

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

5th Floor, Metro Plaza, Bittan Market, Bhopal - 462 016



AGGREGATE REVENUE REQUIREMENT AND RETAIL SUPPLY TARIFF ORDER FOR FY 2024-25

Petition No. 73/2023

PRESENT:

S.P.S. Parihar, Chairman
Gopal Srivastava, Member (Law)
Prashant Chaturvedi, Member

IN THE MATTER OF:

Determination of Aggregate Revenue Requirement (ARR) and Retail Supply Tariff for FY 2024-25 based on the ARR & Tariff Petition filed by the Distribution Licensees namely Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (East DISCOM), Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited (West DISCOM), Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited (Central DISCOM), and M.P. Power Management Company Limited (MPPMCL)

Table of Contents

A1: ORDER.....	10
A2: AGGREGATE REVENUE REQUIREMENT FOR PETITIONERS.....	19
Sales Forecast	19
Energy Balance.....	22
Assessment of Energy Availability	26
Assessment of Power Purchase Cost	44
Renewable Purchase Obligation (RPO).....	68
Management of Surplus Energy	71
Inter-State Transmission Charges.....	74
Intra-State Transmission Charges and SLDC Charges	75
MPPMCL Costs: Details and DISCOM-wise Allocation	76
Summary of Power Purchase Cost.....	78
Capital Expenditure Plans/ Capitalization of Assets	80
Operations and Maintenance Expenses	83
Depreciation.....	89
Interest and Finance Charges	92
Interest on Working Capital.....	97
Interest on Consumer Security Deposit	100
Return on Equity (RoE)	101
Bad and doubtful debts	104
Other Income.....	105
Differential Bulk Supply Tariff (DBST)	107
Revenue from Existing and Admitted Tariffs and Gap/Surplus.....	114
A3: WHEELING CHARGES, CROSS SUBSIDY SURCHARGE AND ADDITIONAL SURCHARGE.....	118
Determination of Wheeling Cost	118
Determination of Cross-Subsidy Surcharge	122
Determination of Additional Surcharge	127
A4: GREEN ENERGY TARIFF.....	129
A5: FUEL AND POWER PURCHASE ADJUSTMENT SURCHARGE.....	139
A6: RETAIL TARIFF DESIGN.....	140
Legal Position	140
Commission's Approach to Tariff Determination	140
Linkage to Average Cost of Supply	140
A7: COMPLIANCE OF DIRECTIVES ISSUED IN TARIFF ORDER FOR FY 2023-24.....	147

A8: PUBLIC SUGGESTIONS AND COMMENTS ON LICENSEES' PETITION	157
Annexure-1 (List of Stakeholders)	174
Annexure-2 (Tariff Schedules for Low Tension Consumers)	177
Annexure-3 (Tariff Schedules for High Tension Consumers)	203

List of Tables

Table 1 : List of Newspapers- Public Notice published by the Petitioners	11
Table 2 : Summary of Tariff proposal for FY 2024-25 as submitted by Petitioners (Rs. Crore)	12
Table 3: Status of meterisation of un-metered rural domestic consumers	13
Table 4: Status of meterisation of agricultural DTRs.....	13
Table 5: Distribution Loss Trajectory specified in the Regulations	14
Table 6: Actual Distribution Loss for FY 2022-23	14
Table 7: ARR admitted by the Commission for FY 2024-25 (Rs. Crore)	15
Table 8: ARR admitted and Revenue at Existing/Approved Tariff for FY 2024-25 (Rs. Crore)	16
Table 9: Category-wise sales projected by Petitioners for FY 2024-25 (MU).....	20
Table 10: Category wise sales admitted by the Commission for State for FY 2024-25 (MU)	21
Table 11: Energy Requirement proposed by Petitioners for FY 2024-25 (MU)	24
Table 12: Loss targets as per Regulations (in %).....	25
Table 13: Energy requirement admitted by the Commission for FY 2024-25.....	25
Table 14: Details of Capacity Addition with respect to Solar Projects during FY 2024-25	27
Table 15: Details of Capacity Addition with respect to Wind Projects during FY 2024-25	27
Table 16: Details of Capacity Addition with respect to MSW Projects during FY 2024-25	28
Table 17: Details of Capacity Addition with respect to Hydro Projects during FY 2024-25	28
Table 18: Details of energy anticipated through PFCL for FY 2024-25.....	28
Table 19: Allocated stations submitted by the Petitioners for FY 2024-25.....	29
Table 20: Power Plant-Wise backing down considered by the Petitioners for FY 2024-25 (MU)	33
Table 21: Allocation of Generating Station considered by the Commission for FY 2024-25	36
Table 22 : Month wise energy availability projection for FY 2024-25 (MU)	41
Table 23 : Fixed cost and Energy charges of MPPMCL allocated stations as submitted by the Petitioners for FY 2024-25	44
Table 24 : MOD for FY 2024-25 as submitted by the Petitioners	52
Table 25 : Fixed Charges and Energy Charges as Claimed by Petitioners for FY 2024-25 (Rs. Crore)	54
Table 26: Basis of Fixed and Energy Charges for the generating stations for FY 2024-25	58
Table 27: MOD on allocated generating stations for FY 2024-25.....	64
Table 28 : Fixed and Energy Charges of all generating stations admitted for FY 2024-25	66
Table 29: Renewable Purchase Obligation for FY 2024-25	68
Table 30: Net Shortfall in Renewable Purchase Obligation for FY 2024-25.....	69
Table 31: Net Shortfall in Renewable Purchase Obligation for FY 2024-25.....	70
Table 32: Renewable Purchase Obligation and Cost as computed by the Commission for FY 2024-25	70
Table 33: RE power purchase cost for RPO compliance for FY 2024-25 (Rs. Crore)	71
Table 34: Management of Surplus Energy as submitted by Petitioners.....	72
Table 35: Surplus Energy information for last 3 years as submitted by Petitioners	73
Table 36 : Details of saving in power purchase cost through sale of Surplus energy	74
Table 37: Inter-State Transmission Charges claimed for FY 2024-25 (Rs. Crore)	75
Table 38: Inter-State Transmission Charges admitted for FY 2024-25 (Rs. Crore).....	75
Table 39: Intra-State Transmission Charges and SLDC charges claimed for FY 2024-25 (Rs. Crore)	75
Table 40 : Intra-State Transmission Charges including SLDC Charges admitted for FY 2024-25 (Rs. Crore)	76
Table 41: MPPMCL Cost claimed for FY 2024-25 (Rs. Crore).....	77

Table 42: MPPMCL Costs/ Income admitted by the Commission for FY 2024-25 (Rs. Crore).....	78
Table 43: Power Purchase Cost as filed by Petitioners for FY 2024-25 (Rs. Crore)	78
Table 44 : Total Power Purchase cost admitted for FY 2024-25 (Rs. Crore).....	79
Table 45: Capital Expenditure Plan for FY 2024-25 (Rs. Crore).....	82
Table 46 : DISCOM-wise proposed capitalization and bifurcation of CWIP (Rs. Crore).....	82
Table 47: Projected Asset Capitalization considered by the Commission for FY 2024-25 (Rs. Crore)	83
Table 48: Escalation Rate for FY 2022-23 and FY 2023-24 (%).....	84
Table 49: Dearness Allowance Considered (%).....	84
Table 50: Additional OPEX submitted by the Petitioners (Rs Crore)	85
Table 51: O&M Expenses Claimed by the Petitioners for FY 2024-25 (Rs. Crore)	86
Table 52: Escalation Rate admitted for FY 2022-23 and FY 2023-24 (%).....	87
Table 53: Operation and Maintenance Expenses admitted for FY 2024-25 (Rs. Crore).....	89
Table 54: Depreciation claimed by the Petitioners for FY 2024-25 (Rs. Crore)	90
Table 55: Depreciation admitted for FY 2024-25 (Rs. Crore)	92
Table 56: Interest on Project Loan claimed for FY 2024-25 (Rs. Crore)	93
Table 57: Interest and finance charges admitted for FY 2024-25 (Rs. Crore).....	96
Table 58: Interest on Working Capital claimed for 2024-25 (Rs Crore)	97
Table 59: Interest on Working Capital admitted by the Commission (Rs. Crore)	99
Table 60: Interest on Consumer Security Deposit claimed by the Petitioners for FY 2024-25 (Rs. Crore)	100
Table 61: Interest on Consumer Security Deposit (CSD) admitted for FY 2024-25 (Rs. Crore).....	100
Table 62: Return on Equity Claimed by the Petitioners for FY 2024-25 (Rs. Crore)	101
Table 63: Return on Equity admitted for FY 2024-25 (Rs. Crore).....	104
Table 64: Provision for Bad and Doubtful Debts Claimed for FY 2024-25 (Rs Crore)	104
Table 65: Other Income and Non-Tariff Income for FY 2024-25 (Rs Crore)	105
Table 66: Total actual Other Income as per True-up Orders (Rs Crore)	106
Table 67: Other Income admitted for FY 2024-25 (Rs. Crore)	107
Table 68: DBST submitted by the Petitioners for FY 2024-25 (Rs Crore).....	108
Table 69: Differential Bulk Supply Tariff Admitted by the Commission for FY 2024-25 (Rs Crore)	109
Table 70: Aggregate Revenue Requirement (ARR) admitted for State for FY 2024-25 (Rs Crore)..	110
Table 71: Admitted ARR for Wheeling Business for FY 2024-25 (Rs. Crore).....	112
Table 72: Admitted ARR for Supply Business for FY 2024-25 (Rs. Crore).....	113
Table 73: Revenue at Existing and proposed Tariff submitted by Petitioner for FY 2024-25 (Rs. Crore)	114
Table 74: Revenue including Rebate/ Incentives at Existing and Admitted Tariffs for FY 2024-25 (Rs. Crore)	115
Table 75: Final ARR and Revenue from existing tariffs for FY 2024-25 (Rs Crore)	116
Table 76: Final ARR and Revenue from admitted tariffs for FY 2024-25 (Rs Crore).....	117
Table 77 : Wheeling Charges submitted by the Petitioners for FY 2024-25	118
Table 78 : Voltage level-wise Cost Break-up of Sub transmission & Distribution Lines.....	120
Table 79 Voltage level-wise cost of Transformer	120
Table 80 : Identification of value of network at different voltage level (Rs. Crore).....	120
Table 81 : Identification of network expenses (wheeling cost) at different voltage levels	120
Table 82 : Energy Wheeled at different voltage levels (MU)	121
Table 83 : Allocation of wheeling cost over Distribution System Users at 33 kV.....	121
Table 84 : Allocation of wheeling cost over Distribution System Users at 11 kV.....	121
Table 85 : Wheeling Charges at different Voltage levels	122
Table 86 : Category wise Cross Subsidy Surcharge claimed by the Petitioners.....	122
Table 87 : Weighted average cost of power purchase by the Licensee including cost of meeting the Renewable Purchase Obligation.....	124
Table 88 : Voltage-wise losses.....	124