

TRIPURA ELECTRICITY REGULATORY COMMISSION



TARIFF ORDER FOR FY 2023-24

Petition No. 3 (Truing up) of 2023 and 4 (MYT) of 2023

True-up of FY 2020-21 and FY 2021-22, Annual Performance Review of FY 2022-23 and ARR Determination for Generation, Transmission and Distribution Business for FY 2023-24 and Retail Supply Tariff for FY 2023-24 of Tripura State Electricity Corporation Limited

September, 2023

Table of Contents

1	BACKGROUND AND SALIENT FEATURES OF THE ORDER	16
1.1	BACKGROUND.....	16
1.2	TARIFF ORDERS ISSUED BY THE COMMISSION EARLIER:	17
1.3	ADMISSION OF CURRENT PETITION FILED BY TSECL	18
1.4	PUBLIC CONSULTATION PROCESS.....	20
1.5	STATE ADVISORY COMMITTEE.....	21
1.6	CONTENT OF THE ORDER.....	21
2	SUGGESTIONS/OBJECTIONS, TSECL'S RESPONSES AND COMMISSION'S RULING	23
2.1	OBJECTION: DISCOUNT TO COMMERCIAL TARIFF TO BE GIVEN FOR HOSPITALS	23
2.2	OBJECTION: ARR PETITION FOR FY 2023-24	25
2.3	OBJECTION: ALLOWANCE OF HIGHER RETURN ON EQUITY BY SEPARATION OF TSECL	25
2.4	OBJECTION: PERFORMANCE PARAMETERS FOR RGTPP AND BGTPP	26
2.5	OBJECTION: RATE OF INTEREST ON LOAN CAPITAL AND WORKING CAPITAL.....	27
2.6	OBJECTION: INCREASE IN GAS PRICES	28
2.7	OBJECTION: DEPRECIATION	29
2.8	OBJECTION: TARIFF FOR INDUSTRY CATEGORY (NEW)	29
2.9	OBJECTION: INCREASE IN ELECTRICITY BILL UNIT PRICE.....	31
2.10	OBJECTION: UDAY SCHEME DETAILS AND DISTRIBUTION LOSS	32
3	TRUING UP OF ARR FOR FY 2020-21 AND FY 2021-22, APR OF FY 2022-23AND ARR OF FY 2023-24FOR GENERATION BUSINESS	34
3.1	BACKGROUND AND APPROACH	34
3.2	NORMS FOR OPERATIONS	35
3.3	GROSS GENERATION AND NET GENERATION	35
3.4	PLANT AVAILABILITY FACTOR	39
3.5	STATION HEAT RATE.....	41
3.6	FUEL PURCHASE COST.....	43
3.7	ANNUAL FIXED CHARGES (AFC).....	48
3.8	OPERATION & MAINTENANCE EXPENSES	48
3.9	DEPRECIATION.....	53
3.10	INTEREST ON WORKING CAPITAL	57
3.11	RETURN ON EQUITY AND TAX ON INCOME	60
3.12	NON-TARIFF INCOME.....	63
3.13	SHARING OF GAINS AND LOSSES ON CONTROLLABLE PARAMETERS	64
3.14	SUMMARY OF TRUE-UP FOR FY 2020-21 AND FY 2021-22AND ARR FOR FY 2022-23 TO FY 2023-24	65
3.15	GENERATION TARIFF FOR FY 2023-24	70
4	TRUING UP OF ARR FOR FY 2020-21 AND FY 2021-22, APR OF FY 2022-23 AND ARR OF	

FY 2023-24 FOR TRANSMISSION BUSINESS	71
4.1 BACKGROUND AND APPROACH	71
4.2 TRANSMISSION LOSS.....	72
4.3 ANNUAL FIXED COST (AFC)	73
4.4 OPERATION & MAINTENANCE EXPENSES	73
4.5 DEPRECIATION.....	75
4.6 INTEREST AND FINANCE CHARGES	78
4.7 RETURN ON EQUITY AND TAX ON RETURN ON EQUITY	78
4.8 INTEREST ON WORKING CAPITAL	80
4.9 NON-TARIFF INCOME.....	82
4.10 SUMMARY OF TRUE-UP FOR FY 2020-21 AND FY 2021-22 AND ARR FOR FY 2022-23 AND FY 2023-24 FOR TRANSMISSION BUSINESS	83
5 TRUING UP OF ARR FOR FY 2020-21 AND FY 2021-22, APR OF FY 2022-23 AND ARR OF FY 2023-24FOR DISTRIBUTION BUSINESS	85
5.1 BACKGROUND AND APPROACH	85
5.2 ENERGY SALES.....	86
5.3 DISTRIBUTION LOSS	89
5.4 ENERGY BALANCE	91
5.5 POWER PURCHASE.....	94
5.6 INTRA-STATE TRANSMISSION CHARGES	97
5.7 OPERATION & MAINTENANCE EXPENSES	97
5.8 DEPRECIATION.....	100
5.9 INTEREST AND FINANCE CHARGES	103
5.10 INTEREST ON WORKING CAPITAL	105
5.11 RETURN ON EQUITY AND TAX ON RETURN ON EQUITY	106
5.12 NON-TARIFF INCOME.....	109
5.13 SHARING OF CONTROLLABLE FACTOR.....	110
5.14 SUMMARY OF ARR FOR FY 2020-21 TO FY 2023-24	112
5.15 REVENUE FROM SALE OF POWER	115
5.16 REVENUE GAP/(SURPLUS).....	116
6 DIRECTIVES OF THE COMMISSION.....	119
7 TARIFF PRINCIPLES AND DESIGN.....	120
7.1 TARIFF PROPOSAL FOR FY 2023-24	120
7.2 WHEELING CHARGES	121
7.3 CROSS SUBSIDY	123
7.4 CROSS-SUBSIDY SURCHARGE.....	124
7.5 TARIFF PRINCIPLES.....	128
7.6 APPROVED TARIFF FOR FY 2023-24	133
7.7 APPROVED MISCELLANEOUS AND OTHER CHARGES FOR FY 2023-24	141
8 ANNEXURE 1: APPROVED TARIFF SCHEDULE FOR FY 2023-24.....	145

9	ANNEXURE 2: TARIFF SCHEDULE FOR FY 2023-24 AFTER CONSIDERING GOVERNMENT SUBSIDY	147
10	APPENDIX 1: NUMBER OF CONSUMERS FROM FY 2020-21 TO FY 2023-24(P)	149
11	APPENDIX 2: CONNECTED LOAD FROM FY 2020-21 TO FY 2023-24(P)	150
12	APPENDIX 3: SALES (MU) FROM FY 2020-21 TO FY 2023-24(P)	151

List of Tables

Table 1: Name of the Objectors who filed objections/suggestions in writing on Tariff Petition of TSECL.....	20
Table 2: Plant wise Effective Capacity	35
Table 3: Plant-wise own generation for FY 2020-21 to FY 2023-24 as submitted by TSECL	37
Table 4: Normative PLF and Aux. Consumption and Actual Performance of Generation Plant (%).....	38
Table 5: Own generation from FY 2020-21 to FY 2023-24 approved by the Commission	39
Table 6: Plant wise Availability (%) for FY 2020-21 to FY 2023-24 submitted by TSECL	40
Table 7: Plant wise Availability (%) for FY 2020-21 to FY 2023-24 approved by the Commission	41
Table 8: SHR for FY 2020-21 to FY 2023-24(kCal/ kWh)	42
Table 9: Approved SHR (kCal/kWh).....	42
Table 10: Source wise Supply of Fuel and cost (per SCM) - FY 2020-21 to FY 2023-24	43
Table 11: Details of APM Gas price notified by MoPNG, Gol.....	44
Table 12: Fuel consumption and Fuel Cost as per TSECL (Rs. Crore).....	45
Table 13: Reconciliation of Fuel Cost (Rs. Crore).....	45
Table 14: Fuel Purchase Cost of RGTPP for FY 2020-21 to FY 2022-23 as approved by the Commission.....	47
Table 15: Fuel Purchase Cost of BGTPP for FY 2020-21 and FY 2022-23 approved by the Commission.....	47
Table 16: Fuel Cost for FY 2020-21 to FY 2023-24 approved by the Commission	48
Table 17: Norms for calculation of O&M expenses for Generating Station.....	48
Table 18: O&M Expenses claimed by Petitioner (Rs. Crore).....	49
Table 19: Normative O&M Cost for FY 2020-21 and FY 2023-24 approved by the Commission (Rs. Crore)	51
Table 20: Reconciliation of O&M function-wise with Audited Accounts (Rs. Crore) ..	52
Table 21: O&M expenses for FY 2020-21 to FY 2023-24 as approved by the Commission (Rs. Crore)	53
Table 22: Rate of Depreciation as per Tariff Regulations	53
Table 23: Gross Value of Assets and Depreciation claimed for FY 2020-21 to FY 2023-24(Rs. Crore)	54
Table 24: Capitalisation of Assets of Generation business – Petitioner (Rs. Crore) .	55
Table 25: Depreciation for FY 2020-21 to FY 2023-24 approved by the Commission	