

KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

Petition No: OP 10/2023

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

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

Petitioner : M/s Cochin Special Economic Zone Authority (CSEZA)

Represented by : Sri. Boni Prasada Rao INMMS, DDC, CSEZA
Sri. Pramodu S, Secretary in Charge, CSEZA
Sri. K. C Seetharaman, Consultant, CSEZA
Sri. Krishna Varma K, Consultant, CSEZA

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. Shine Raj, Assistant Engineer, KSEB Ltd

Date of hearing : 17.02.2023 at Conference Hall, CSEZA

Order Dated 19.01.2024

1. M/s Cochin Special Economic Zone Authority (hereinafter referred to as CSEZA or the licensee) is a government owned Special Economic Zone, under the Ministry of Commerce and Industry, Department of Commerce, Government of India. Cochin Special Economic Zone Authority (CSEZA) constituted under the SEZ Act 2005, is the developer of the Zone providing infrastructure and other related services to the Zone. 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.
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 (hereinafter referred to as Control Period). 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. M/s Cochin Special Economic Zone Authority has filed petition for approval of ARR&ERC for the control period 2022-23 to 2026-27 vide letter dated 16-03-2022, which was received on 23-03-2022 in the Office of the Commission. Since there was a delay in filing the petition, Cochin Special Economic Zone Authority has filed petition for condonation of delay stating reasons for the delay along with prescribed fees. The Commission had considered the submission made by the licensee and condoned the delay vide Order dated 25.03.2022 in OP No.21/2022. The licensee has filed the present petition for the approval ARR & ERC for the control period from 2022-23 to 2026-27 as per the Tariff Regulation, 2021 in the Multi Year Tariff Framework.
4. 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. M/s CSEZA has submitted vide letter dated 27.12.2022 their revised ARR&ERC based on the Tariff Order dated 25th June 2022. The licensee submitted that, for FY 2022-23, the respective projections are updated based on pre-revised tariff up to 25.6.2022 and based on revised tariff w.e.f 26.6.2022. For FY 2023-24, FY 2024-25, FY 2025-26 & FY 2026-26, the projections are updated based on revised tariff as per tariff order dated 25.6.2022. The revised projections – Forms - D 2.1-Revenue from Sale of Power, D 3.1- Purchase Cost and D 2.4-Other Income are attached herewith. There is no change in other forms. Based on this, the comparison of ARR&ERC for the Control Period as per the petition and Truing Up petition claim and Trued Up amount for the previous years is shown in Table 1 and Table 2 below.

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

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Cost of power purchase	3774.16	3923.46	3950.92	3950.42	3949.91
O&M Expenses	229.40	216.45	228.49	229.83	237.11
Depreciation	101.82	110.41	114.30	117.89	119.42
Return on NFA	72.06	74.97	72.90	71.92	68.32
Total Aggregate Revenue Requirement	4177.43	4325.29	4366.61	4370.06	4374.76
Revenue from Sale of Power	4016.07	4146.62	4173.71	4173.71	4173.71
Other Income	68.65	68.80	71.50	73.00	76.41
Total Expected Revenue from Charges	4084.72	4215.42	4245.21	4246.71	4250.12
Revenue Surplus (+)/ Gap (-)	(-)92.71	(-)109.87	(-)121.40	(-)123.35	(-)124.64

Table 2
Income and Expenditure for the previous years (Rs. lakh)

Particulars	2019-20		2020-21		2021-22	
	Truing Up Petition	Trued Up	Truing Up Petition	Trued Up	Truing Up Petition	Trued Up
Revenue from Sale of Power	3880.28	3880.28	3553.40	3553.4	3774.95	3774.95
Other Income	124.36	124.36	97.05	100.19	84.65	84.65
Total Income	4004.64	4004.64	3650.45	3653.59	3859.60	3859.60
Purchase of Power	3582.29	3582.29	3167.46	3169.77	3431.01	3428.28
R&M Expenses	5.20	192.29	8.95	201.68	13.86	197.93
Employee Cost	138.96		137.93		100.36	
A &G Expenses	29.73		35.69		36.66	
Refund of excess revenue	-	-	-	-	134.08	134.08
Depreciation	76.93	36.65	96.47	36.65	97.88	37.81
Return on NFA	36.04	16.82	34.85	15.73	42.20	14.62
Total Expenditure	3869.15	3828.05	3481.35	3423.83	3856.05	3812.72
Revenue Surplus (+)/Deficit (-)	135.49	176.59	169.10	229.76	3.55	46.88

Hearing on the Matter

5. The Public hearing on the petition was conducted on 17.02.2023 at the Conference Hall, Office of CSEZA at 12.00 PM. The petitioner, M/s Cochin Special Economic Zone Authority was represented by Sri. Boni Prasada Rao, Deputy Development Commissioner, Sri. Pramodu S, Secretary-in-Charge, CSEZA, Sri Seetharaman, Consultant and other officers and consultants of CSEZA. Sri. Rajan, Deputy Chief Engineer, TRAC. Sri. Ajith Kumar K.N, Executive Engineer and Sri. Shine Raj, Assistant Engineer representing KSEB Ltd, consumers in the license area and other stakeholders also participated in the hearing. Sri. Pramodu S, presented details on the petition and responded to the queries of the Commission. The main points made by the licensee are briefed below.

- a) The licensee has a substation capacity of 25 MVA (2X12.5MVA) Transformers and have power purchase agreement with KSEB Ltd valid up to 31.03.2025 with contract demand of 13 MVA at 110 kV.
- b) Actual energy sale from 1st April 2021 to 31st December 2021 was considered for the sales projection for the MYT Period. Additional Load expected for new SDF 3 and ZLD project has been considered for projection of Sale for MYT period from the estimated sale for 2022-23.
- c) The distribution loss of 1.45 % is estimated for FY 2022-23. Projection of Distribution loss for MYT Control period has been done considering 1% reduction of loss from the percentage of distribution loss estimated for the previous year.

- d) Energy Audit conducted through Accredited Energy Auditor M/s Kerala State Productivity Council has reported that actual distribution loss for FY 2021-22 is 1.45% considering switchgear/contact loss.
 - e) A&G expenses includes O&M charges for prepaid metering software system. This expense has been reduced in the MYT period compared to the year 2022-23.
 - f) The Capital Expenditure proposal for the MYT period is Rs.414.68 lakh. The fund for the capital additions are to be met from the surplus available in CSEZA's Power Distribution System Account.
 - g) Depreciation expenditure for the Control Period has been computed in accordance with Regulation 27 of KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021.
 - h) Return on NFA for the MYT control period 2022-23 to 2026-27 has been computed as per Regulation 28 of KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021.
 - i) Under the O&M cost, one time and emergency expenses not included in the present claim, which may have to be incurred during the Control Period may also be allowed at the time of truing up of accounts.
 - j) With regard to Renewable Purchase Obligation of the licensee, the licensee stated that there is no space or other facilities for generating neither non-solar nor solar energy within the licensed area.
 - k) It is further stated that, the licensee is unable to procure renewable energy from outside sources through Open access, within the Contract demand as per PPA executed with KSEB Ltd.
6. KSEB Ltd presented their views on the petition before the Commission and submitted that the written comments shall be submitted subsequently. KSEB Ltd vide letter dated 27.02.2023 submitted the views of KSEB Ltd on the petition before the Commission.
7. During the hearing, the Commission sought the necessity of the proposed capital expenditure and directed the licensee to submit detailed analysis, justifying the needs for the proposed capital expenditure.
8. KSEB Ltd submitted the views on the petition before the Commission which are briefed below.
- a) The licensee for the control period has projected only a minor increase in the sales to the consumer categories. CSEZA has assumed 1.02% to 1% increase in sale for the year 2022-23 to 2024-25. Thereafter no increase in sales is considered.

- b) Consumer count as on 2020-21 is 164 nos. The licensee has projected an increase in consumer number up to 204 nos. The increase is mainly in the category of IT & IT related services. Moreover, maximum demand is also increasing during ARR period. But corresponding increase in energy sale is not mentioned in the petition.
- c) The distribution loss projected by the petitioner is on higher side. As per KSERC truing up order 2020-21, the approved distribution loss is 1.27%. Whereas projected loss is varying from 1.450% to 1.393%. Hence the distribution loss may be fixed at a value below 1.27% and shall be reduced gradually during the ARR control period.
- d) As per the petition, CSEZA has installed 636kWp roof top solar plant in the year 2017-18 in order to generate solar power. Another grid connected solar Power plant of 653kWp was commissioned by CSEZA in April 2021. As per the KSERC tariff order 2020-21, the solar generation of licensee as approved by the commission is 1.5769 MU. Almost similar capacity solar plant is commissioned by the petitioner in April 2021. Therefore, the solar energy received in 2020-21 should have been doubled in the ARR control period but the licensee has projected a solar generation lesser than what is currently being received.
- e) The other income is seen reducing for the control period which may be analysed in detail prior to the approval of the ARR & ERC for the control period as there is no split up for long-term, short-term FD details. Hence the Hon'ble Commission may approve the non-tariff income only after prudence check on all the deposits held and interest received by the licensee.
- f) As per the truing up order 2020-21, the licensee is holding regulatory surplus of Rs. 672.90 lakh. As per the CAPEX plan proposed by the licensee includes, an investment of Rs. 414.68 lakh. As per the petition, it is proposed to meet the expenditure from the surplus available in CSEZA's Power Distribution System Account. The Commission may kindly be noted that, as the capex investment is proposed to meet with their accumulated surplus, depreciation and the return on NFA may not allowable.
- g) In the CAPEX proposal, the licensee has proposed many replacements work for which no decommissioning/decapitalisation has been provided.
- h) In the case of depreciation, the depreciation claimed for the assets created up to 2020-21 by the petitioner during the MYT control period is higher than KSERC approved value. Hence the Commission may limit the depreciation as per the truing up order.

- i) The Commission has directed CSEZA to furnish separate petition for approval of employee expenses. In the petition CSEZA requested the Commission time extension for filing the petition since CSEZA has floated EOI for selection of O& M Agency. As there is no clarity in the O&M expenses, it is requested to limit the expense as per the norms.
9. Further, the Commission has sought the view of KSEB Ltd regarding the RPO obligations and Open access. KSEB Ltd was directed to submit their opinion/stand with regard to KSEB Ltd meeting the RPO of CSEZA on or before 10.03.2023. The Commission also directed CSEZA to submit their counter, if any on the comments of KSEB Ltd and submit additional information/clarifications on or before 10.03.2023 vide Daily Order dated 22.02.2023. The licensee vide letter dated 10.03.2023 submitted the clarifications and counter statement of KSEB Ltd.

Analysis and decision of the Commission

10. The Commission considered the application for approval of ARR & ERC for the Control Period 2022-23 to 2026-27, the additional clarifications and submissions vide letters dated 27.12.2022 and 10.03.2023 and submissions furnished by the licensee along with the comments of KSEB Ltd vide letters dated 27.02.2023 and 10.04.2023. 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

11. 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.

12. The licensee stated that, as on 31.03.2022 it has estimated the composition of Consumers as 29 HT consumers and 136 LT consumers of various categories, totaling 165. The consumer mix, consumption pattern, etc. depends on financial stability around the world as consumers of the Zone are export oriented units. As such, consumption pattern is expected to continue as in the previous years. As on 31.03.2022, it is estimated that about 83% will be sold to HT consumers alone.

**Table 3
Consumers Mix**

Consumer Category	No of Consumers	% of Total Consumption
HT -1(A) -Industrial	27	76.93
HT -1 (B)-Industrial-IT/IT Enabled	1	3.36
HT- III(B)-Agricultural	1	2.40
LT –IV(A)-Industrial	60	10.75
LT-IV(B)-Industrial-IT/IT Enabled	33	5.27
LT- Other Categories	43	1.29
Total	165	100

13. Sale of energy during the control period is worked out on the basis of existing trend in the consumption pattern of the consumers in the Zone. The licensee further stated that there has been reduction in energy sale in the years 2020 & 2021 compared to 2019-20 due to the outbreak of COVID-19 pandemic and consequent reduction in power demand. Hence, CSEZA has considered actual Energy Sale and Revenue from Sale of Power for FY 2021-22 upto December 2021 as the basis for projection for MYT Control Period. As the land usage inside the Zone has reached saturation level, vertical expansion is the only option. Increase in energy sale projected for 2022-23 to 2026-27 is due to the expected additional energy consumption for new load of SDF project and ZLD plant from the estimated sale of FY 2021-22.
14. Accordingly, the sales projection and the number of consumers for the years of the control period are tabulated below:

Table 4
Number of Consumers for the control period

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
	Number of consumers	Number of consumers	Number of consumers	Number of consumers	Number of consumers
LT Categories					
LT-IV (A) Industry	60	60	60	60	60
LT-IV(B) IT & IT Enabled Service	44	60	70	70	70
LT-VI General (A)	1	1	1	1	1
LT-VI General (B)	2	2	2	2	2
LT-VI General (C)	5	5	5	5	5
LT-VI General (F)	21	21	21	21	21
LT-VII(A)	14	14	14	14	14
LT-VII (C)	1	1	1	1	1
LT-VIII B Metered Streetlights	1	1	1	1	1
LT Sub Total	149	165	175	175	175
HT Categories					
HT-I Industrial (A)	27	27	27	27	27
HT-I Industrial (B)	1	1	1	1	1
HT-III(B) Agricultural	1	1	1	1	1
HT Sub Total	29	29	29	29	29
LT & HT TOTAL	178	194	204	204	204

Table 5
Category wise Energy sales for the Control Period (lakh Units)

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
	Units Sold	Units Sold	Units Sold	Units Sold	Units Sold
LT Categories					
LT IV(A) Industry	58.59	58.59	58.59	58.59	58.59
LT-IV(B) IT & IT Enabled Service	34.02	43.02	46.73	46.73	46.73
LT-VI General (A)	0.04	0.04	0.04	0.04	0.04
LT-VI General (B)	0.34	0.34	0.34	0.34	0.34
LT-VI General (C)	0.16	0.16	0.16	0.16	0.16
LT-VI General (F)	3.97	3.97	3.97	3.97	3.97
LT-VII(A)	1.89	1.89	1.89	1.89	1.89
LT-VII (C)	0.01	0.01	0.01	0.01	0.01
LT-VIII B Metered Streetlights	0.58	0.58	0.58	0.58	0.58
LT Sub Total	99.60	108.60	112.31	112.31	112.31
HT Categories					
HT-I Industrial (A)	425.79	425.79	425.79	425.79	425.79
HT-I Industrial (B)	18.34	18.34	18.34	18.34	18.34
HT-III(B) Agricultural	13.09	13.09	13.09	13.09	13.09
HT Sub Total	457.21	457.21	457.21	457.21	457.21
LT & HT TOTAL	556.81	565.81	569.52	569.52	569.52

15. During the hearing KSEB Ltd pointed out that, though more consumers are projected in 2022-23, 2023-24 and 2024-25 but no increase in sale is projected. The licensee has also submitted the response of counter statements submitted by the KSEB Ltd vide letter dated 10.03.2023. The licensee during the hearing clarified that the Zone is nearly saturated and only possible way is vertical expansion. The licensee has projected number of consumers and sale of power for the MYT control period considering the estimated sale for 2021-22 (544.90 lakh units) based on the actual details from April 2021 to December 2021 and adding the anticipated additional load of new SDF project which is nearing completion as well as the new Zero Liquid Discharge (ZLD) Plant. CSEZA has estimated that 25% of the SDF area will be allocated during 2022-23, another 50% area in 2023-24 and remaining 25% in 2024-25. The SDF building has 10 floors and each floor could be allotted to a maximum of four consumers thereby a total of 40 consumers were estimated to be added during the MYT period in LT-IV (B) category (IT/IT Enabled) units. Each new LT (IV) B consumer is estimated to have an average 21 KW connected load. Accordingly, CSEZA has shown corresponding increase in number of consumers and KWH consumption in LT-IV (B) category for the MYT period. Since no further load increase, no increase in KWH is envisaged for 2025-26 and 2026-27, the same figures of 2024-25 are repeated for 2025-26 & 2026-27 too. It is also worth to note that the consumers in the Zone are export oriented units and the export market situations are volatile resulting in unpredictable power demand and consumption pattern. Outbreak of Covid-19 pandemic also contributed to reduction in power consumption.
16. The Commission has examined the projections of the Licensee. It is seen that the major share of the sale of the Control period is to the HT – Industrial [HT-I(A)] category which consists of 27 consumers throughout the Control Period. Its further noted that, increase in energy sale projected for 2022-23 to 2026-27 is due to the expected additional energy consumption for new load of SDF project and ZLD plant from the estimated sale of FY 2021-22. **Considering the past sales and the limited increase in number of consumers, the sales projections of the licensee is reasonable. Accordingly, the Commission hereby approves the sales units as projected by the licensee for the Control Period.**

Energy requirement & Distribution Loss

17. 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 has proposed 1% loss reduction target for the years of the Control Period. The licensee has also considered solar generation units for the calculation of distribution loss. The distribution loss proposed by the licensee is as shown below.

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

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Energy Purchase from KSEB Ltd (lakh units)	551.30	560.35	564.03	563.95	563.86
Solar Power (lakh units)	13.70	13.70	13.70	13.70	13.70
Total Input (lakh units)	565.00	574.05	577.73	577.65	577.56
Energy Sales (lakh units)	556.81	565.81	569.52	569.52	569.52
Distribution Loss (lakh units)	8.19	8.24	8.21	8.13	8.04
Distribution Loss (%)	1.45	1.44	1.42	1.41	1.39

18. Distribution loss Reduction is a factor 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. The details of the distribution loss of the previous Control Period are tabulated below.

Table 7
Actual Distribution loss for the previous Control Period

Particulars	2018-19	2019-20	2020-21	2021-22
ARR Projection (%)	1.84	1.78	1.73	1.73
ARR Approval (%)	1.45	1.40	1.38	1.36
Truing Up Petition (%)	2.08	1.41	1.27	1.44
Trued Up (%)	1.45	1.41	1.27	1.36

19. The licensee further submitted vide letter dated 10.03.2023 that, subsequent to the submission of MYT petition, BEE as part of PAT Cycle VII has directed all DISCOMS to submit an action plan to limit the T & D loss to the targeted value by 2024-25. As per this, CSEZA has to limit T&D loss to 1.41 % by 2024-25. Accordingly, CSEZA is planning to replace existing seven old Distribution Transformers with energy efficient (IS 1180 level1) transformers. In the first phase, CSEZA intends to replace the existing two 400kVA Distribution transformers in SDF 16 building to 630 kVA along with new LT panel board by 31-12-2024. Estimated Cost for the same comes to Rs.70 lakh. This will reduce the distribution loss in transformers considerably which would help to limit the overall T & D loss to the targeted value stipulated by BEE for CSEZA. Moreover, the aforesaid two existing transformers are 22 years old and nearly loaded to its rated capacity and there is a limitation when any of the existing consumers who are presently being fed from these transformers ask for load enhancement. The licensee will submit necessary justification and analysis to the Commission along with other CAPEX proposal for this MYT period.

20. Regarding the distribution loss of licensee, KSEB Ltd commented that distribution loss to be fixed at value below 1.27 % (as per actuals in 2020-21) and gradually reduced during the control period. The licensee has also submitted the response that, during 2020-21 the power consumption from KSEB Ltd was abnormally low (494.30 lakh units) compared to 565.80 lakh units in 2019-20, due to COVID 19 pandemic and consequent demand reduction by export units. Due to this abnormal load reduction and less power consumption, the distribution loss in Power Transformers, Cables and Distribution Transformers was less (since copper loss is proportional to Square of Current being drawn). Hence low distribution loss of 1.27 % occurred in 2020-21 is not the normative loss when all the Units are running at their installed capacity and therefore cannot be taken as the basis for fixing distribution loss for the MYT period. The distribution loss estimated for 2021-22 based on the actual distribution loss occurred from April to December 2021 works out to 1.47%. The average Distribution loss for the period 2017-18 to 2021-22 is 1.55%. in view of the above, CSEZA has realistically projected a reasonable distribution loss of 1.45 % for the FY 2022-23 and a further 1 % reduction from previous year has been estimated for projecting reasonable distribution loss for subsequent years of the control period. Moreover, the Energy Audit conducted by Kerala State Productivity Council has also verified and confirmed that distribution loss for 2021-22 is 1.45 %.
21. As per the truing up petition for the year 2021-22, the actual loss of the licensee is 1.44%. 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 license area is nearly saturated and only possible way is vertical expansion, the Commission is of the opinion that distribution loss is to be controlled at optimum level. **Accordingly, the Commission fixes the distribution loss for the Control Period as proposed by the licensee with reduction target of 1%. Thus, the level of distribution loss and the energy requirement approved for the Control Period are shown below.**

Table 8
Approved Distribution loss for the Control Period

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Energy Purchase from KSEB Ltd (lakh units)	551.30	560.35	564.03	563.95	563.86
Solar Power (lakh units)	13.70	13.70	13.70	13.70	13.70
Total Energy Input (lakh units)	565.00	574.05	577.73	577.65	577.56
Energy Sales (lakh units)	556.81	565.81	569.52	569.52	569.52
Distribution Loss (lakh units)	8.19	8.24	8.21	8.13	8.04
Distribution Loss (%)	1.45	1.44	1.42	1.41	1.39

Renewable Purchase Obligation

22. In the petition licensee has stated that, as per Kerala State Electricity Regulatory Commission (Renewable Energy and Net Metering) Regulations 2020, every distribution licensee shall meet the renewable energy obligation at the percentage specified therein. Accordingly, RPO for 2021-22 is 17 % (10.25 % non-solar & 6.25% solar) of the energy consumption. Regulations stipulate that for the purpose of computing the RPO, the quantum of energy met from large hydro sources of power with capacity above 25 MW, commissioned on or before 08.03.2019 shall be deducted. The said regulation has not specified RPO to be met by Licensees for the MYT control period. CSEZA has installed 636kWp roof top solar plant in the year 2017-18 in order to generate solar power. Another grid connected solar Power plant of 653kWp was commissioned by CSEZA in April 2021. The average annual solar power generation estimated for the MYT Control period is 1369613 kWh.
23. The licensee further submitted that, licensee has earnestly made efforts to meet the RPO and there is no space or other facilities for generating neither non-solar nor solar energy within the licensed area of CSEZA. In view of the above, to meet the RPO obligation, CSEZA has to go for procurement of Renewable Energy from external sources for meeting remaining Obligation after accounting the internal solar generation. But, CSEZA is unable to procure renewable energy from outside sources through Open access, as KSEBL cited Clause 15(2) of Open Access Regulation 2013 and objected that CSEZA, being a power distribution licensee, cannot procure power from Open Access within the Contract demand as per PPA executed with KSEB Ltd. In other words, CSEZA can procure Open Access power above the Contract Demand only. As the Regulation stipulate RPO as per percentage of Energy consumption, and since entire power requirement of CSEZA is met from KSEB Ltd, the above objection will disable CSEZA from procuring RE Power from Open market to meet the RPO.
24. The licensee has also stated that, as per KSERC (Renewable Energy and Net Metering) Regulations 2020, Buyer Licensee do not have separate RPO if the seller Licensee Meets the RPO. Since entire power requirement of CSEZA is met from KSEB Ltd, it is requested that KSEB Ltd may meet the RPO of CSEZA. Further, power met from Hydro sources shall be considered for actual RPO obligation. Hence, cost of REC procurement has not been included in the purchase cost.
25. Regarding the underutilization of solar generation commented by KSEB Ltd, the licensee stated that, CSEZA commissioned solar power plant of capacity of 636 kWp in 2017-18 and another 653 kWp solar plant was completed and put

on trial in February 2020. The latter was commissioned and capitalized in April 2020. CSEZA projected solar generation of 13.70 lakh units for the MYT control period based on the estimated solar generation for 2021-22 which was worked out considering the actual solar generation obtained from April 2021 to December 2021 (including). It is admitted that solar generation achieved for 2021-22 and the projection is less than what was received in 2020-21. CSEZA is analyzing possible reasons for the reduced solar generation and will do the necessary corrective measures.

26. The Commission noted the relevant provision as per the Regulation 4(6) of the KSERC (Renewable Energy and Net Metering) Regulations, 2020. The relevant portion are stated below.

“A distribution licensee which is engaged in bulk purchase of electricity from another licensee shall not have separate obligation for purchase of renewable energy if, -(i) the seller licensee meets the renewable purchase obligation for the energy sold to the licensee or (ii) The licensee reimburses to the seller licensee the additional cost incurred as approved by the Commission by the seller licensee for the generation or purchase of renewable energy to meet the renewable purchase obligation of the licensee.”

27. The power supplied by KSEB Ltd to other distribution licensee is a mix up of energy from various sources inclusive of renewable sources, the cost for meeting the renewable power purchase obligation of the buyer licensees through KSEB Ltd will always be lower than directly meeting the RP obligation. KSEB Ltd vide letter No. KSEBL/TRAC/AE2 General/License-RPO/2022-23/19 dated 10.04.2023 submitted the details with regard to the anticipated renewable energy. KSEB Ltd further stated that, it is willing to meet the shortage in the renewable purchase obligations of licensee after accounting their own RE generation as per the existing targets fixed by the Commission, either by own generation or through purchase, with a suitable mechanism to pass the additional expenditure incurred by KSEB Ltd for meeting the RP Obligations.
28. The Commission considered the above submissions by the licensee and KSEB Ltd and noticed that KSEB Ltd is willing to meet the RP Obligations of CSEZA also with a suitable mechanism to pass through the additional expenditure and CSEZA will be ready to reimburse the additional cost to KSEB Ltd. As such, the **Commission hereby orders KSEB Ltd to meet the RP obligation of CSEZA also and directs CSEZA to pay the additional cost to KSEB Ltd at the rates as may be fixed by the Commission from time to time. The CUF of the solar plant having a total capacity of 1.2 MW is much below the normative level of 19% and thus the generation projected is**

below par. The licensee is directed to take urgent correction steps to ensure generation to the full potential and that the investment made is providing adequate returns.

Power Purchase Cost

29. CSEZA is sourcing power from KSEBL since inception of its distribution business. CSEZA distributes power to a very limited area and there is no scope for lateral expansion of the Zone area. Though there is scope for vertical expansion, occupancy of land or single storied standard design factories hinder expansion in that direction. As such, CSEZA is not expecting any huge leap from its present power requirement in the control period under consideration other than the additional load for new SDF project and ZLD plant. Therefore, for the time being, power shall be procured from KSEBL only. Open Access Power procurement is not considered by CSEZA for the control period.
30. The approach and basis for computing and projection of Power Purchase is as below:
 - a) Energy Sale (KWH) for 2021-22 is first estimated based on the actual up to 31.12.2021.
 - b) Energy Sale (KWH) for 2022-23 to 2026-27 are estimated by considering Additional energy Consumption estimated for new SDF and ZLD plant.
 - c) Worked out the Total Energy Input (KWH) to facilitate the above projected energy sale considering the projected Distribution Loss percentage projected for respective years. Total Input Power required = Total Sale KWH projected divided by distribution loss % projected for respective years.
 - d) Deduct Solar Generation projected for the respective years of MYT control period from the Total Input Energy projected (KSEB Ltd+ Solar) to arrive at power proposed to be procured from KSEB Ltd.
31. Computation and projection of power Purchase (KWH) for MYT Control period is given below:

**Table 9
Projection of Power Purchase (KWH) for the Control Period**

Year	Energy Sale (kWH)	Distribution loss %	Total Input Power Required (KSEBL + Solar) (kWH)	Solar Generation estimated (kWH)	Power to be purchased from KSEB Ltd (kWH)
2021-22 (estimated)	54494583	1.47	55307747	1369613	53938133
2022-23	55680855	1.45	56500106	1369613	55130493
2023-24	56581143	1.436	57405485	1369613	56035872
2024-25	56951799	1.421	57772749	1369613	56403136
2025-26	56951799	1.407	57764546	1369613	56394932
2026-27	56951799	1.393	57756345	1369613	56386731

32. 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	2022-23	2023-24	2024-25	2025-26	2026-27
Energy Purchased (lakh units)	551.30	560.36	564.03	563.95	563.87
Total Annual Fixed charges (Rs. lakh)	455.07	477.25	482.13	482.13	482.13
Variable Cost per unit including Fuel Price Adjustment (Rs/kWh)	5.6 & 6.15	6.15	6.15	6.15	6.15
Total Variable Charges (Rs. lakh)	3319.08	3446.21	3468.79	3468.29	3467.78
Total Cost of Energy Received (Rs. lakh)	3774.16	3923.46	3950.92	3950.42	3949.91
Avg cost of energy received (Rs/kWh)	6.85	7.00	7.00	7.00	7.01

Operation and Maintenance

33. 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 KSEB (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 as 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	
	Norms	Projected	Norms	Projected	Norms	Projected
Employee Expenses	159.54	153.53	166.65	154.39	174.07	165.26
R&M Expenses	5.97	30.20	6.24	23.77	6.51	22.06
A&G Expenses	34.13	45.67	35.65	38.29	37.24	41.17
O&M Expense	199.64	229.40	208.54	216.45	217.83	228.49

Particulars	2025-26		2026-27	
	Norms	Projected	Norms	Projected
Employee Expenses	181.82	171.17	189.92	177.11
R&M Expenses	6.80	17.48	7.11	17.87
A&G Expenses	38.91	41.18	40.63	42.13
O&M Expense	227.53	229.83	237.66	237.11

34. 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

	2022-23	2023-24	2024-25	2025-26	2026-27
Sales (Lakh units)	556.81	565.81	569.52	569.52	569.52
Employee Expenses	153.53	154.39	165.26	171.17	177.11
Repair & Maintenance Expenses	30.2	23.77	22.06	17.48	17.87
Administrative & General Expenses	45.67	38.29	41.17	41.18	42.13
Total O&M Expense	229.4	216.45	228.49	229.83	237.11
Per Unit Employee Expense	0.28	0.27	0.29	0.30	0.31
Per Unit R&M Expense	0.05	0.04	0.04	0.03	0.03
Per Unit A&G Expense	0.08	0.07	0.07	0.07	0.07
Per Unit Operation & Maintenance	0.41	0.38	0.40	0.40	0.42

35. 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

36. A comparison of the employee cost projected for the years of the Control Period and previous years is tabulated below.

Table 13
Employees cost for previous years and Projected for Control Period (Rs. In lakh)

Particulars	2019-20 (Actuals)	2020-21 (Actuals)	2021-22 (Actuals)	2022-23	2023-24	2024-25	2025-26	2026-27
Net Employee Costs	23.29	24.46	27.81	28.71	29.57	30.46	31.38	32.32
Others (Charges to O & M Agency)	115.67	113.47	72.55	124.82	124.82	134.80	139.80	144.79
Gross Employee Expenses	138.96	137.93	100.36	153.53	154.39	165.26	171.17	177.11
Norms As per the Regulations for the Control Period				159.54	166.65	174.07	181.82	189.92

37. In the petition the licensee stated that, CSEZA do not have own technical manpower and entire O&M Activities are got done through outsourced O & M Agency. Administrative activities are managed by CSEZA's staff. Technical aspects and overall management of the power distribution system is executed through an O&M Agency. This includes manning of 110 kV Substation and the entire distribution lines. Assistance of a separate sub agency, tendered and finalized by the main O&M agency, is taken for achieving the smooth functioning of the system. Hence the Employee Expenses of CSEZA constitutes the following:

- a) Pro rata Salary Expenses of CSEZA Staff working for Power Distribution business with apportionment based on time spent. Salary expenses of persons directly engaged by CSEZA for assisting CSEZA for administrative, legal as well as regulatory matters are also included.
 - b) Manpower expenses paid to outsourced O & M Agency. This shall also include manpower charges paid to sub Agency for operation, manning of Substation as well as for attending day to day small maintenance works.
38. The Employee Expenses (being paid to O & M Agency) for MYT Control Period has been estimated considering actual Employee expenses for the period 2021-22 and considering reasonable cost escalation to cover inflation as well as to include annual increments etc. Bureau of Energy Efficiency under Ministry of Power Government of India has notified new BEE regulations 2021 stipulating yearly mandatory energy auditing and reporting quarterly energy accounting by DISCOMs. For this, CSEZA have to have certified energy manager and IT manager as part of the Energy Audit cell. CSEZA intends to get these services outsourced through O & M Agency which will be extra compared to previous years.
39. Actual Expenses paid to O&M Agency for 2021-22 is considered as a base and 10 % escalation is taken for 2022-23 & 2023-24. Subsequently 8%, 12% and 16% escalation has been considered for projecting Employee expenses for period 2024-25 to 2026-27 over and above the projections for 2022-23. Annual salary expenses for CSEZA's staff working for Power Distribution System for 2021-22 is considered as a base figure and annual increments considered for arriving the expenses of CSEZA staff for 2022-23. The projections are made on a conservative basis. An annual increase of 3%, as per the Seventh Pay Commission, is considered for CSEZA staff for the MYT period.
40. The licensee has also stated vide letter dated 10.03.2023 that, CSEZA has to completely outsource the O&M activities to outsourced agency and only administrative and minimal supervisory function is done by CSEZA. CSEZA has been in the process of tendering and selecting O & M Agency and the price/commercial bid is under finalization. Once the Agency is selected, then they have to float tenders for identifying sub agency for substation operation/manning and maintenance of power distribution system. Only after this process, actual employee expenses can be finalised. However, CSEZA has estimated and projected Employee expenses for 2022-23 based on the prevailing charges being incurred and applying reasonable escalation factor for the subsequent years as already detailed in the petition. Further, BEE regulations 2021 stipulated that all DISCOMS shall have certified Energy Managers and IT manager as part of Energy Audit Cell, which is not included in the present employee expenses projected and will be known only after finalizing the O & M Agency and their charges.

41. The Commission has analysed the submissions made by the licensee. It is pertinent to note that, the employee cost projected for each year of the Control Period is lower than the norms approved by the Commission. Further, the BEE Regulations do not envisage creation of an exclusive energy accounting and audit cell by fresh recruitment of technically and professionally qualified personnel by all small licensees; instead the licensee can assign the responsibility to any of the existing qualified employees of the licensee. ***The Commission is of the view that the duties as mandated in the BEE Regulations and the additional cost thereof, if any can be considered at the time of Truing Up of accounts in accordance with the provisions in the regulations.***

Repair & Maintenance Expense

42. The Repair and Maintenance expenses for the MYT control period 2022-23 to 2026-27 and actuals for the year 2019-20 to 2021-22 are tabulated below.

Table 14
Comparison of the actual and projected R&M Expenses (Rs. In lakh)

Particulars	2019-20 (Actuals)	2020-21 (Actuals)	2021-22 (Actuals)	2022-23 (Projected)	2023-24 (Projected)	2024-25 (Projected)	2025-26 (Projected)	2026-27 (Projected)
Total R &M Expenses	5.20	8.95	13.86	30.20	23.77	22.06	17.48	17.87

43. The licensee stated that, the Commission has fixed norms for R &M expenses based on the actual trued up figures for 2018-19 and applying cost escalation. The licensee requested to the Commission to reconsider and approve R & M Expenses as projected notwithstanding the norms in MYT Tariff Regulations 2021. Apart from the above, the licensee further requested to approve other R & M Expenses which may have to be incurred in case of emergency and also necessary to provide quality power supply to its esteemed consumers though the same is not planned now.
44. The licensee has also submitted split up of the proposed R&M for the control period. The details are given below.

Table 15
Split Up of projected R&M Expenses for 2022-23

Sl. No	Description of works	Frequency	Rs. lakh
1	Condition monitoring of Distribution Transformers (above 1MVA)	5 Years	1.00
2	Condition monitoring of EHT Power Transformers and Auxiliaries (Year of commissioning - 2005)	3 Years	3.85
3	Testing and servicing of 3 Nos SF6 Circuit breaker in 110 KV substation	3 Years	0.75

4	Testing and servicing of 2 No's VCB In SDF 17	3 Years	0.40
5	Testing and servicing of 1 No's VCB In SDF 43	3 Years	0.20
6	Testing and servicing of HT VCB's at 110 KV Substation - Section A	2 Years	1.26
7	EHT Power Transformer oil filtration (12.5 MVA - 2 No's)	2 Years	0.95
8	Servicing & Refilling of fire extinguishers	1 Year	0.26
9	Power & Distribution Transformers Silica gel replacement	1 Year	0.11
10	Procurement of 5 No's SMPS used in Schneider make Energy meter	One Time	0.10
11	Replacement of Siemens make 3Nos. SIPROTEC Numerical Protection Relays at 110KV Substation	One Time	6.20
13	Replacement of deteriorated ACB and accessories at Plot No 30 CSEZ, Kakkanad	One Time	3.75
14	Protective relay testing of EHT Power Transformers , Distribution Power Transformer and RMU's .	2 Year	1.58
15	Calibration and servicing of lab equipments	3 Years	1.50
16	Substation water proofing	One Time	7.50
17	Consumption of Spares	Every year	0.80
	FY 2022 -23 Total		30.20

Table 16
Split Up of projected R&M Expenses for 2023-24

Sl. No	Description of works	Frequency	Rs. lakh
1	OLTC servicing & oil replacement of EHT Power and Distribution Transformers	3 Years	4.40
2	Testing and servicing of HT VCB's at 110 KV Substation - Section B	2 Years	1.26
3	Distribution Transformers Oil Filtration (8 No's capacity up to 1250 KVA)	2 Years	0.53
4	Servicing & Refilling of fire extinguishers	1 Year	0.28
5	Power & Distribution Transformers Silica gel replacement	1 Year	0.11
6	Replacement of Siemens make 3Nos. SIPROTEC Numerical Protection Relays at 110KV Substation	One Time	3.10
7	Outdoor RMU Roofing sheet and structure replacement Ring 1	One Time	3.25
8	Protective relays replacement in Distributions panels (RMU's SDF-16,17,43 & warehouse cum office)-Phase 1	One Time	2.10
9	Replacement of deteriorated 800A ACB in ring	One Time	2.50
10	Procurement of 10 No's SMPS used in Schneider make Energy meter		0.20
11	Replacement of VCB panel in Plot No.30, CSEZ, Kakkanad	One Time	5.25
12	Consumption of Spares	Every year	0.80
	FY 2023 -24 Total		23.77

Table 17
Split Up of projected R&M Expenses for 2024-25

Sl. No	Description of works	Frequency	Rs. lakh
1	EHT Substation Earthing System Healthiness check up	5 Years	2.25
2	EHT Substation relay coordination and Arc Flash intensity check up	5 Years	3.00
3	Testing and servicing of 1 No's VCB In SDF 3	3 Years	0.80
4	EHT Power Transformer oil filtration (12.5 MVA - 2 No's)	2 Years	1.00
5	EHT Power Transformers, Distribution Power Transformer and RMU's Protection relays testing	2 Year	1.65
6	Servicing & Refilling of fire extinguishers	1 Year	0.29
7	Power & Distribution Transformers Silica gel replacement	1 Year	0.12
8	Supply, Installation, testing and Commissioning of 5 No's 4 Pole, 250 A in existing LT Panel, SDF-16	One Time	2.20
9	Replacement of Deteriorated 800A ACB at SDF 16	One Time	2.50
10	Protective relays replacement in Distributions panels (RMU's SDF-16,17,43 & warehouse cum office)-Phase 2	One Time	2.21
11	Replacement of VCB panel in SDF-43, CSEZ, Kakkanad	One Time	5.25
12	Consumption of Spares	Every year	0.80
	FY 2024 -25 Total		22.06

Table 18
Split Up of projected R&M Expenses for 2025-26

Sl. No	Description of works	Frequency	Rs. lakh
1	Condition monitoring of EHT Power Transformers and Auxiliaries	3 Years	4.24
2	Testing and servicing of 3 Nos SF6 Circuit breaker (2500A,145KV) at 110 KV substation	3 Years	0.83
3	Testing and servicing of 2 No's VCB (800A) at SDF 17	3 Years	0.42
4	Testing and servicing of 1 No's VCB (630A) at SDF 43	3 Years	0.21
5	Testing and servicing of HT VCB's at 110 KV Substation - Section A	2 Years	1.39
6	Distribution Transformers Oil Filtration (8 No's capacity up to 1250 KVA)	2 Years	0.55
7	Servicing & Refilling of fire extinguishers	1 Year	0.29
8	Power & Distribution Transformers Silica gel replacement	1 Year	0.12
9	Outdoor RMU Roofing sheet and structure replacement Ring 2 & Ring 3	One Time	7.00
10	Calibration and servicing of lab equipments	3 years	1.65
11	Consumption of Spares	Every year	0.80
	FY 2025 -26 Total		17.48

Table 19
Split Up of projected R&M Expenses for 2026-27

Sl. No	Description of works	Frequency	Rs. lakh
1	Repainting of Transformers, panel boards etc.	5 Years	5.50
2	OLTC servicing & oil replacement of EHT Power and Distribution Transformers	3 Years	4.84
3	Testing and servicing of HT VCB's (1250A,11KV) at 110 KV Substation - Section B	2 Years	1.32
4	EHT Power Transformer oil filtration (12.5 MVA - 2 No's)	2 Years	1.05
5	EHT Power Transformers, Distribution Power Transformer and RMU's Protection relays testing	2 Year	1.74
6	Servicing & Refilling of fire extinguishers	1 Year	0.30
7	Power & Distribution Transformers Silica gel replacement	1 Year	0.12
8	Replacement of cooling fins of old 500 KVA Transformer in Water Treatment Plant.	One Time	2.20
9	Consumption of Spares	Every year	0.80
	FY 2026 -27 Total		17.87

45. Regarding R&M expenses the licensee has also stated vide letter dated 10.03.2023 that, since many of the substation equipments and distribution system were installed and commissioned in 2005, there are incidents and reports of breakdown/failures necessitating frequent repairs/ replacements. CSEZA has made a detailed R&M planning for MYT period which includes regular and one-time maintenance work. Also, certain parts/components are proposed to be replaced to ensure quality and reliable power supply to consumers. Hence, it is requested to approve the R&M works as proposed, though the same are above the norms fixed as it is the responsibility of licensee to provide reliable and quality power supply to consumers complying to Standards of Performance regulations and Supply Code.
46. A comparison of the R&M expenses projected for the years of the Control Period and previous years is tabulated below.

Table 20
Comparison of R&M (Rs. lakh)

Particulars	Truing Up Petition	Trued Up
2019-20	5.20	5.20
2020-21	8.95	8.95
2021-22	13.86	13.86
	Projected	As per norms
2022-23	30.20	5.97
2023-24	23.77	6.24
2024-25	22.06	6.51
2025-26	17.48	6.80
2026-27	17.87	7.11

47. The Commission noted that, the licensee has proposed plans of Repair & Maintenance expenses for the entire Control Period. However, this proposal includes replacement of some assets as one-time addition. The licensee vide letter dated 10.03.2023 clarified that, licensee has included replacement of certain items in R&M Works. These are only replacement of part items of a larger equipment/switchboard and not a complete equipment replacement. Hence these are only R & M nature of works and are not asset additions.
48. The Commission further noted that, the licensee has proposed the R&M expenses which is significantly higher than norms approved in the Regulations. The licensee in the write up has requested that one-time emergency R&M works if any during the control period may be allowed during the truing up process. The licensee shall submit all data to substantiate the one-time emergency R&M works 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 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.**

Administrative & General Expenses

49. The licensee has projected the Administrative and General Expense for the years of the control period as tabulated below:

Table 21
Comparison of projected A&G Expenses for the Control Period (Rs.lakh)

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Rent Rates & Taxes	11.08	11.08	12.17	12.17	12.17
Insurance	2.72	2.72	2.99	2.99	2.99
Telephone & Postage, etc.	0.02	0.02	0.02	0.02	0.02
Audit Fees- Energy Audit Fee	5.42	4.22	4.86	4.86	4.86
Other Professional charges	1.50	1.50	1.50	1.50	1.50
Electricity charges & Water Charges	0.14	0.16	0.17	0.17	0.17
Printing & Stationery	0.18	0.18	0.18	0.18	0.18
Training expenses	0.50	0.50	0.50	0.50	0.50
Miscellaneous Expenses	0.10	0.10	0.10	0.10	0.10
Bank Charges	0.01	0.01	0.01	0.01	0.01
License Fee and other related fee	1.13	1.14	1.16	1.17	1.17
MYT Petition Filing Charges (fee to KSERC)					0.95
Truing Up Application fee & fee & Another petition fee to KSERC	0.43	0.33	0.34	0.34	0.34
Inspection Fee (Electrical Inspectorate)	0.42	0.42	0.46	0.46	0.46
V-sat, Internet and related charges	5.28	5.28	6.07	6.07	6.07
Charges for Monitoring & Managing prepaid metering software system	16.60	10.49	10.49	10.49	10.49
Travelling Expenses	0.15	0.15	0.15	0.15	0.15
Gross A&G Expenses	45.67	38.29	41.17	41.18	42.13

50. The licensee further submitted that, from 2021-22 onwards CSEZA has to engage accredited auditor for conducting yearly mandatory Energy Accounting/Auditing as per stipulations in Bureau of Energy Efficiency Energy auditing and Energy Accounting Regulations, 2021. Fee for this energy auditing will be an addition to the expenses compared to previous years. Professional charges for preparation of DPR for capital investment above Rs.15.00 lakh will also have to be incurred additionally. Insurance premium charges for assets of power distribution system will also increase consequent to addition of new assets capitalized. The licensee requested the Commission to consider and approve A&G expenses as projected and not to restrict such expenses to the norms in MYT Tariff Regulations 2021.
51. The Commission noted that, A&G expense include Professional charges for preparation of DPR for capital investment above Rs.15.00 lakh to be incurred additionally and this is also to be incurred in all the Control Period. The licensee vide letter dated 10.03.2023 clarified that, licensee had considered cost of DPR preparation spread across all five years (Rs.1.50 lakh per year since in each year of MYT period, there are asset additions above Rs.15.00 lakh). The licensee has considered DPRs in all years separately because of the fact that actual cost will be different depending on the time of implementation and also to reflect realistic amount in DPR.
52. 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 Comparison of norms approved by the Commission and amount projected by the licensee is shown below.

Table 22
Comparison of norms and projected A&G Expenses (Rs.lakh)

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Projected by licensee	34.13	35.65	37.24	38.91	40.63
Norms approved in Regulations	45.67	38.29	41.17	41.18	42.13

O&M Expenses Approved

53. The Commission has fixed the normative O&M expense 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 23
Approved Operation & Maintenance Expenses for the Control Period (Rs.lakh)

Particulars	2022-23		2023-24		2024-25	
	Projected	Approved Norms	Projected	Approved Norms	Projected	Approved Norms
Employee Expenses	153.53	159.54	154.39	166.65	165.26	174.07
R&M Expenses	30.20	5.97	23.77	6.24	22.06	6.51
A&G Expenses	45.67	34.13	38.29	35.65	41.17	37.24
Total	229.40	199.64	216.45	208.54	228.49	217.83

Particulars	2025-26		2026-27	
	Projected	Approved Norms	Projected	Approved Norms
Employee Expenses	171.17	181.82	177.11	189.92
R&M Expenses	17.48	6.80	17.87	7.11
A&G Expenses	41.18	38.91	42.13	40.63
Total	229.83	227.53	237.11	237.66

Capital Investment plan for the Control Period

54. The licensee has requested the Commission to permit them to file separate and detailed petition for Capital Expenditure for MYT period as the same will require preparation of DPR for expenditure exceeding Rs.15.00 lakh. However, preliminary capital expenditure plan of Rs.414.68 lakh has been submitted for the MYT control period 2022-23 to 2026-27. The licensee has stated that all the capital investments are proposed to meet the expenditure from the surplus available in CSEZA's Power Distribution System Account. The details of capital investment proposal submitted by the licensee are shown below.

Table 24
Capital Investment Proposal for the Control Period

Sl.No	Description of works	Estimated amount (Rs.lakh)	Year
1	Supply, Installation, Testing and Commissioning of Smart Energy meters and prepaid energy management system. Which includes replacement of existing Energy meters with new and establishing communication facility with BEE portal as per the latest BEE regulation.	150.80	2022-23
2	Procurement of thermal imaging camera	1.50	2022-23
3	Replacing of 30V,100Ah battery bank for control system of 1250KVA No1 Transformer at SDF 17 -Tr2	0.75	2022-23
4	Purchase of Computers -2 Nos.	1.50	2022-23
5	Replacement of section - B, 11 KV panel at 110 KV substation Including Section B Incomer and Bus coupler	73.00	2023-24
6	Replacement of section A side of 11 KV VCB Panel including Section A Incomer & Aux Transformer	93.00	2024-25
7	Replacing of 110V,120Ah battery bank for control system of 110KV substation	2.15	2024-25
8	Replacing of 12V SMPH battery bank for5KVA UPS	0.75	2024-25
9	SITC of New ACB Buscoupler for the Distribution Transformers 1 & 2 at SDF 17	21.50	2025-26
10	Procurement of 1 No. 11/ 0.433KV 500 KVA USS Transformer as spare in Power distribution system.	12.00	2025-26
11	Replacement of distribution UG cable (11KV 3Cx 240 Sq.mm unearthed XLPE Aluminium cable)	19.00	2025-26
12	Replacing of 30V,100Ah battery bank for control system of 1250KVA No1 Transformer at SDF 17-Tr1	0.75	2026-27
13	Replacing of 30V,100Ah battery bank for control system of 1250KVA distribution transformer at SD 43	0.75	2026-27
14	SITC of HT cable for new Ring in 110 KV Substation	37.23	2026-27
	Total	414.68	

55. The licensee stated that, the surplus available in power account is not fully due to the surplus income generated by way of excess revenue over the purchase cost. Various factors have contributed to the accumulation of surplus with CSEZA such as ROE allowed by the Commission from time to time, efficiency gain in monetary terms etc. Moreover, CSEZA has considered depreciation for new assets so as to have a reserve fund to replace the same in future. With regard to ROE, it may please be noted that it is the only return available to Small licensees like CSEZA in the power distribution business. The Commission has been allowing nominal amounts of ROE in the past which actually do not even compensate the Section 3 duty being paid to Government

of Kerala, which cannot be passed on to consumers. The licensee brought to the attention of the Commission that disallowing Depreciation & RONFA for assets created out of CSEZA's Own fund would in effect result in subsidizing the public consumers by way of retail tariff fixation and taxing CSEZA. Moreover, it is also brought to the notice of the Hon'ble Commission that Regulation 27 & 28 of KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021, do not specifically disallow depreciation and RoE for the asset addition utilising own fund of licensee. Hence it is requested that Honorable Commission may kindly approve depreciation and ROE for the proposed asset additions.

56. The capital expenditure proposed for the years of the control period is briefed below.

Capital Investment Proposal for the FY 2022-23

1. Supply, Installation, Testing and Commissioning of Smart Energy meters and prepaid energy management system.

57. Bureau of Energy Efficiency Gazette notification dated 6th October, 2021 has published regulations covering mandatory annual energy auditing and also stipulating special requirements of metering and times lines to be complied by all DISCOMs. As per the above regulations, CSEZA intends to replace existing energy meters with smart meters and also provide feeder metering and DT metering to comply with the BEE regulations. The licensee further stated that, presently available energy meters are 0.5 class energy meters are being for recording the energy consumption at both HT & LT consumer points and since manufacturer has stopped production spare meters are not available in the market for any replacement/or addition of consumers. Also, the existing energy meters are not suitable for directly communicating to energy audit portal of Bureau of Energy Efficiency (BEE). Further feeder metering & Distribution transformer metering systems are not available in the existing distribution network. The licensee has estimated the project cost as Rs.150.79 lakh. The benefits available from the project is stating by the licensee are given below.

- Improvement in billing accuracy
- Reduction in distribution loss
- Customized reports can be generated at any time; following are some of the standard reports.
 - a) Instantaneous Parameters
 - b) Load Survey Data
 - c) Tamperers / Power fail events

- d) Midnight Energy Data
- e) Billing Parameters
- f) Distribution loss at different voltage levels / feeders.

2. Procurement of thermal imaging camera

58. The proposal is to procure a Thermal imaging camera for strengthening the preventive maintenance activities and at present the panel's/ equipment's heat build-up check-ups are not performing as a part of preventive maintenance activities. The cost for the procurement of a Thermal Imaging Camera is approximately Rs 1.50 lakh. The benefits available from the project as stated by the licensee are given below.
- Helps to identify problems before they cause serious failure or an electrical fire.
 - Non-contact feature of Thermal imaging camera helps ensure a safe inspection.
 - Thermal Imaging Camera is non-intrusive, so there is no interruption of power during the inspection.

3. Replacing of 30V,100Ah battery bank for control system of 1250KVA Transformer at SDF 17 -Tr2

59. The existing battery bank for control supply to No.2 transformer 1250 KVA at SDF-17 is old and its guaranty period is expired and hence required to replace the same. The estimated cost of 30 V, 40 Ah battery banks for control system of 1250 KVA No.2Transformer at SDF-17 is Rs. 0.75 lakh.

4. Purchase of Computers

60. CSEZA proposes to purchase Two Nos Computers of latest configuration and specs to be used for Power distribution System. The estimated cost for the same is Rs.1.50 lakh.

Capital Investment Proposal for the FY 2023-24

5. Replacement of section - B, 11 KV panel at 110 KV substation Including Section B Incomer and Bus coupler.

61. Existing ABB make 11 KV VCB panels at 110 KV Substation are 17 years old and it is very difficult to get the proper spares for this out-dated model VCB. Of late frequent failures in the VCB mechanism are affecting the power system reliability in the 11 KV distribution network. There is no spare VCB available at 110KV Substation and the existing spare VCB is in beyond repair condition.

62. The proposal is to replace the existing ABB make 11 KV feeder VCB panels of section A & section B in a phase by phase manner. As per the plan, section B VCB panel's replacement is planned in the FY 2023-24. The removed VCB's from section B will be utilized as spares in the section A VCB panels. The estimated project cost for section B VCB panels replacement is Rs.73.00 Lakh.

Capital Investment Proposal for the FY 2024-25

6. Replacement of section A side of 11 KV VCB Panel including Section A Incomer & Aux Transformer

63. Existing ABB make 11 KV VCB panels at 110 KV Substation are 17 years old and it is very difficult to get the proper spares for this out-dated model VCB. Of late frequent failures in the VCB mechanism are affecting the power system reliability in the 11 KV distribution network. There is no spare VCB available at 110KV Substation and the existing spare VCB is in beyond repair condition.
64. The proposal is to replace the existing ABB make 11 KV feeder VCB panels of section A & section B in a phase by phase manner. As per the plan, section B VCB panel's replacement is planned in the FY 2024-25. The removed VCB's from section B will be utilized as spares in the section A VCB panels. The estimated project cost for section B VCB panels replacement is Rs.93.00 lakh.

7. Replacing of 110V,120Ah battery bank for control system of 110KV substation

65. The existing 110 V, 120AH battery bank for control system of 110 KV is old and its guaranty period is expired and hence required to replace the same. The estimated cost of 110, 120 Ah battery bank for control system of 110KV substation is Rs. 2.15 lakh/-

8. Replacing of 12V SMPH battery bank for 5KVA UPS in 110kV Substation

66. The existing 12V, SMPH battery bank for 5kVA UPS in 110kV Substation its guaranty period is expired and hence required to replace the same. The estimated cost for the same is Rs.0.75 lakh

Capital Investment Proposal for the FY 2025-26

9. Supply, Installation, testing and commissioning of New ACB Buscoupler for the Distribution Transformers 1 & 2 at SDF 17

67. The Bus coupling provision to be enabled in between Transformer 1 & 2 at SDF-17 for increasing the reliability of power distribution at SDF-17. The present status of the system is, bus coupler was not considered in the initial design of SDF-17 LT Switchboard, as a result of this if there is any maintenance or fault occurred in any of the transformers, that section is in an

isolated condition. Transformer preventive maintenance works are always scheduled on Sundays only because of the mentioned reason. But few companies are working in 24x7 manner, these power shutdowns are adversely affecting the productivity of that companies and our Annual preventive maintenance plan. The proposal is to install a bus coupler panel in between the Transformer 1 & 2 at SDF 17. Bus coupler is a breaker used to couple two Bus bars for transferring the load from one bus to another. The estimated cost of Supply, Installation, testing and commissioning of New ACB Bus coupler for the Distribution Transformers 1 & 2 at SDF 17 is Rs.21.50 lakh. The benefits available from the project as stated by the licensee are given below.

- Power supply reliability will be improved.
- Energy Savings
- Transformer maintenance can be scheduled as desired.

10. Procurement of 1 No. 11/ 0.433KV 500 KVA USS Transformer as spare in Power distribution system

68. To procure a 500 KVA Unitised Sub-Station (USS) as a common spare for the power distribution system in the entire zone area. There is no spare transformer available for the entire distribution system comprising the following transformers.

**Table 25
List of Transformers in Distribution System**

SI. No	Description of Transformers	Unit	Qty
1	500 KVA distribution transformer in Ring Main Unit	Nos	3
2	400 KVA distribution transformer in SDF-16	Nos	2
3	400 KVA distribution transformer in 110 KV Substation (Auxiliary)	Nos	1
4	1250 KVA distribution transformer in SDF-43	Nos	1
5	400 KVA distribution transformer in WTP	Nos	1
6	630 KVA distribution transformer in Plot No. 30	Nos	1
7	1250 KVA distribution transformer in SDF-17	Nos	2
8	800 KVA distribution transformer for solar	Nos	1
9	500 KVA distribution transformer in ware house cum office	Nos	1

69. The proposal is to procure a 500 KVA Unitised Sub-Station (USS) as a common spare for the power distribution system in the entire zone area. A USS comprises various sub-station equipments housed inside a metal enclosure. The equipments include a step down transformer, a Vacuum Circuit Breaker (VCB) or a Ring Main Unit (RMU) on High Voltage (HV) side and Low Voltage (LV) distribution panel in LV side compartment. It is a pre-fabricated sub-station engineered to reduce size, increase safety. The proposed USS can be used as a common spare in the distribution system except SDF 17 & 43. In SDF 17 if

we are providing bus coupling system there is no need of any spare. The project cost for the procurement of a 500 KVA Unitised Sub-Station (USS) is approximately Rs.12.00 lakh. The benefits available from the project is stating by the licensee are given below.

- Installation & Charging will be very simple
- Space constrains in the existing location will not affect the installation of USS
- USS with a trolley arrangement will overcome the transportation difficulties during shifting.

11. Replacement of distribution UG cable (11KV 3Cx 240 Sq.mm unearthed XLPE Aluminium cable

70. To replace the existing deteriorated 11 KV Distribution earthed UG cable with unearthed UG cable. The proposal is to replace the existing deteriorated XLPE earthed UG HT cable with XLPE unearthed UG HT cable. Unearthed cable has more insulation strength as compared to earthed cable, in earthed cable the insulation level between conductor to armour is 0.57 times of the insulation level between the conductor to conductor but in unearthed cable the insulation level of conductor to armour is equal to the insulation level of conductor to conductor which will enable increased level of insulation. The estimated project cost for the same is Rs.19.00 lakh. The benefits available from the project as stated by the licensee are given below.

- Sudden breakdowns can be avoided, down time of such breakdowns may extend up to few weeks
- Feeder insulation level will be improved

Capital Investment Proposal for the FY 2026-27

12. Replacing of 30V,100Ah battery bank for control system of 1250 KVA Transformer at SDF 17-Tr1

71. The existing battery bank for control supply to No.1 transformer 1250 KVA at SDF-17 is old and its guaranty period is expired and hence required to replace the same. The estimated cost of 30 V, 100 Ah battery bank for control system of 1250 KVA No.1 Transformer at SDF-17 is Rs.0.75 lakh.

13. Replacing of 30V,100Ah battery bank for control system of 1250 KVA distribution transformer at SD 43

72. The existing battery bank for control supply to No.1 transformer 1250 KVA at SDF-43 is old and its guaranty period is expired and hence required to replace the same. The estimated cost of 30 V, 100 Ah battery banks for control system of 1250 KVA No.1 Transformer at SDF-43 is Rs.0.75 lakh.

14. Supply Installation and Commissioning of HT cable for new Ring in 110 KV Substation

73. Existing ring 3 getting over loaded at times and most of the times the ring is in full load condition which will lead to ring failure. The proposal is to lay a new cable from substation and split the existing ring 3 by removing two RMU's from the ring 3 and connect them with new cable, thereby we can add a new ring (Ring 4) in the system, which will avoid the overloading on the existing ring 3. The estimated cost of the Project is Rs.37.23 lakh. The benefits available from the project as stated by the licensee are given below.
- Overloading on the existing ring- 3 can be avoided.
 - It is possible to add more RMU's in the system if there is any further power demand.
74. The Commission had gone through the capital investment proposals of the licensee in detail. The licensee has furnished the estimated cost of the work and the rationale for such works. In the absence of detailed quantification of benefits and costs arising from such projects, the Commission is unable to fully ascertain necessity of investment and accordingly to allow the capital expenditure as proposed by the licensee. In this context, the Commission reiterates that the works for which provisional approval has been accorded shall be executed through proper tendering process ensuring sufficient participation of bidders, and following due procedure.
75. The Commission further observed that, all the capital investments are proposed to be financed from accumulated surplus of distribution business. The accumulated regulatory surplus is over and above the regulated return and reasonable expenses including efficiency gains allowed by the Commission to the licensee. Hence, the said surplus belongs to the consumers to be adjusted against the consumer tariffs in future. Since such frequent tariff adjustment process is not undertaken due to uniform retail tariff, such surplus is allowed to be retained by the licensee as a source of fund for future. If any financing cost such as depreciation or interest charges are allowed for such funds, it would result in double payment by the consumers. Hence, the licensee is not eligible for any financing costs such as interest charges or depreciation on the assets created by utilising such surplus.
76. ***Accordingly, the Commission provisionally approve the capital investment plan for the control period and hereby directs the licensee to submit the detailed proposal as a petition before the Commission at the earliest. The capital investment plan proposed shall be heard separately and based on the decision of the Commission, the investment proposals can be considered as part of ARR&ERC. The approval of asset addition will be considered only after the prudence check by the Commission.***

Depreciation

77. Depreciation expenditure for the Control Period from FY 2022-23 to FY 2026-27 has been computed in accordance with Regulation 27 of KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021 and also considering the asset-class wise depreciation rates as provided under the said Regulations. In addition to the yearly depreciation for existing assets, depreciation for new assets added also has been considered. In respect of the assets expected to be added during the years in the Control Period, depreciation has been considered from the date of capitalization expected in that year. The details of the depreciation claimed by the licensee for the years of the control period are tabulated below.

Table 26
Depreciation Claimed for the Control Period (Rs. lakh)

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Depreciation on assets	101.82	110.41	114.30	117.89	119.42

78. The Commission has examined the depreciation claim of the licensee. The licensee has also claimed depreciation for the capital investments proposed for the control period. As per the details submitted by the licensee, the capital additions are financed from the accumulated regulatory surplus of the licensee. Since the assets are financed from the accumulated regulatory surplus of the licensee, no depreciation is allowed on the same. The licensee shall make appropriate entries in the fixed asset register of the distribution business as and when the assets are completed and capitalized.
79. The Commission while Truing Up of accounts for the year 2021-22 had approved depreciation of Rs. 37.81 lakh only after deducting the depreciation on assets created out of accumulated regulatory surplus. ***Considering the provisions and rates specified in the Tariff Regulations 2021, depreciation provisionally approved for the Control Period is tabulated below.***

Table 27
Depreciation approved for the control period (Rs. in lakh)

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Depreciation claimed	101.82	110.41	114.30	117.89	119.42
Depreciation provisionally Approved	37.81	37.81	37.81	37.81	37.81

Return on Net Fixed Assets

80. The licensee has claimed Return on NFA for the MYT control period 2022-23 to 2026-27 has been computed as per Regulation 28 of KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021. The return on NFA has been claimed as 5.50 % of NFA at the beginning of the financial year.

Table 28
Return on Net Fixed Assets projected for the Control Period (Rs.lakh)

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Net Fixed Assets - net of Consumer Contribution & Grants (at the beginning of the year)	1310.16	1363.05	1325.46	1307.58	1242.19
Return on net fixed asset for new MYT period (5.50%)	72.06	74.97	72.90	71.92	68.32

81. The Commission noted that, while Truing Up the accounts for the year 2021-22, the Commission had approved an amount of Rs.14.62 lakh as against Rs.42.20 lakh claimed by the licensee. The licensee has created assets from 2016-17 using their accumulated surplus. Since the same has no cost of funds, the return on NFA is not allowable for the said assets. Accordingly, the NFA eligible for return for the Control Period is as shown below.

Table 29
Return on Net Fixed Assets approved for the Control Period (Rs. lakh)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Net Fixed Assets (at the beginning of the year) (A)	487.49	449.68	411.87	374.06	336.25	298.44
Depreciation Approved (B)	37.81	37.81	37.81	37.81	37.81	37.81
Net Fixed Assets (at the end of the year) (A-B)	449.68	411.87	374.06	336.25	298.44	260.63
Return on net fixed asset (5.50%)	-	24.73	22.65	20.57	18.49	16.41

Revenue from Sale of Power

82. 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 category wise 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 30
Revenue from sale of power expected in the MYT period (Rs. lakh)

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
LT Categories					
LT-IV (A) Industry	427.67	431.02	431.02	431.02	431.02
LT-IV(B) IT & IT Enabled Service	286.96	358.18	385.27	385.27	385.27
LT-VI General (A)	0.25	0.25	0.25	0.25	0.25
LT-VI General (B)	2.51	2.53	2.53	2.53	2.53
LT-VI General (C)	1.94	1.95	1.95	1.95	1.95
LT-VI General (F)	41.17	41.61	41.61	41.61	41.61
LT-VII(A)	21.73	21.89	21.89	21.89	21.89

LT-VII (C)	0.21	0.21	0.21	0.21	0.21
LT-VIII B Metered Streetlights	2.67	2.72	2.72	2.72	2.72
LT Sub Total	785.10	860.37	887.45	887.45	887.45
HT Categories					
HT-I Industrial (A)	3025.55	3075.65	3075.65	3075.65	3075.65
HT-I Industrial (B)	148.33	152.28	152.28	152.28	152.28
HT-III(B) Agricultural	57.09	58.33	58.33	58.33	58.33
HT Sub Total	3230.97	3286.26	3286.26	3286.26	3286.26
LT & HT TOTAL	4016.07	4146.62	4173.71	4173.71	4173.71
Average Realisation Rate	7.21	7.33	7.33	7.33	7.33

83. The Commission has examined the projections of the Licensee. It is seen that the major share of the sale of the Control period is to the HT – Industrial [HT-I(A) category which consists of 27 consumers throughout the Control Period. Considering the past sales and the limited increase in number of consumers, the sales projections of the licensee is reasonable. The Commission has already approved the sales units and number of consumers in para 16 of this Order. **Considering this and consideration of all facts, 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

84. The non-tariff income is computed on the basis of a reasonable return from fixed deposits, interest on security deposit made with KSEBL, 1% commission for the collection of electricity duty & surcharge payable to the State Government. Apart from the above, meter rent collected from consumers is also included in the Other Income.

Table 31
Non-Tariff Income projected for the MYT period (Rs. lakh)

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Interest on investments, fixed and call deposits and bank balances	46.91	46.91	49.42	50.92	54.33
Interest on KSEB security Deposit	19.19	19.19	19.19	19.19	19.19
Miscellaneous receipts	0.25	0.25	0.35	0.35	0.35
Commission for collection of electricity duty	1.23	1.28	1.32	1.32	1.32
Meter/metering equipment/service line rentals	1.07	1.16	1.22	1.22	1.22
Total	68.65	68.80	71.50	73.00	76.41

85. As per the details submitted, the non-tariff income include interest on fixed deposits and bank balances, interest on advances, commission for collection of electricity duty etc. Regarding the reduction of interest on investments, fixed and call deposits and bank balances, the licensee stated that, CSEZA has

estimated and projected the FD interest for the MYT period considering bank interest prevailing at the time of MYT preparation. Besides, long term and short-term FDs available during each year after utilizing amounts required for capital asset additions proposed for respective year was also taken into account for the computation of interest income. Once the FDs are utilized for new capital asset additions, there will be pro rata reduction in FD interest for the subsequent years of MYT period. The above assumptions were the basis for the projection in the MYT petition.

86. The licensee after the Truing Up of Accounts for the year 2021-22 has an accumulated surplus of Rs.1668.17 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. As per Regulation 83 of Tariff Regulations, 2018, the other income includes normative interest income calculated based on accumulated regulatory surplus. The relevant portion of the Regulation is shown below.

83. Other Income. –

(1) The receipts of other income of the distribution business/ licensee, as approved by the Commission, shall be deducted from the Aggregate Revenue Requirement while determining the tariff of the distribution business/ licensee.

(2) The indicative list of items to be considered as other income includes, -

- (i) interest on staff loans and advances;*
- (ii) income from statutory investments;*
- (iii) income from trading;*
- (iv) income from rent of land or buildings;*
- (v) income from sale of scrap;*
- (vi) income from staff welfare activities;*
- (vii) rental from staff quarters;*
- (viii) excess found on physical verification;*
- (ix) interest on investments, fixed and call deposits and the bank balances;*
- (x) interest on the advances to suppliers/ contractors;*
- (xi) income from hire charges from the contractors and others;*
- (xii) income due to right of way granted for laying fibre optic cables/ coaxial cables on the distribution system;*
- (xiii) income from advertisements etc.;*
- (xiv) miscellaneous receipts;*
- (xv) commission for the collection of electricity duty;*
- (xvi) interest received on delayed or deferred payment on the bills;*
- (xvii) rebate from central generating stations;*
- (xviii) interest income earned from security deposits;*
- (xix) normative interest income calculated based on accumulated regulatory surplus;*
- (xx) Any other receipts.*

87. Considering the above Regulation, the Commission hereby considers the interest on accumulated surplus as part of non-tariff income based on the Bank Rate of 4.25% prevailing as on 01-04-2022. As per the Order on OP 31/2023

dated 25.10.2023 with regard to the Truing Up Order for the year 2021-22, the licensee is holding an accumulated surplus of Rs.719.78 lakh (after deducting approved capital additions till 2021-22 from the accumulated surplus). The Commission is considering only the capital addition up to 2021-22 for the calculation of interest on accumulated surplus.

88. Accordingly, the interest on the revenue surplus is approved at the rate of 4.25% per annum (Standard rate notified by the RBI as on 01-04-2022) and interest amounting to Rs.30.59 lakh (Rs.719.78 lakh*4.25%) is to be provided for the year 2022-23. As against this, the licensee has already claimed a higher amount in the petition as interest on investment, fixed and call deposits throughout the Control Period and the interest income shown is reasonable. **Hence, the Commission hereby approves the projected Non-tariff income as claimed by the licensee for the Control Period. Accordingly, the other income approved for the Control Period is shown below.**

**Table 31
Non-Tariff Income approved for the MYT period**

Particulars	2022-23	2023-24	2024-25	2025-26	2026-27
Interest on investments, fixed and call deposits and bank balances	46.91	46.91	49.42	50.92	54.33
Interest on KSEB security Deposit	19.19	19.19	19.19	19.19	19.19
Miscellaneous receipts	0.25	0.25	0.35	0.35	0.35
Commission for collection of electricity duty	1.23	1.28	1.32	1.32	1.32
Meter/metering equipment/service line rentals	1.07	1.16	1.22	1.22	1.22
Total	68.65	68.80	71.50	73.00	76.41

Revenue Surplus/Gap:

89. 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 32
Revenue Surplus/ Gap, projected by the licensee and Approved by the Commission for the Control Period (Rs.lakh)**

Particulars	2022-23		2023-24	
	Projected	Approved	Projected	Approved
Cost of power purchase	3774.16	3774.16	3923.46	3923.46
O&M Expenses	229.4	199.64	216.45	208.54
Depreciation	101.82	37.81	110.41	37.81
Return on NFA	72.06	24.73	74.97	22.65
Total Aggregate Revenue Requirement	4177.43	4036.34	4325.29	4192.46
Revenue from Sale of Power	4016.07	4016.07	4146.62	4146.62
Other Income	68.65	68.65	68.80	68.80
Total Expected Revenue from Charges	4084.72	4084.72	4215.42	4215.42
Revenue Surplus/ (-Gap)	-92.71	48.38	-109.87	22.96

Table 32
Revenue Surplus/ Gap, projected by the licensee and Approved by the Commission for the Control Period (Rs.lakh)

Particulars	2024-25		2025-26		2026-27	
	Projected	Approved	Projected	Approved	Projected	Approved
Cost of power purchase	3950.92	3950.92	3950.42	3950.42	3949.91	3949.91
O&M Expenses	228.49	217.83	229.83	227.53	237.11	237.66
Depreciation	114.30	37.81	117.89	37.81	119.42	37.81
Return on NFA	72.90	20.57	71.92	18.49	68.32	16.41
Total Aggregate Revenue Requirement	4366.61	4227.13	4370.06	4234.25	4374.76	4241.79
Revenue from Sale of Power	4173.71	4173.71	4173.71	4173.71	4173.71	4173.71
Other Income	71.50	71.50	73.00	73.00	76.41	76.41
Total Expected Revenue from Charges	4245.21	4245.21	4246.71	4246.71	4250.12	4250.12
Revenue Surplus/ (-Gap)	-121.40	18.08	-123.35	12.46	-124.64	8.33

Order of the Commission

90. 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 59
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	4177.43	4036.34	4325.29	4192.46	4366.61	4227.13
Total Income	4084.72	4084.72	4215.42	4215.42	4245.21	4245.21
Net Surplus/(-Gap)	-92.71	48.38	-109.87	22.96	-121.40	18.08

Table 59
Revenue Surplus/ Gap approved by the Commission for the Control Period (Rs. lakh)

Particulars	2025-26		2026-27	
	Projected	Approved	Projected	Approved
Total Revenue Expenditure	4370.06	4234.25	4374.76	4241.79
Total Income	4246.71	4246.71	4250.12	4250.12
Net Surplus/(-Gap)	-123.35	12.46	-124.64	8.33

Directives of the Commission

91. In view of the facts and reasons explained in earlier paragraphs, the Commission gives the following directives.

- a) ***The Commission hereby orders KSEB Ltd to meet the RP obligation of CSEZA also and directs CSEZA to pay the additional cost to KSEB Ltd at the rates as may be fixed by the Commission from time to time.***
- b) ***The licensee to submit the detailed proposal of capital investment plan as a petition before the Commission at the earliest. The capital investment plan proposed shall be heard separately and appropriate orders will be issued based on the decision of the Commission.***

92. With the above, 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