provision for pay revision for the years 2022-23, 2025-26 and 2026-27. For the year 2022-23, the provision created for pay revision is Rs.127.50 lakh and for the years 2025-26 and 2026-27, the amount is Rs.625.00 lakh each.
27. The license in the petition has submitted that grade promotions were not given to a set of employees owing to the objections raised by the Kerala State Audit Department and Directorate of Urban Affairs and was under the consideration of Kerala Administrative Tribunal (KAT). The Tribunal vide its Order dated 04.10.23 had directed to disburse the amount due to the employees within three months from the date of the order. In addition, the promotion of the employees under various categories is also pending owing to various disputes between the appointing authority and employees on promotions and many have approached the Tribunal. The licensee has stated that the arrears on this account are also forming part of the projection which will come around Rs.150 lakh. Regarding grade promotion arrears, the Commission is of the considered view that the same will be allowed at the time of truing up on the basis of actuals after prudence check.
28. The licensee has further stated that there will be a reduction in the number of employees due to IT/OT and AMISP projects and that benefit has taken in the calculation of employee cost. The increase in the number of employees due to SCADA & new 110KV substation and the subsequent increase in the expenses is accounted under wages and not in salary in the year of completion of those projects and this may change according to the government approval on the creation of new posts. The licensee has highlighted that, even after all these additions, the employee cost is within the norms prescribed by the Commission.

29. With regard to the employee strength, the licensee has stated that the same is determined by Government as per direction of the Director of Urban Affairs. The licensee has filed petition seeking approval of employee strength and employee cost of Distribution licensee. The Commission has gone through the petition and is of the considered view that matter shall be treated separately, based on the petition filed before the Commission. Commission notes positively that the claim made under employee cost is lower than the norms specified by the Commission, whereas the veracity of the projection shall be analysed in detail while truing up the accounts of the relevant years.
30. With regard to the provision created for pay revision, Commission is of the considered view that the pay revision may be considered while truing up the accounts based on actual disbursement. ***Accordingly, the Commission hereby provisionally approves the employee cost for the control period as per the norms approved in Tariff Regulation, 2021.***

### **Repair and Maintenance Expenses**

31. The licensee has projected repair and maintenance expenses for each year of the control period, which is lower than the norms specified by the Commission. The licensee has stated that the benefits on account of various capital investment projects have taken into consideration while projecting the R&M cost. Projects like SCADA, conductor change, augmentation etc. will reduce the repair & maintenance time and cost considerably. The split up of the R&M expenses projected for the Control period.

**Table 13**  
**Split Up of R&M Expenses projected for the control period (Rs. lakh)**

<b>Particulars</b>	<b>2022-23 actual</b>	<b>2023-24 Projected</b>	<b>2024-25 Projected</b>	<b>2025-26 Projected</b>	<b>2026-27 Projected</b>
Plant & Machinery	15.82	16.54	17.29	18.08	20.27
Buildings	0.96	-	-	-	-
Lines & Cable Networks	53.72	56.15	58.70	61.37	53.06
Vehicles	1.82	1.89	1.96	2.04	2.12
Furniture & Fixtures	1.26	1.31	1.37	1.42	1.48
Office Equipment	11.71	12.25	12.80	13.38	13.99
Labour Works	0.47				
<b>Gross R&amp;M Expenses</b>	<b>85.76</b>	<b>88.14</b>	<b>92.13</b>	<b>96.29</b>	<b>90.92</b>
<b>Norms Approved in Tariff Regulation</b>	<b>98.71</b>	<b>103.11</b>	<b>107.70</b>	<b>112.50</b>	<b>117.51</b>

32. The licensee has not submitted any detailed split up of the R&M expenses projected for the control period. The licensee shall submit detailed item wise split up of the R&M expenses while filing the petitions for the truing up of accounts for the respective years of the Control Period. The actual expense while truing up the accounts for the year 2021-22 was Rs.74.51 lakh. The Commission had considered the same and had approved the same as claimed by the licensee.

33. The Commission directs the licensee to take all efforts to limit the R&M expenses to the projected level and the licensee shall note that reducing R&M expenses without properly maintaining the equipment is not a prudent practice and the licensee is bound to maintain the equipment as per required standards and effective functioning of the equipment. ***The Commission is of the view that the licensee should take all efforts to limit the R&M expenses within the normative level and any expenses relating to uncontrollable factors or one-time expenses can be considered in Truing Up of accounts by the Commission only after prudence check.***

### A&G Expenses

34. The licensee for the control period has projected the A&G expenses higher than the norms approved by the Commission. The major amounts booked as part of administrative and general expenses are the rent, conveyance and vehicle expenses, printing and stationery expenses and duty under Section 3 of the Kerala Electricity Act 1963.

**Table 14**  
**A&G Expenses projected for the control period (Rs.lakh)**

Particulars	2022-23 Actual	2023-24 Projected	2024-25 Projected	2025-26 Projected	2026-27 Projected
Rent Rates & Taxes	59.68	59.68	59.68	59.68	59.68
Insurance	4.04	4.08	4.12	4.16	9.20
Telephone & Postage, etc.	5.82	6.98	8.38	10.06	12.07
Legal charges	3.24	3.38	3.54	3.70	3.86
Consultancy charges	12.91	12.81	12.93	13.04	12.36
Other Professional charges	8.79	47.44	48.36	49.37	50.48
Conveyance	27.47	28.56	29.71	30.89	32.13
Printing & Stationery	4.16	4.35	4.55	4.76	2.97
Water charges	0.59	0.61	0.63	0.66	0.69
Advertisements, Exhibition, publicity	6.82	7.13	7.45	7.79	8.14
Training Expenses	0.58	0.60	0.63	0.65	0.68
License Fee and other related fee	4.22	4.39	4.43	4.61	4.65
Others	30.32	31.70	33.14	34.64	36.21
Bank Charges	6.83				
Accident Compensation	10.16				
Self Consumption	9.26	9.44	9.63	9.83	10.02
Ele. Duty u/s 3(I), KED Act	87.38	89.13	90.91	92.73	94.59
Loss of scrap asset (energy meters)					179.44
SCADA rent to KSEBL					10.00
PET test	22.15	5.00	5.00	25.00	5.00
<b>TOTAL</b>	<b>304.41</b>	<b>315.32</b>	<b>323.27</b>	<b>351.78</b>	<b>532.58</b>
<b>Norms Approved in Tariff Regulation</b>	<b>106.85</b>	<b>111.61</b>	<b>116.59</b>	<b>121.78</b>	<b>127.20</b>

35. The rent claimed for each year of the Control Period is Rs.59.68 lakh. The licensee has not clearly submitted the details to justify the methodology

adopted for calculating the rent. The licensee had until 2019-20 claimed rent at the rate of Rs.172.03 lakh per annum. The Commission had disallowed the claim and had directed the licensee to finalise rent as per the PWD rates. During 2021-22, the licensee has claimed Rs.50.58 lakh as rent for the building which is stated to be calculated by authorised engineers of the Corporation based on G.O (Rt.) No/.269/2016/PWD. The licensee has stated that rent of the yard occupied for substations and store were calculated proportional to market value of the property. The Commission viewed that the estimation of rent by the engineers of the Corporation was not proper and prudent and had directed the licensee to approach PWD for fixing the rent on a reasonable manner as per the PWD rates. The licensee had stated that Hon'ble Mayor has initiated steps to reevaluate the rent factor, whereas has not submitted details with regard to justifying the rent. It is also stated that TCED would submit details of rent before the Commission once the rent demand is finalised. ***The Commission is of the considered view that rent shall be finalized and certified by the PWD and then the licensee shall approach the Commission for consideration of the matter.***

36. With regard to the claim towards Electricity Duty under Section 3(1) 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&ERC.***
37. The licensee has also stated that with the implementation of total e- governance a substantial reduction in printing & stationery expenditure is expected. After the commissioning of 110 kV Substation in the year 2025-26 the additional expenses like insurance and other charges have been considered in the projection. The PMA charges for RDSS is included under the head professional charges. Other Professional Charges includes Inspection Fees, Testing Fees for Vehicles and Technical Fees for Research and Survey. The rent to be given to KSEB Ltd for using their premises for setting up SCADA office for the TCED is also taken into account. The self-consumption units of new substation are also considered as part of A&G expenses. Mandatory energy audit and financial audit charges are shown under the head consultancy charges. The claim under the head other expenses include expenses on Security Staff Wages, Pooram Related Expenses, Project Processing Fees, Water Charges and Diesel for Office Generator. The licensee has also projected an amount of Rs.179.44 lakh as the scrap value of the replaced energy meters after deducting the accumulated depreciation.

38. The Commission noted that, the licensee has proposed the A&G expenses which is higher than norms approved in the Regulations. Regarding the additional expenses or one-time expenses, the licensee shall submit all data to substantiate the expenses if any while truing up the accounts for the relevant years of the control period which shall be considered if prudent. ***The Commission is of the considered view that A&G expenses are controllable expenses and the Commission approves A&G expenses as per the norms fixed by the Regulations.***

### **O&M Expenses Approved**

39. The Commission has fixed the normative O&M expenses in the Tariff Regulations, 2021 by applying the escalation rate of 4.454%. While fixing the norms relying on historical inflation data, the Commission decided that actual escalation rates based on the actual inflation existing for each year of the Control Period would be considered at the time of Truing Up of the concerned financial year. As per the Regulation 80(2) of the Tariff Regulations, 2021 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. ***The Commission is of the view that the licensee should take all efforts to limit the O&M expenses within the normative level and any additional expenses relating to uncontrollable factors or one-time expenses can be considered at the time of Truing Up of accounts only after prudence check by the Commission. Accordingly, the Commission is of the considered view that the O&M expense is to be approved only in line with Regulation 80(2) and details are shown below.***

**Table 15**  
**Operation & Maintenance Expenses approved (Rs. lakh)**

Particulars	2022-23		2023-24		2024-25	
	Actuals	Approved Norms	Projected	Approved Norms	Projected	Approved Norms
Employee Expenses	1081.90	1315.13	1274.53	1373.71	1225.13	1434.90
Provision for pay revision	127.50	-	-	-	-	-
R&M Expenses	85.76	98.71	88.14	103.11	92.13	107.70
A&G Expenses	304.41	106.85	315.32	111.61	323.27	116.59
<b>Total</b>	<b>1599.57</b>	<b>1520.70</b>	<b>1677.99</b>	<b>1588.43</b>	<b>1640.53</b>	<b>1659.19</b>

Particulars	2025-26		2026-27	
	Projected	Approved Norms	Projected	Approved Norms
Employee Expenses	1278.01	1498.81	1343.08	1565.58
Provision for pay revision	625.00	-	625.00	-
R&M Expenses	96.29	112.50	90.92	117.51
A&G Expenses	351.78	121.78	532.58	127.20
<b>Total</b>	<b>2351.08</b>	<b>1733.09</b>	<b>2591.58</b>	<b>1810.29</b>



## Capital Investment Plan for the Control Period

40. The Tariff Regulations 2021 clearly specifies procedure to be followed by the licensee while proposing the capital investment plan. Regulation 10 and 71 of the Tariff Regulations 2021 is quoted below;

### **“10. Filing under the Multi-Year Tariff (MYT) framework. –**

*(1) Every generating business/ company or transmission business/ licensee or distribution business/ licensee or State Load Despatch Centre shall file, on or before the Thirty first day of December 2021, the following petitions for the Control Period:*

*(i) Petitions for approval of Aggregate Revenue Requirement and determination of tariff separately for each year of the Control Period, including capital investment plan for each year of the Control Period;*

*Provided that, in the case of Generation Business/ Company, Transmission Business/Licensee, Distribution Business/Licensee & SLDC of Kerala State Electricity Board Limited and Thrissur Corporation Electricity Department, separate petition shall be filed on or before 20th December 2021 for the approval of the Capital Investment Plan for each year of the Control Period;*

.....

### **71. Capital Investment Plan. –**

*(1) It is the primary responsibility of the distribution business/ licensee to ensure optimum utilization of the capital expenditure in its projects to enhance economy, efficiency and productivity and to meet the Performance Standards specified by the Commission.*

*(2) The distribution business/ licensee shall, along with the petition for determination of aggregate revenue requirements for the Control Period, file to the Commission for its approval, a detailed yearly capital investment plan, financing plan and the physical targets for meeting the requirement of load growth, reduction in distribution losses, improvement in the quality of supply, reliability, metering, consumer services etc., in accordance with the ‘Guidelines for Provisional Clearance of Capital Investment’ specified in Annexure 4 to these Regulations.*

*(3) The Capital Investment Plan shall be accompanied by all such information, particulars and documents as may be required by the Commission to substantiate the investment, justification of the proposed investments, project wise Detailed Project Report, basis of estimate, alternate solutions considered, and shall also include the capitalization schedule and financing plan.*

*(4) The Commission may approve the capital investment plan of the distribution business/ licensee, with appropriate modifications, if required, or reject the same:*

*Provided that the Commission shall afford to the distribution business/ licensee, a reasonable opportunity of being heard, before rejecting the proposal for approval of the Capital Investment Plan.*

*(5) The costs corresponding to the capital investments which are capitalised as per the approved Capital Investment Plan of the distribution business/ licensee for a given financial year shall be considered for its revenue requirement.”*

41. The licensee has filed a separate petition before the Commission for approval of capital investments for the control period (OP 52/2023). The Commission during the hearing had directed the licensee to submit additional details. As per the petition for approval of ARR&ERC the asset addition for the control period is tabulated below.

**Table 16**  
**Asset addition for the control period (Rs. lakh)**

Particulars	2022-23	2025-26	2026-27
Office equipment	0.13	-	-
IT Equipment	14.58	-	1409.98
Furniture and Fittings	0.69	-	-
Transformers	-	-	151.76
Plant & Machinery other than Transformers	19.78	264.35	1584.02
Lines & Cables	85.37	89.87	1021.52
Meters	14.37	-	-
Software	2.36	-	247.73
EV Charging	-	56.00	-
<b>Total Asset Additions</b>	<b>137.28</b>	<b>410.22</b>	<b>4415.01</b>

42. The Commission will consider this capital expenditure petition in due course based on the Order in (OP 52/2023). ***Therefore, the depreciation and other finance charges for the assets addition will be considered after formal approval, during the process of truing up of accounts based on the decision of the Commission.***

## Depreciation

43. The licensee has claimed Depreciation as per the provisions of the Tariff Regulations, 2021. The licensee has claimed depreciation for the asset additions projected during the years of the Control Period. The depreciation claimed for the years of the control period is tabulated below;

**Table 17**  
**Depreciation projected for the control period**

Year	(Rs. lakh)
2022-23 (actual)	232.25
2023-24 Projected	303.74
2024-25 Projected	292.64
2025-26 Projected	325.40
2026-27 Projected	805.36

44. The Commission is of the considered view that depreciation for the years of control period shall be based on the approval of the capital Investment plan. Based on the approval of the Capital Investment plan in OP 52/2023, depreciation shall be approved while truing up the accounts of the years of the

control period. Accordingly, the Commission provisionally approves Rs.207.39 lakh which had approved in 2021-22 Truing Up Order dated 22.11.2023 as the depreciation for the years of the control period as detailed below.

**Table 18**  
**Depreciation approved for Control Period 2022-23 to 2026-27 ( Rs.lakh)**

Particulars	GFA as on 01-04-2021	Assets Addition	Adjustments & Deductions	Depreciation
Distribution Lines	2418.26	24.75	7.34	66.71
Sub Station Equipments	3298.24	26.66	4.36	92.35
Furniture & Fixtures	31.08	0.78	-	1.60
Office Equipments	135.79	2.15	-	3.62
Vehicles	53.68	-	-	1.60
Land & Land rights	23.39	-	-	-
Building	119.93	-	-	3.50
Meter	603.69	8.73	-	32.11
Software	29.38	5.25	-	0.26
IT Equipment	111.50	5.49	-	5.64
<b>Total</b>	<b>6824.93</b>	<b>73.80</b>	<b>11.70</b>	<b>207.39</b>

### Interest and finance charges

45. The licensee for the control period has claimed Interest on consumer security deposits and deposits from Users of the distribution system for each year of the control period and has also claimed interest on loans for the year 2026-27. The licensee has stated that the claim on interest on consumer security deposit will change based on the effect of smart metering and the methodology for refund of security deposit as decided by the Commission. The interest on loans to be taken for RDSS projects is also considered in projection. The interest and finance charges projected for the years of the control period is tabulated below;

**Table 19**  
**Interest and Finance Charges proposed for the control period (Rs. lakh)**

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Interest on Consumer Deposits	174.21	189.95	189.95	189.95	189.95
Interest on Normative Long-Term Loan	-	-	-	-	310.65
<b>Total</b>	<b>174.21</b>	<b>189.95</b>	<b>189.95</b>	<b>189.95</b>	<b>500.60</b>

#### A. Interest on Normative Loan

46. The licensee has projected interest on normative loan for the year 2026-27 of the control period. The interest rate considered is 8.50% for the control period. The interest on normative loan claimed by the licensee for the control period is tabulated below;

**Table 20**  
**Interest on Normative loan proposed for the control period (Rs.lakh)**

Particulars (specify items)	2022-23	2023-24	2024-25	2025-26	2026-27
	Actuals	Projected	Projected	Projected	Projected
Loan from PFC					
Gross Loan -Opening	-	-	241.64	2,331.41	4,089.60
Cumulative repayments of Loans upto previous year	-				
Net loan-Opening	-	-	241.64	2,331.41	4,089.60
Add: Drawal(s) during the Year	-	604.11	5,284.83	4,984.37	-
Less: Repayment (s) of Loans during the year	-	362.47	3,195.06	3,226.18	434.93
Net loan - Closing	-	241.64	2,331.41	4,089.60	3,654.67
Average Net Loan	-				
Rate of Interest on Loan on annual basis	-	8.50%	8.50%	8.50%	8.50%
Interest on loan	-	-	18.49	178.15	310.65
Less IDC			18.49	178.15	-
Actual interest expense		-	-	-	<b>310.65</b>

47. The Commission has examined the proposal of the licensee and the provisions of the Regulations. The relevant provision of Tariff Regulation stated below.

**29. Interest, Finance charges and Carrying cost. –**

(1) *The loans arrived at in the manner indicated in Regulation 26 shall be considered as gross normative loan for calculation of interest on the loans:*

*Provided that the interest and finance charges on capital works in progress shall be excluded from such consideration and will not be considered in the ARR and truing up processes:*

*Provided further that in case of retirement or replacement of the assets, the normative loan amount approved by the Commission shall be reduced to the extent of outstanding loan component of the original value of the retired or replaced assets; based on documentary evidence.*

(2) *The normative loan outstanding as on the first day of April, 2022, shall be worked out by deducting the amount of cumulative repayment as approved by the Commission upto the thirty first day of March, 2022, from the normative loan.*

(3) *Notwithstanding any moratorium period availed by the generating business/company or the transmission business/ licensee or the distribution business/licensee, the repayment of loan shall be considered from the first financial year of the declaration of the commercial operation date of the project and shall be equal to the depreciation allowed for that financial year.*

(4) *The rate of interest allowed shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each financial year applicable to the generating business/ company or the transmission business/ licensee or the distribution business/ licensee or State Load Despatch Centre:*

*Provided that if there is no actual loan for a particular financial year of the Control Period but normative loan is still outstanding, the rate of interest on the last available loan shall be considered:*

*Provided further that if the generating business/ company or the transmission business/ licensee or the distribution business/ licensee or State*

*Load Despatch Centre does not have any actual loan outstanding, but normative loan is outstanding, then interest shall be allowed at the base rate.*

- (5) *The interest on loan shall be calculated on the normative average loan as per the norms approved by the Commission for the financial year, by applying the weighted average rate of interest.*

.....

48. As per regulation 26, the normative debt equity ratio of 70:30 has to be considered and where equity is more than 30%, the equity for the purpose is to be limited to 30% and the balance amount has to be treated as normative loan and interest on the same has to be allowed at the weighted average rate of interest of the actual loan portfolio. As per regulation 29, if there is no loan portfolio available, interest shall be allowed at the base rate
49. Based on the provisions of the Regulations, the normative loan for the Control Period can be allowed. However, the Commission observed that the licensee in their previous Truing Up Order had not claimed interest on normative loan up to the year 2021-22. This was not approved considering the lack of proper supporting claim and details. ***Considering this the Commission hereby directs to submit with proper details and justification during Truing Up of Accounts regarding the claim on Interest on normative loan as eligible as per the tariff Regulations 2021.***

#### **B. Interest on Consumers Security Deposit**

50. The licensee has claimed interest on security deposit at the rate of 4.65% as part of Interest and Finance Charges. The projection made by the licensee is tabulated below;

**Table 21**  
**Interest on Security Deposit for the control period (Rs.lakh)**

Year	Interest on Consumers Security Deposit
2022-23	174.21
2023-24	189.95
2024-25	189.95
2025-26	189.95
2026-27	189.95

51. The Commission has examined the claims on interest on the security deposit of the licensee. In this connection, Regulation 72 of the Kerala Electricity Supply Code, 2014 is reproduced hereunder.

**72. Interest on security deposit.-** (1) *The licensee shall pay to the consumer, interest on the security deposit furnished by him at the bank rate prevailing on the first of April of that year and it shall be payable annually with effect from date of such deposit.*

(2) The interest accrued during the financial year shall be adjusted in the energy bill of the consumer during the first quarter of the ensuing financial year.

(3) If the adjustment of interest is delayed, interest at twice the bank rate shall be payable for the delayed period.

52. As per Regulation 72 of the Kerala Electricity Supply Code, 2014, the licensee has to pay interest on the security deposit at the bank rate prevailing in the first April of that year. The Commission has noted that the licensee has proposed pre-paid smart metering for all consumers under RDSS project, which could necessitate refund of entire security deposit to consumers. The Commission based orders to be issued on Capital Investment Plan and after prudence check will consider this item appropriately during truing up. **Accordingly, considering this and the bank rate of 4.25% prevailing as on 01-04-2022, the Commission provisionally allows interest on security deposit based on the Revenue projection for the control period as shown below.**

**Table 22**  
**Approved Interest on Security Deposit for the Control Period (Rs. lakh)**

Particulars	2022-23 Actual	2023-24	2024-25	2025-26	2026-27
Revenue Expected for Previous year (Rs Lakhs)	-	13237.58	13504.33	13779.42	14063.03
Security Deposit (Rs Lakhs)	-	2206.26	2250.72	2296.57	2343.84
<b>Interest on Deposit @ 4.25%</b>	<b>174.21</b>	<b>93.77</b>	<b>95.66</b>	<b>97.60</b>	<b>99.61</b>

### Return on Net Fixed Assets

53. As per Regulation 28(2) of the Tariff Regulations 2021, if there is no equity invested in the business or equity invested in the regulated business of the distribution licensee is not clearly identifiable, return at the rate of 5.50 percent shall be allowed on the net fixed assets at the beginning of the financial year for such regulated business. Accordingly, the licensee has claimed a RoNFA at the rate of 5.50% on the net fixed assets at the beginning of the financial year as shown below.

**Table 23**  
**Return on Net Fixed Assets projected for the control period (Rs.lakh)**

Particulars	2022-23 (actual)	2023-24 Projected	2024-25 Projected	2025-26 Projected	2026-27 Projected
Net Fixed Assets at the Opening of Each Year	2,707.45	2,566.07	2,247.34	1,938.21	2,010.96
Amount eligible for ROE	2,707.45	2,566.07	2,247.34	1,938.21	2,010.96
<b>5.5 % on NFA</b>	<b>148.91</b>	<b>141.13</b>	<b>123.60</b>	<b>106.60</b>	<b>110.60</b>

54. Regulation 28 of the Tariff Regulations, 2021 provides for Return on equity share capital or net fixed assets.

28. Return on Paid up Equity or Net Fixed Assets. –

(1). Return on equity shall be computed in rupee terms, on the paid-up equity share capital and shall be allowed at the rate of fourteen percent (14%) per annum:

*Provided that in the case of increase in the equity share capital of the generating business/ company, transmission business/ licensee, distribution business/ licensee and State Load Despatch Centre, the additional amount of equity share capital infused into the generating business/ company, transmission business/ licensee, distribution business/ licensee and State Load Despatch Centre, and approved by the Commission for the assets put to its intended use shall be provided with ROE at 14% per annum on pro rata basis from the date of issuance of the equity shares:*

*Provided further that the generating business/ company, transmission business/ licensee, distribution business/ licensee and State Load Despatch Centre shall provide the complete details of the source of funding for such equity share capital.*

(2). If there is no equity share capital invested in the business or the equity invested in the regulated business of the generating business/ company or transmission business/ licensee or distribution business/ licensee or State Load Despatch Centre or such equity share capital is not clearly identifiable, return at the rate of 5.50 percent shall be allowed on the net fixed assets at the beginning of the financial year for such regulated business:

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

55. Based on above Regulation 28 of Tariff Regulations, 2018, the return shall be allowed at 5.50 percent on the net fixed assets at the beginning of the financial year for such regulated business. The Commission is of the considered view that Return on NFA for the years of control period shall be based on the approval of the capital Investment plan. Based on the approval of the Capital Investment plan in OP 52/2023, Return on NFA shall be approved while truing up the accounts of the years of the control period.
56. Accordingly, the Commission provisionally approves Return on net fixed assets for the years of the control period as Rs.155.60 lakh which had arrived based on the approved value in 2021-22 Truing Up Order dated 22.11.2023 and the details are shown below.

**Table 24**  
**Return on Net Fixed Assets approved for the Control Period (Rs. lakh)**

Particulars	Trued Up
Gross Fixed Assets as on beginning of the year	6887.03
Less: Cumulative Depreciation at the beginning of the year	3488.83
Net Fixed Assets at the beginning of the year	3398.20
<b>Less: Fixed assets financed by Consumer contribution at the beginning of the year (566.82+2.21)</b>	569.03
Balance net fixed assets on which returns can be allowed	2829.17
<b>5.50 % on Net Fixed Assets</b>	<b>155.60</b>

## Other Item

57. The licensee in form D.1.1 for the year 2026-27 has claimed an amount of Rs.126.89 lakh as Smart Meter. The licensee has not submitted any details of the claim made nor has furnished any documents to justify the projection. Accordingly, the same amount cannot be considered. The licensee shall submit proper documents to justify the same while truing up the accounts of the relevant financial year.

## Revenue from Sale of Power

58. The licensee while filing the petition for approval of ARR&ERC for the control period had projected the revenue from sale of power as per the pre-revised tariff. The Commission vide order dated 26.06.2022 has issued the schedule of tariff and terms and conditions for retail supply of electricity. Accordingly, the licensee submitted revised calculation for revenue from sale of power. The major sale of power and revenue realisation is from the LT VII A, LT I Domestic category, HT II B, HT IV A and HT IV B category of consumers. The revenue from sale of power claimed by the licensee for each year of the control period applicable for the years of the control period is tabulated hereunder.

**Table 25**  
**Revenue from Sale of Power projected for Control Period**

Category	2022-23		2023-24		2024-25	
	Sale of energy	Revenue	Sale of energy	Revenue	Sale of energy	Revenue
	(Lakh Units)	(Rs.Lakh)	(Lakh Units)	(Rs.Lakh)	(Lakh Units)	(Rs.Lakh)
Domestic	401.00	2,440.64	409.00	2491.45	417.21	2546.28
Non-Domestic	1037.31	10505.82	1058.09	10715.94	1079.11	10930.25
Agricultural	0.50	2.26	0.50	2.30	0.61	2.35
Industry	32.70	230.80	33.30	235.42	34.01	240.13
Streetlight	12.10	58.06	12.39	59.22	12.61	60.41
<b>TOTAL</b>	<b>1483.61</b>	<b>13237.58</b>	<b>1513.28</b>	<b>13504.33</b>	<b>1543.55</b>	<b>13779.42</b>

Category	2025-26		2026-27	
	Sale of energy	Revenue	Sale of energy	Revenue
	(Lakh Units)	(Rs.Lakh)	(Lakh Units)	(Rs.Lakh)
Domestic	425.50	2597.20	443.10	2704.53
Non-Domestic	1102.19	11156.90	1156.30	11723.84
Agricultural	0.61	2.39	0.63	252.98
Industry	34.68	244.93	35.76	2.47
Streetlight	12.90	61.61	13.29	63.64
<b>TOTAL</b>	<b>1575.88</b>	<b>14063.03</b>	<b>1649.08</b>	<b>14747.46</b>

***Considering the projections based on the actuals for the year 2022-23, figures and comments, the Commission provisionally approves the revenue from sale of power as estimated by the licensee for the Control Period on the condition that, the actuals only be allowed at the time of Truing up of accounts of the respective years.***



## Non-tariff income

59. The licensee has projected the non-tariff income for the control period as tabulated below

**Table 26**  
**Non-Tariff Income projected for the control period (Rs.lakh)**

Particulars	2022-23 (actual)	2023-24 (Projected)	2024-25 (Projected)	2025-26 (Projected)	2026-27 (Projected)
Meter Rent	47.06	48.00	48.96	49.94	50.94
Pole Rental Charges	45.86	50.45	61.73	81.01	93.35
Interest on FD	275.24	227.65	197.60	160.86	112.42
Commission for collection electricity duty	10.80	11.01	11.23	11.46	11.69
Recovery of theft and pilferage of energy	0.07	10.06	11.07	12.17	-
Penal Interest on deferred payment of bills	76.90	33.52	34.19	34.88	35.58
EV charging station				10.95	10.95
Interest from SD (KSEB)	36.66	36.84	37.03	37.21	37.40
Other receipts	43.20	47.52	52.27	57.50	63.25
Profit on sale of asset					74.27
<b>Grand Total</b>	<b>535.79</b>	<b>465.05</b>	<b>454.08</b>	<b>455.98</b>	<b>415.58</b>

60. The licensee has stated that the installation of special cross arms will generate additional revenue from FY 2024-25. The additional revenue generated from the commissioning of two EV charging stations which has been considered in the projections.

61. It is seen that the licensee has claimed an amount of Rs.74.27 lakh for the year 2026-27 as profit on sale of assets. The Commission notes that an arithmetic error had crept in as the same was not added to the non-tariff income for the year. Considering the said amount the non-tariff income for the year 2026-27 will be Rs.489.85 lakh.

62. The Commission also notes that the licensee has proposed interest on fixed deposits during the control period which is decreasing year after year. The cumulative revenue surplus till 2021-22 is Rs.16351.87. lakh. The Commission considers the rate of 4.25% per annum (Standard rate notified by the RBI as on 01-04-2022) for working out interest and the total interest on accumulated surplus works out to Rs.694.95 lakh. The balance amount after adjusting the interest on fixed deposits projected by the licensee is considered as part of non-tariff Income. Accordingly, the Non tariff income approved for the years of the Control Period is tabulated below;

**Table 27**  
**Non-Tariff Income approved for the control period (Rs.lakh)**

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Meter Rent	47.06	48.00	48.96	49.94	50.94
Pole Rental Charges	45.86	50.45	61.73	81.01	93.35
Interest on FD	275.24	227.65	197.60	160.86	112.42
Balance interest on accumulated surplus	419.71	467.30	497.35	534.09	582.53
Commission for collection electricity duty	10.80	11.01	11.23	11.46	11.69
Recovery of theft and pilferage of energy	0.07	10.06	11.07	12.17	-
Penal Interest on deferred payment of bills	76.90	33.52	34.19	34.88	35.58
EV charging station				10.95	10.95
Interest from SD (KSEB)	36.66	36.84	37.03	37.21	37.40
Other receipts	43.20	47.52	52.27	57.50	63.25
Profit on sale of asset					74.27
<b>Grand Total</b>	<b>955.50</b>	<b>932.35</b>	<b>951.43</b>	<b>990.07</b>	<b>1072.38</b>

### Revenue Surplus / (Gap)

63. 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 - 28**  
**Revenue Surplus/ Gap, projected by the licensee and Approved by the Commission for the Control Period (Rs. lakh)**

Particulars	2022-23 (Actuals)	2022-23 Provisionally approved	2023-24 (Projected)	2023-24 Approved
Purchase of power	11632.97	11591.52	12133.24	12067.16
Employee Cost	1081.90	1315.13	1274.53	1373.71
Provision for pay revision	127.50	-	-	-
R & M Expenses	85.76	98.71	88.14	103.11
A & G Expenses	304.41	106.85	315.32	111.61
Depreciation	232.25	207.39	303.74	207.39
Interest on consumer security deposits	174.21	174.21	189.95	93.77
Return on Equity	148.91	155.60	141.13	155.60
<b>Total Expenditure</b>	<b>13787.92</b>	<b>13649.41</b>	<b>14446.05</b>	<b>14112.35</b>
Revenue from Sale of Power	13237.58	13237.58	13504.33	13504.33
Non-tariff Income	535.79	955.50	465.06	932.35
<b>Total Income</b>	<b>13773.37</b>	<b>14193.08</b>	<b>13969.39</b>	<b>14436.68</b>
<b>Revenue Surplus/ (-) Gap</b>	<b>(-) 14.55</b>	<b>543.67</b>	<b>(-) 476.65</b>	<b>324.33</b>

Particulars	2024-25 (Projected)	2024-25 (Approved)	2025-26 (Projected)	2025-26 (Approved)
Purchase of power	12375.45	12294.71	12577.65	12509.85
Employee Cost	1225.13	1434.90	1278.01	1498.81
Provision for pay revision	-	-	625.00	-
R & M Expenses	92.13	107.70	96.29	112.50
A & G Expenses	323.27	116.59	351.78	121.78
Depreciation	292.64	207.39	325.40	207.39
Interest on consumer security deposits	189.95	95.66	189.95	97.60
Return on Equity	123.60	155.60	106.60	155.60
<b>Total Expenditure</b>	<b>14622.16</b>	<b>14412.55</b>	<b>15550.67</b>	<b>14703.53</b>
Revenue from Sale of Power	13779.42	13779.42	14063.03	14063.03
Non-tariff Income	454.09	951.43	455.97	990.07
<b>Total Income</b>	<b>14233.51</b>	<b>14730.85</b>	<b>14519.00</b>	<b>15053.10</b>
<b>Revenue Surplus/ (-) Gap</b>	<b>(-) 388.65</b>	<b>318.30</b>	<b>(-) 1031.67</b>	<b>349.57</b>

Particulars	2026-27 (Projected)	2026-27 (Approved)
Purchase of power	12946.91	12947.29
Employee Cost	1343.08	1565.58
Provision for pay revision	625.00	-
R & M Expenses	90.92	117.51
A & G Expenses	532.58	127.20
Depreciation	805.36	207.39
Interest & Finance Charges on long term loans	310.65	-
Interest on consumer security deposits	189.95	99.61
Other Debits (Smart meter)	126.89	-
Return on Equity	110.60	155.60
<b>Total Expenditure</b>	<b>17081.94</b>	<b>15220.18</b>
Revenue from Sale of Power	14747.46	14747.46
Non-tariff Income	415.58	1072.38
<b>Total Income</b>	<b>15163.04</b>	<b>15819.84</b>
<b>Revenue Surplus/ (-) Gap</b>	<b>(-) 1918.90</b>	<b>599.66</b>

### Orders of the Commission

64. The Commission considered the petition for approval of ARR & ERC for the Control Period 2022-23 to 2026-27, 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 2022-23 to 2026-27 are as shown below.**

**Table 29**  
**Revenue Surplus/ Gap approved by the Commission for the Control Period (Rs. lakh)**

Particulars	2022-23		2023-24		2024-25	
	Projected	Approved	Projected	Approved	Projected	Approved
Total Revenue Expenditure	13787.92	13649.41	14446.05	14112.35	14622.16	14412.55
Total Income	13773.37	14193.08	13969.39	14436.68	14233.51	14730.85
<b>Net Surplus/Gap</b>	<b>(-) 14.55</b>	<b>543.67</b>	<b>(-) 476.65</b>	<b>324.33</b>	<b>(-) 388.65</b>	<b>318.30</b>

Particulars	2025-26		2026-27	
	Projected	Approved	Projected	Approved
Total Revenue Expenditure	15550.67	14703.53	17081.94	15220.18
Total Income	14519.00	15053.10	15163.04	15819.84
<b>Net Surplus/Gap</b>	<b>(-) 1031.67</b>	<b>349.57</b>	<b>(-) 1918.90</b>	<b>599.66</b>

65. The petition is disposed of. Ordered accordingly.

Sd/-  
**Sri. T.K Jose**  
**Chairman**

Sd/-  
**Adv. A. J. Wilson**  
**Member**

Sd/-  
**Sri. B. Pradeep**  
**Member**

Approved for Issue  
Sd/-  
C.R Satheesh Chandran  
Secretary