TARIFF ORDER

Approval for True-up of FY 2020-21 and True-up of FY 2021-22, Annual Performance Review (APR) of FY 2022-23, and Aggregate Revenue Requirement (ARR) and Determination of Retail Tariff for FY 2023-24

Petition No. 99/2023

for

Electricity Wing of Engineering Department, Chandigarh (EWEDC)

30th March 2023

JOINT ELECTRICITY REGULATORY COMMISSION
For the State of Goa and Union Territories,
3rd and 4th Floor, Plot No. 55-56, Sector -18, Udyog Vihar - Phase IV
Gurugram, (122015) Haryana
Telephone: +91(124) 4684705 Telefax: +91(124) 4684706
Website: www.jercuts.gov.in
E-mail: secy.jercuts@gov.in

THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY

Table of Contents

1. Chapter 1: Introduction **17**

1.1. About Joint Electricity Regulatory Commission for the State of Goa and UT's (JERC) 17
1.2. About Union Territory of Chandigarh 17
1.3. About Electricity Wing of Engineering Department, Chandigarh (EWEDC) 17
1.4. Multi Year Tariff Regulations, 2018 18
1.5. Multi Year Tariff Regulations, 2021 18
1.6. Filing and Admission of the Present Petition 18
1.7. Interaction with the Petitioner 18
1.8. Notice for Public Hearing 19
1.9. Public Hearing 19

2. Chapter 2: Summary of Suggestions/ Objections received, Response from the Petitioner and the Commission's Views **20**

2.1. Regulatory Process 20
2.2. Suggestions/ Objections, Response of the Petitioner and Commission's Views 20
2.2.1. Hike in tariff proposed by the Electricity Department 20
2.2.2. High Transaction charges/ fee in payment of bills through Sampark Centres 21
2.2.3. Availability of digital payment modes 22
2.2.4. Shortage of manpower in ED 22
2.2.5. Functioning of EWEDC 23
2.2.6. Electricity Supply Code Review Panel 23
2.2.7. Pilot Project for laying U/G Power cable in Sector-8, Chandigarh 23
2.2.8. Effect of Midway termination of Smart Grid Project for installation of Smart Meter in PAN City 24
2.2.9. Privatization of ED 24
2.2.10. Refund of Excess ED charges from Solar consumers 25
2.2.11. Over charging of fixed charges w.e.f. 4th April, 2015 25
2.2.12. Replacement of Service Connection Cable from Pole to the Meter in Consumer Premises 25
2.2.13. Procurement of Materials (Meters, Tools and Safety Equipment) 26
2.2.14. Maintenance of Roads/Passage Stretch from V-6, Road/Internal Sector Road to Substations in various Sectors of Chandigarh 26
2.2.15. Public Hearings 26
2.2.16. Consumer's Grievance Cell 27
2.2.17. Central Complaint Centre 27
2.2.18. Latest position on decisions given by JERC in tariff order for FY 2022-23 27
2.2.19. Compliance of Directives issued in tariff order dated 11.07.2022 27
2.2.20. Non Framing of Instruction manual/Term & Conditions of supply: 29
2.2.21. Delay in completion of 66 kV works 30
2.2.22. Sale of scrap 30
2.2.23. Abandoned Diesel Power House of UTED located in Timber Market Sector 26, Chandigarh 31
2.2.24. Availability of material at departmental store 31
2.2.25. Presentation of ARR & Compilation of Information 32

2.2.26. T & D Losses 32
2.2.27. Request to categorise telecommunication towers under the Industry (General) Tariff Category, 33
2.2.28. Manpower Planning 33
2.2.29. Directives on Manpower Deployment 33
2.2.30. Safety Training for EWEDC employees 34
2.2.31. Management Information System 35
2.2.32. Delay in filing Petition 36

3. Chapter 3: True-up for the FY 2020-21 37

3.1. Applicable Provisions and Background 37
3.2. Approach for True-up for FY 2020-21 38
3.3. Energy Sales 39
3.4. Inter-State Transmission Loss 40
3.5. Intra-State Distribution Loss 40
3.6. Power Purchase Quantum & Cost 42
3.7. Renewable Purchase Obligation (RPO) 44
3.8. Energy Balance 46
3.9. Operation & Maintenance Expenses 47
3.9.1. Employee Expenses 48
3.9.2. Administrative and General (A&G) Expenses 49
3.9.3. Repair & Maintenance Expenses (R&M) 50
3.9.4. Total Operation and Maintenance Expenses (O&M) 51

3.10. Capitalisation 52
3.11. Capital Structure 52
3.12. Depreciation 54
3.13. Interest on Loan 56
3.14. Return on Equity (RoE) 59
3.15. Interest on Consumer Security Deposits 60
3.16. Interest on Working Capital 61
3.17. Income Tax 63
3.18. Provision for Bad & Doubtful Debts 64
3.19. Non-Tariff Income (NTI) 64
3.20. Incentive/Disincentive towards over/under achievement of norms 65
3.20.1. Dis-incentive on account of under-achievement of Intra- State Transmission & Distribution (T&D) loss 65
3.20.2. Incentive on account of norms for Operations & Maintenance (O&M) Expenses 66

3.21. Aggregate Revenue Requirement (ARR) 67
3.22. Revenue at existing Retail Tariff 68
3.23. Standalone Revenue Gap/ (Surplus) 69

4. Chapter 4: True-up of the FY 2021-22 70

4.1. Applicable provisions 70
4.2. Approach for the True-up of FY 2021-22 70

5. Chapter 5: Annual Performance Review for the FY 2022-23 71

5.1. Applicable Provisions and Background 71
5.2. Approach for the Review for the FY 2022-23 71
5.3. Energy Sales 72
5.4. Inter-State Transmission Loss 73
5.5. Intra-State Distribution Loss 74
5.6. Power Purchase Quantum & Cost 74
5.6.1. Availability of power 78
5.6.2. Power Purchase Cost 78
5.6.3. Transmission Charges 78
5.6.4. Total power purchase quantum and cost 78
5.7. Renewable Purchase Obligation (RPO) 81
5.8. Energy Balance 84
5.9. Operation & Maintenance Expenses 85
5.9.1. Employee Expenses 86
5.9.2. Administrative and General (A&G) Expenses 87
5.9.3. Repair & Maintenance Expenses (R&M) 88
5.9.4. Total Operation and Maintenance Expenses (O&M) 89
5.10. Capital Expenditure and Capitalisation 89
5.11. Capital Structure 90
5.12. Depreciation 91
5.13. Interest on Loan 93
5.14. Return on Equity (RoE) 95
5.15. Interest on Security Deposits 97
5.16. Interest on Working Capital 98
5.17. Income Tax 99
5.18. Provision for Bad & Doubtful Debts 100
5.19. Non-Tariff Income (NTI) 100
5.20. Aggregate Revenue Requirement (ARR) 102
5.21. Revenue at existing Retail Tariff 103
5.22. Standalone Revenue Gap/ (Surplus) 104
6. Chapter 6: Annual Revenue Requirement for the FY 2023-24 106
6.1. Background 106
6.2. Approach for determination of ARR for the FY 2023-24 106
6.3. Projection of Number of consumers, Connected Load and Energy Sales 106
6.4. Inter-State Transmission Loss 109
6.5. Intra-State Distribution Loss 109
6.6. Power Purchase Quantum & Cost 110
6.6.1. Availability of power 113
6.6.2. Power Purchase Cost 114
6.6.3. Transmission Charges 114
6.6.4. Total power purchase quantum and cost 114
6.6.5. Net Power Purchase Cost 117

6.7. Renewable Purchase Obligation (RPO) 117
6.8. Energy Balance 120
6.9. Operation & Maintenance Expenses 121
6.9.1. Employee Expenses 122
6.9.2. Administrative and General (A&G) Expenses 124
6.9.3. Repair & Maintenance Expenses (R&M) 124
6.9.4. Total Operation and Maintenance Expenses (O&M) 125
6.10. Capital Expenditure and Capitalisation 125
6.11. Capital Structure 126
6.12. Depreciation 127
6.13. Interest on Loan 129
6.14. Return on Equity (RoE) 131
6.15. Interest on Security Deposits 133
6.16. Interest on Working Capital 134
6.17. Income Tax 135
6.18. Provision for Bad & Doubtful Debts 136
6.19. Non-Tariff Income (NTI) 136
6.20. Aggregate Revenue Requirement (ARR) 138
6.21. Revenue at existing Retail Tariff 139
6.22. Standalone Revenue Gap/ (Surplus) 141
7. Chapter 7: Tariff Principles and Design 142
7.1. Overall Approach 142
7.2. Applicable Regulations 142
7.3. Standalone and Consolidated Revenue Gap/ Surplus at existing tariff 143
7.4. Treatment of the Revenue Gap/ Surplus and Tariff Design 144
7.4.1. Tariff Design 144
7.4.2. Approved Final Tariff Schedule 150
7.4.3. Revenue from Approved Retail Tariff for FY 2023-24 151
7.4.4. Cumulative Revenue Gap/ (Surplus) at Approved Tariff 153
7.4.5. Highlights of the Tariff Structure 153
8. Chapter 8: Open Access Charges for the FY 2023-24 154
8.1. Wheeling Charges 154
8.1.1. Allocation Matrix - Allocation of ARR into Wheeling and Retail Supply of Electricity 154
8.2. Additional Surcharge 157
8.3. Cross-Subsidy Surcharge 158
9. Chapter 9: Fuel and Power Purchase Adjustment Mechanism 161
9.1. Legal Provisions 161
9.2. Formula 162
10. Chapter 10: Directives 166
10.1. Directives continued in this Order 166

10.1.1. Metering /replacement of Non-Functional or defective/ 11 kV Meters 166
10.1.2. Energy Audit 167
10.1.3. Demand Side Management and Energy Conservation 167
10.1.4. Segregation of T&D losses and loss reduction trajectory 168
10.1.5. Assets created from consumer contribution 168
10.1.6. Creation of SLDC 169
10.1.7. Operational safety and policy for accidents and compensation 169
10.1.8. Non-achievement of capitalization target 170
10.1.9. Monthly Billing for Domestic and Commercial/ Non-Residential category consumers 170
10.1.10. Determination of Category wise/ Voltage wise Cost of supply 171
10.1.11. kVAh based tariff 171
10.1.12. Hydro Purchase Obligation 172

11. Chapter 11: Tariff Schedule **173**

11.1. Tariff Schedule 173
11.2. Applicability 174
11.3. General Conditions of HT and LT Supply 179
11.4. Schedule of Other Charges 181
11.5. Schedule for service connection charges and service rentals 185

Annexures **189**

Annexure 1: List of Stakeholders 189

List of Tables

Table 1: Standalone Revenue Gap/ (Surplus) at existing tariff for the FY 2020-21 (INR Cr.) 15
Table 2: Standalone Revenue Gap/ (Surplus) at existing tariff for the FY 2022-23 (INR Cr.)....15
Table 3: Standalone Revenue Gap/ (Surplus) at existing tariff for the FY 2023-24 (INR Cr.)....15
Table 4: Cumulative Revenue Gap/ (Surplus) approved by Commission (In INR Cr) 15
Table 5: Timelines of the interaction with the Petitioner....18
Table 6: Details of Public Notices published by the Commission....19
Table 7: Details of Public Notices published by the Petitioner 19
Table 8: Energy Sales (MU) Trued-up by the Commission for FY 2020-21 40
Table 9: Inter-State Transmission Loss Trued-up by the Commission for FY 2020-21 (%) 40
Table 10: Intra-State Distribution Loss calculation 41
Table 11: Intra-State Distribution Loss Trued-up by the Commission for FY 2020-21 (%) 42
Table 12: Power Purchase quantum and cost submitted by the Petitioner.... 42
Table 13: Power Purchase quantum and cost Trued-up by the Commission for FY 2020-21 44
Table 14: RPO compliance submitted by the Petitioner.... 45
Table 15: Effective energy sales (except hydro) for calculation of RPO 45
Table 16: Summary of Renewable Purchase Obligation (RPO) (MU) 45
Table 17: Energy requirement submitted by the Petitioner (in MU).... 46
Table 18: Energy balance Trued-up by the Commission for FY 2020-21 (in MU) 47
Table 19: Computation of CPI Inflation (%) 49
Table 20: Computation of Manpower Growth rate (%) 49
Table 21: Employee Expenses (In INR Cr).... 49
Table 22: Employee Expenses Trued-up by the Commission for FY 2020-21 (In INR Cr) 49
Table 23: A&G Expenses approved by Commission (In INR Cr) 50
Table 24: A&G Expenses Trued-up by the Commission for FY 2020-21 (In INR Cr).... 50
Table 25: Computation of WPI Inflation (%).... 50
Table 26: R&M Expenses approved by the Commission (In INR Cr) 51
Table 27: R&M Expenses Trued-up by the Commission for FY 2020-21 (In INR Cr) 51
Table 28: O&M Expenses Trued-up by the Commission for FY 2020-21 (In INR Cr)....51
Table 29: Capitalisation approved by the Commission for FY 2020-21 (In INR Cr) 52
Table 30: Funding Plan Trued-up by the Commission for FY 2020-21 (In INR Cr).... 53
Table 31: GFA addition Trued-up by the Commission for FY 2020-21 (In INR Cr) 53
Table 32: Normative Loan addition Trued-up by the Commission for FY 2020-21 (In INR Cr) 54
Table 33: Normative Equity addition Trued-up by the Commission for FY 2020-21 (In INR Cr).... 54
Table 34: Depreciation Rate (%).... 55
Table 35: Asset wise and overall effective Depreciation Rate (%) 56
Table 36: Depreciation approved by the Commission for FY 2020-21 (In INR Cr) 56
Table 37: Interest and Finance Charges approved by the Commission for FY 2020-21 (In INR Cr).... 59
Table 38: RoE approved by the Commission for FY 2020-21 (In INR Cr) 60
Table 39: Interest on Consumer Security Deposits Trued-up by the Commission for FY 2020-21 (In INR Cr)...61
Table 40: Interest on Working Capital submitted by Petitioner (In INR Cr) 61
Table 41: Interest on Working Capital approved by the Commission for FY 2020-21 (In INR Cr) 63
Table 42: Income Tax Trued-up by the Commission for FY 2020-21 (In INR Cr).... 64
Table 43: Non-Tariff Income submitted by the Petitioner for FY 2020-21 (In INR Cr) 65
Table 44: Non-Tariff Income considered by the Commission for FY 2020-21 (In INR Cr) 65
Table 45: Non- Tariff Income Trued-up by the Commission for FY 2020-21 (In INR Cr) 65
Table 46: Dis-incentive due to under-achievement of Intra-State Distribution Loss target (In INR Cr) 66
Table 47: O&M Expenses approved by Commission (In INR Cr).... 67
Table 48: Aggregate Revenue Requirement Trued-up by Commission for the FY 2020-21 (In INR Cr) 67
Table 49: Revenue at existing tariff Trued-up by Commission for the FY 2020-21 (In INR Cr) 68
Table 50: Standalone Revenue Gap/ (Surplus) for the FY 2020-21 (In INR Cr) 69

Table 51: Energy Sales (MU) submitted by the Petitioner for the FY 2022-23 72
Table 52: Energy Sales (MU) approved by the Commission for the FY 2022-23 73
Table 53: Inter-State Transmission Loss (%) approved by the Commission for the FY 2022-23 73
Table 54: Intra-State Distribution Loss (%) approved by the Commission for the FY 2022-23 74
Table 55: Power Purchase quantum (MU) and cost (In INR Cr) submitted by the Petitioner 75
Table 56: Power Purchase Quantum (MU) and cost (INR Cr) approved by the Commission for the FY 2022-23 79
Table 57: Effective Energy Sales (Excluding Hydro) as submitted by Petitioner 81
Table 58: RPO Requirement (Solar and Non-Solar) as submitted by Petitioner 81
Table 59: HPO targets for FY 2022-23 (in MU) 82
Table 60: RPO and HPO targets 82
Table 61: Effective energy sales (adjusted for hydro) (in MU) 82
Table 62: Summary of Renewable Purchase Obligation (RPO) (MU) 83
Table 63: Hydro Purchase Obligation (HPO) approved by the Commission for FY 2022-23 83
Table 64: Energy Requirement of the System (MU) 84
Table 65: Energy Balance approved by the Commission for the FY 2022-23 (MU) 84
Table 66: CPI inflation computed for FY 2022-23 87
Table 67: Manpower Growth factor considered by the Commission for FY 2022-23 87
Table 68: Employee Expense approved by the Commission for 3rd MYT Control Period 87
Table 69: A&G Expenses approved by the Commission for the FY 2022-23 (In INR Cr) 88
Table 70: WPI inflation computed for 2nd MYT Control Period 88
Table 71: R&M Expenses approved by the Commission for the FY 2022-23 (In INR Cr) 88
Table 72: O&M Expenses approved by the Commission for the FY 2022-23 (In INR Cr) 89
Table 73: Capitalisation for FY 2022-23 as submitted by the Petitioner (In INR Cr) 89
Table 74: Capitalisation approved by the Commission for the FY 2022-23 (In INR Cr) 89
Table 75: Capital Structure considered by the Commission (INR Cr.) 91
Table 76: Depreciation submitted by the Petitioner for FY 2022-23 (INR Cr) 91
Table 77: Asset-wise depreciation rate considered by the Commission for weighted average rate for FY 2022-23 (%) 92
Table 78: Depreciation considered by the Commission for FY 2022-23 (INR Cr.) 93
Table 79: Interest on Normative Loan submitted by the Petitioner for the FY 2022-23 (INR Cr) 93
Table 80: Interest and Finance Charges considered by the Commission for FY 2022-23 (INR Cr.) 95
Table 81: Return on Equity submitted by the Petitioner for the FY 2022-23 (INR Cr) 95
Table 82: Return on Equity considered by the Commission for FY 2022-23 (INR Cr.) 96
Table 83: Interest on Security Deposit submitted by the Petitioner for the FY 2022-23 (INR Cr) 97
Table 84: Interest on Consumer security considered by the Commission for FY 2022-23 (INR Cr.) 97
Table 85: Interest on Working Capital submitted by the Petitioner for the FY 2022-23 (In INR Cr) 98
Table 86: Interest on working capital considered by the Commission for FY 2022-23 (INR Cr.) 99
Table 87: Non-Tariff Income claimed by the Petitioner for the FY 2022-23 (INR Cr) 101
Table 88: Non-Tariff Income considered by the Commission for FY 2022-23 (INR Cr.) 102
Table 89: ARR submitted by the Petitioner for FY 2022-23 (INR Cr.) 102
Table 90: ARR approved by the Commission for the FY 2022-23 (INR Cr.) 102
Table 91: Revenue at existing tariff as submitted by the Petitioner (In INR Cr) 103
Table 92: Revenue at existing tariff computed by Commission for FY2022-23 (In INR Cr) 103
Table 93: Standalone Revenue Gap/ (Surplus) at existing tariff (In INR Cr) 105
Table 94: Category-wise Energy Sales (MU) proposed by the Petitioner for FY 2023-24 106
Table 95: Category-wise connected load (kW) proposed by the Petitioner for FY 2023-24 107
Table 96: Category-wise number of consumers proposed by the Petitioner for FY 2023-24 107
Table 97: Category-wise number of consumers approved by the Commission for FY 2023-24 108
Table 98: Category-wise connected load (kW) approved by the Commission for FY 2023-24 108
Table 99: Category-wise energy sales (MU) approved by the Commission for FY 2023-24 109
Table 100: Inter-State Transmission Loss (%) approved by the Commission for the FY 2023-24 109
Table 101: Intra-State Distribution Loss (%) approved by the Commission for the FY 2023-24 110

Table 102: Power Purchase quantum (MU) and cost (In INR Cr) submitted by the Petitioner 111
Table 103: Power Purchase Quantum (MU) and cost (INR Cr) approved by the Commission for the FY 2023-24 114
Table 104: Net Power Purchase Cost approved by the Commission for FY 2023-24.... 117
Table 105: Average Power Purchase Cost (APPC) for the FY 2023-24 117
Table 106: Effective Energy Sales (Excluding Hydro) as submitted by Petitioner 118
Table 107: RPO Requirement (Solar and Non-Solar) as submitted by Petitioner....118
Table 108: HPO Compliance for FY 2023-24 as submitted by Petitioner 118
Table 109: Renewable Purchase Obligation (RPO) approved by the Commission for FY 2023-24 119
Table 110: Hydro Purchase Obligation (HPO) approved by the Commission for FY 2023-24....119
Table 111: REC cost approved by the Commission for FY 2023-24 (INR Crore) 120
Table 112: Energy Requirement of the System (MU) 120
Table 113: Energy Balance approved by the Commission for the FY 2023-24 (MU) 121
Table 114: Employee expenses submitted by the Petitioner for FY 2023-24....122
Table 115: CPI inflation computed for FY 2023-24 123
Table 116: Growth factor considered by the Commission for FY 2023-24 123
Table 117: Employee Expense approved by the Commission for 2023-24....123
Table 118: A&G Expenses approved by the Commission for the FY 2023-24 (In INR Cr) 124
Table 119: WPI inflation computed for FY 2023-24....124
Table 120: R&M Expenses approved by the Commission for the FY 2023-24 (In INR Cr)....125
Table 121: O&M Expenses approved by the Commission for the FY 2023-24 (In INR Cr) 125
Table 122: Capitalisation for FY 2023-24 as submitted by the Petitioner (In INR Cr)....125
Table 123: Capitalisation approved by the Commission for the FY 2023-24 (In INR Cr) 126
Table 124: Capital Structure considered by the Commission (INR Cr.)....127
Table 125: Depreciation submitted by the Petitioner for FY 2023-24 (INR Cr)....127
Table 126: Asset-wise depreciation rate considered by the Commission for weighted average rate for FY 2023-24 (%) 128
Table 127: Depreciation considered by the Commission for FY 2023- 24 (INR Cr.) 129
Table 128: Interest on Normative Loan submitted by the Petitioner for the FY 2023-24 (INR Cr) 129
Table 129: Interest on Loan considered by the Commission for FY 2023-24 (INR Cr.).... 131
Table 130: Return on Equity submitted by the Petitioner for the FY 2023-24 (INR Cr)....132
Table 131: Return on Equity considered by the Commission for FY 2023-24 (INR Cr.) 132
Table 132: Interest on Security Deposit submitted by the Petitioner for the FY 2023-24 (INR Cr) 133
Table 133: Interest on Consumer security considered by the Commission for FY 2023-24 (INR Cr.) 133
Table 134: Interest on Working Capital submitted by the Petitioner for the FY 2023-24 (In INR Cr)....134
Table 135: Interest on working capital considered by the Commission for FY 2023-24 (INR Cr.)....135
Table 136: Non-Tariff Income claimed by the Petitioner for the FY 2023-24 (INR Cr) 137
Table 137: Non-Tariff Income considered by the Commission for FY 2023-24 (INR Cr.) 138
Table 138: ARR submitted by the Petitioner for FY 2023-24 (INR Cr.) 138
Table 139: ARR approved by the Commission for the FY 2023-24 (INR Cr.) 138
Table 140: Revenue at existing tariff as submitted by the Petitioner (In INR Cr)....139
Table 141: Revenue at existing tariff computed by Commission (In INR Cr) 140
Table 142: Standalone Revenue Gap/ (Surplus) at existing tariff (In INR Cr) 141
Table 143: Standalone Revenue Gap/ (Surplus) submitted by Petitioner for FY 2023-24 (In INR Cr) 143
Table 144: Cumulative Revenue Gap/ (Surplus) submitted by Petitioner for FY 2023-24 (In INR Cr) 143
Table 145: Standalone Revenue Gap/ (Surplus) determined by Commission at existing tariff (In INR Cr) 144
Table 146: Cumulative Revenue Gap/ (Surplus) determined by Commission at existing tariff (In INR Cr)....144
Table 147: Tariff Schedule proposed by the Petitioner for FY 2023-24 145
Table 148: Existing and approved tariff 150
Table 149: Revenue from approved retail tariff determined by Commission (In INR Cr).... 151
Table 150: Cumulative Revenue Gap/ (Surplus) approved by Commission for FY 2023-24 (In INR Cr) 153
Table 151: Allocation matrix as submitted by the Petitioner 154
Table 152: Wheeling Charge calculation as submitted by Petitioner 155

Table 153: Allocation matrix approved by Commission....155
Table 154: Parameters assumed for voltage wise allocation of wheeling costs....156
Table 155: Allocation of costs based on voltage level....156
Table 156: Wheeling Charges approved by Commission....157
Table 157: Additional Surcharge calculation as submitted by Petitioner....157
Table 158: Additional Surcharge approved by Commission....158
Table 159: Cross-Subsidy Surcharge as proposed by the Petitioner....158
Table 160: Voltage wise losses assumed by Commission....159
Table 161: Energy Input at each voltage level (MU)....159
Table 162: Parameters used for allocation of fixed costs....159
Table 163: Voltage Wise Cost of Supply (VCoS)....160
Table 164: Cross-Subsidy Surcharge approved by Commission (INR/kWh)....160
Table 165: Rapproved determined by Commission for FY 2023-24....165
Table 166: Tariff Schedule....173
Table 167: Applicability of Tariff Schedule....174
Table 168: PF Range for LT consumer....180
Table 169: Applicability of ToD Charges....181
Table 170: Schedule of Other Charges....181
Table 171: Service Connection Charges....185
Table 172: Service Connection Charges for Industrial and Bulk Load Supply....186
Table 173: Charges applicable for contract demand higher than 60% of connected load....187
Table 174: List of participants in Public Hearing....189

List of abbreviations

Abbreviation	Full Form
A&G	Administrative and General
ACoS	Average Cost of Supply
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal of Electricity
BPL	Below Poverty Line
BBMB	Bhakra Beas Management Board
CAGR	Compound Annualized Growth rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Stations
COD	Commercial Operation Date
Cr	Crores
CREST	Chandigarh Renewal Energy and Science & Technology
CAG	Comptroller and Auditor General of India
CUF	Capacity Utilization Factor
CPI	Consumer Price Index
Discom	Distribution Company
DST	Daylight Savings Time
EWEDC	Electricity Wing of Engineering Department, Chandigarh
DSM	Deviation Settlement Mechanism
EHT	Extra High Tension
ERP	Enterprise Resource Planning
FPPCA	Fuel and Power Purchase Cost Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
GeM	Government e Marketplace
GPF	General Provident Fund
G-TAM	Green- Term ahead market
HT	High Tension
HPO	Hydro Power Obligation
IEX	Indian Energy Exchange Limited
IPP	Independent Power Producer
ISTS	Inter State Transmission System
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
LT	Low Tension
LU	Lakh Units
MU	Million Units
MYT	Multi Year Tariff
MNRE	Ministry of New and Renewable Energy
MUNPL	Meja Urja Nigam Private Limited
NFA	Net Fixed Assets
NSGM	National Smart Grid Mission
NIC	National Informatics Centre
NOC	No Objection Certificate
NHPC	National Hydro Power Corporation
NPCL	Noida Power Company Limited
NTI	Non-Tariff Income
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
PCS	Provincial Civil Service

PEPSU	Patiala and East Punjab States Union
PGCIL	Power Grid Corporation of India Limited
PGI	Post Graduate Institute
PLF	Plant Load Factor
PLR	Prime Lending Rate
POSOCO	Power System Operation Corporation Limited
PPA	Power Purchase Agreement
PSEB	Punjab State Electricity Board
PSPCL	Punjab State Power Corporation Limited
R&M	Repair and Maintenance
REC	Renewable Energy Certificate
RLDC	Regional Load Despatch Centre
RoE	Return on Equity
RPO	Renewable Purchase Obligation
SBI MCLR	SBI Marginal Cost Lending Rate
SBI PLR	SBI Prime Lending Rate
SCADA	Supervisory control and data acquisition
SECI	Solar Energy Corporation of India
SERC	State Electricity Regulatory Commission
SJVNL	Satluj Jal Vidyut Nigam Limited
SLDC	State Load Despatch Centre
SOP	Standard of Performance
T&D Loss	Transmission & Distribution Loss
THDC	Tehri Hydro Development Corporation
TOD	Time of Day
UI	Unscheduled Interchange
UT	Union Territory
UT ED	Union Territory Electricity Department
VCoS	Voltage-wise Cost of Supply
WPI	Wholesale Price Index

Before the

Joint Electricity Regulatory Commission

For the State of Goa and Union Territories, Gurugram

QUORUM

Smt. Jyoti Prasad, Member (Law)

Petition No. 99/2023

In the matter of

Approval of True-up of FY 2020-21, True-up of FY 2021-22, Annual Performance Review (APR) of FY 2022-23 and Approval of Aggregate Revenue Requirements (ARR) for FY 2023-24 and Determination of Retail Tariff for FY 2023-24.

And in the matter of

Electricity Wing of Engineering Department, Chandigarh (EWEDC)..**Petitioner**

ORDER

1) This Order is passed in respect of the Petition filed by the Electricity Wing of Engineering Department, Chandigarh (EWEDC) (herein after referred to as "The Petitioner" or "EWEDC" or "The Licensee") for Approval of Approval of True-up of FY 2020-21, True-up of FY 2021-22, Annual Performance Review (APR) of FY 2022-23 and Approval of Aggregate Revenue Requirements (ARR) for FY 2023-24 and Determination of Retail Tariff for FY 2023-24 before the Joint Electricity Regulatory Commission (herein after referred to as "The Commission" or "JERC").

2) The Commission scrutinised the said Petition and generally found it in order. The Commission admitted the Petition on 6th February 2023. The Commission thereafter requisitioned further information/ clarifications on the data gaps observed to take a prudent view of the said Petition. The Commission also held a Technical Validation Session to determine sufficiency of data and the veracity of the information submitted. The Public Hearing was held on 17th March 2023, and all the Stakeholders/Electricity Consumers present in the Public Hearing were heard. Further, suggestions/ comments/ views and objections were invited from the Stakeholders and Electricity Consumers.

3) The Commission based on the Petitioner's submission, relevant JERC MYT Regulations, facts of the matter, rules and provisions of the Electricity Act, 2003 and after proper due diligence and prudence check, has approved the Aggregate Revenue Requirement (ARR) for FY 2023-24 and determination of Retail Tariff for the FY 2023-24.

4) A Summary has been provided as follows:

    (a) The Commission has decided not to take up the True-Up for FY 2021-22 due to non-availability of Audited Accounts.

    (b) The following table provides ARR, Revenue and Standalone Gap/ (Surplus) at existing tariff as submitted by the Petitioner and approved by the Commission in True-up for the FY 2020-21:

Secretary (I/c), JERC
(For Goa and UTs)

Table 1: Standalone Revenue Gap/ (Surplus) at existing tariff for the FY 2020-21 (INR Cr.)

S. No.	Particulars	Petitioner's Submission	Approved by Commission
1	Net Revenue Requirement	705.65	612.01
2	Revenue from Retail Sales at Existing Tariff	702.04	702.04
	Net Revenue Gap/ (Surplus)	**3.61**	**(90.03)**

(c) The following table provides APR, Revenue and Standalone Gap/ (Surplus) at existing tariff as submitted by the Petitioner and approved by the Commission for the FY 2022-23:

Table 2: Standalone Revenue Gap/ (Surplus) at existing tariff for the FY 2022-23 (INR Cr.)

S. No.	Particulars	Petitioner's Submission	Approved by Commission
1	Net Revenue Requirement	937.53	934.77
2	Revenue from Retail Sales at Existing Tariff	829.26	840.05
	Net Revenue Gap/ (Surplus)	**108.27**	**94.72**

(d) The following table provides ARR, Revenue and Standalone Gap/ (Surplus) at existing tariff as submitted by the Petitioner and approved by the Commission for the FY 2023-24:

Table 3: Standalone Revenue Gap/ (Surplus) at existing tariff for the FY 2023-24 (INR Cr.)

S. No.	Particulars	Petitioner's Submission	Approved by Commission
1	Net Revenue Requirement	1,032.15	889.88
2	Revenue from Retail Sales at Existing Tariff	840.14	853.19
	Net Revenue Gap/ (Surplus)	**192.01**	**36.68**

(a) Accordingly, the following table provides the cumulative revenue gap/ surplus at existing tariff by the end of FY 2023-24:

Table 4: Cumulative Revenue Gap/ (Surplus) approved by Commission (In INR Cr)

S. No.	Particulars	Formulae	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
a	Opening Gap /(Surplus)		(151.62)	(258.85)	(288.43)	(213.00)
b	**Add: Gap/(Surplus)**		**(90.03)**	**(8.53)**	**94.72**	**36.68**
c	Closing Gap /(Surplus)	(c=a+b)	(241.65)	(267.38)	(193.71)	(176.31)
d	Average Gap/ (Surplus)	(d=(a+c)/2)	(196.63)	(263.12)	(241.07)	(194.65)
e	Interest Rate on carrying cost (%)		8.75%	8.00%	8.00%	8.00%
f	Carrying Cost	(f=d*e)	(17.21)	(21.05)	(19.29)	(15.57)
g	**Final Closing Gap/ (Surplus)**	**(c+f)**	**(258.85)**	**(288.43)**	**(213.00)**	**(191.89)**

(b) The Commission observed that the Petitioner had a standalone revenue surplus in each year from FY 2016-17 to FY 2020-21. Further, it is observed that the projected standalone gap for FY 2023-24 and cumulative revenue surplus at the end of FY 2023-24 at existing tariff is expected to be INR 36.68 Cr and INR 191.89 Cr respectively. Although the Petitioner is revenue deficit on standalone basis for FY 2023-24, it is revenue surplus at the end of FY 2023-24 of INR 191.89 Cr due to accumulated revenue surplus in previous years. Hence, the Commission has retained retail supply tariff for all consumer categories.

(c) The Commission has approved the Average Billing Rate (ABR) of INR 5.10/kWh against the approved Average Cost of Supply (ACoS) of INR 5.32/kWh.

5) This Order shall come into force with effect from 1st April 2023 and shall, unless amended or revoked,

Secretary (I/c), JERC
(For Goa and UTs)

continue to be in force till further orders of the Commission.

6) The licensee shall publish the Tariff Schedule and salient features of Tariff as determined by the Commission in this Order within one week of receipt of the Order in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply and also upload the Tariff Order on its website.

7) The attached documents giving detailed reasons, grounds and conditions are an Integral part of this Order.

8) Ordered accordingly

Sd/-

(Jyoti Prasad)
Member (Law)

Place: Gurugram
Date: 30th March 2023

Certified Copy

(S.D. Sharma)
Secretary (I/C), JERC

1. Chapter 1: Introduction

1.1. About Joint Electricity Regulatory Commission for the State of Goa and UT's (JERC)

In exercise of powers conferred by the Electricity Act 2003, the Central Government constituted the Joint Electricity Regulatory Commission for all the Union Territories except Delhi to be known as "Joint Electricity Regulatory Commission for the Union Territories" vide notification no. 23/52/2003-R&R dated 2nd May 2005. Later with the joining of the State of Goa, the Commission came to be known as "Joint Electricity Regulatory Commission for the State of Goa and Union Territories" (hereinafter referred to as "JERC" or "the Commission") vide notification no. 23/52/2003-R&R (Vol. II) dated 30th May 2008.

JERC is a statutory body responsible for regulation of the Power Sector in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli, Daman & Diu and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity etc. Its primary objective includes taking measures conducive to the development of the electricity industry, promoting competition therein, protecting the interests of consumers and ensuring supply of electricity to all areas.

1.2. About Union Territory of Chandigarh

Chandigarh is a city, district and union territory in India that serves as the capital of the two neighbouring states of Punjab and Haryana. It is bordered by the state of Punjab to the north, the west and the south, and by the state of Haryana to the east. The city is unique as it is not a part of either of the two states but is governed directly by the Union Government, which administers all such territories in the country. Chandigarh is located near the foothills of the Shivalik range of the Himalayas in northwest India. It covers an area of approximately 114 km². The metropolitan area of Chandigarh–Mohali–Panchkula collectively forms a Tri-city, with a combined population of over 2 million.

Chandigarh has been rated as one of the "Wealthiest Towns" of India. The city has one of the highest per capita incomes in the country. The city was reported to be one of the cleanest in India based on a national government study. The union territory also heads the list of Indian states and territories according to Human Development Index. In 2020, a survey ranked it among the top 3 happiest cities in India over the happiness index.

1.3. About Electricity Wing of Engineering Department, Chandigarh (EWEDC)

The Electricity Wing of Engineering Department of UT Administration of Chandigarh, hereinafter referred to as 'EWEDC' or as the 'Petitioner', a deemed licensee under Section 14 of the Electricity Act 2003, is carrying out the business of transmission, distribution and retail supply of electricity in Chandigarh (UT). EWEDC is functioning as an integrated distribution licensee of the Union Territory of Chandigarh. EWEDC procures most of its power through its allocation from Central Generating Stations (CGS) such as NTPC, NHPC, NPCIL BBMB, SJVNL and THDC. The EWEDC also buys short-term power for meeting the demand-supply shortfall during peak hours.

Chandigarh has been divided into various sectors and all the sectors of Chandigarh are electrified and any desiring consumer can avail power supply by submitting a requisition in the prescribed form to the appropriate office of the Department subject to fulfillment of the requisite conditions and payment of charges. The EWEDC is under the control of the Administration of the Union Territory of Chandigarh.

1.4. Multi Year Tariff Regulations, 2018

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018 (hereinafter referred to as 'JERC MYT Regulations, 2018') on 10th August 2018. These Regulations are applicable in the 2nd MYT Control Period comprising of three financial years from FY 2019-20 to FY 2021-22. These Regulations are applicable to all the generation companies, transmission and distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu and Puducherry.

1.5. Multi Year Tariff Regulations, 2021

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 (hereinafter referred to as JERC MYT Regulations, 2021) on 22nd March 2021. These Regulations are applicable in the 3rd MYT Control Period comprising of three financial years from FY 2022- 23 to FY 2024-25. These Regulations are applicable to all the generation companies, transmission and distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry.

1.6. Filing and Admission of the Present Petition

The present Petition was admitted on 6th February 2023 and marked as Petition No. 99 of 2023. The Commission and the Petitioner subsequently uploaded the Petition on their respective websites.

1.7. Interaction with the Petitioner

A preliminary scrutiny/analysis of the Petition was conducted, and certain deficiencies were observed. Accordingly, discrepancy notes were issued to the Petitioner. Further, additional information/clarifications were solicited from the Petitioner as and when required. The Commission and the Petitioner also discussed various concerns of the Petitioner and key data gaps, which included retail sales, revenue from retail tariff, capitalization, tariff proposal etc. The Petitioner submitted its response to the issues through various letters/emails.

The Commission conducted the Technical Validation Session (TVS) with the Petitioner at the Commission's office in Gurugram, during which the discrepancies in the Petition were conveyed and additional information required by the Commission was sought. Subsequently, the Petitioner submitted replies to the issues raised in this session and provided documentary evidence to substantiate its claims regarding various submissions. The following table provides the list of interactions with the Petitioner along with the dates:

Table 5: Timelines of the interaction with the Petitioner

S. No	Subject	Date
1	Issue of First Deficiency Note	13th February 2023
2	Reply received from Petitioner	3rd March 2023 & 13th March 2023
3	Technical Validation Session	14th March 2023
4	Public Hearing	17th March 2023
5	Issue of Second Deficiency Note	14th March 2023
6	Replies received from Petitioner	21st March 2023 & 24th March 2023

1.8. Notice for Public Hearing

Public Notices were published by the Commission in the leading newspapers as tabled below, giving due intimation to the stakeholders, consumers and the public at large about the Public Hearing to be conducted by the Commission. These notices were also uploaded on the Commission's website

Table 6: Details of Public Notices published by the Commission

Sl. No.	Date	Name of Newspaper	Language	Place of Circulation
1	28th February 2023 & 15th March 2023	Ajit	Punjabi	Chandigarh
2		Dainik Jagran	Hindi	Chandigarh
3		The Tribune	English	Chandigarh
4		The Times of India	English	Chandigarh

The Public Notice was published by the Petitioner in the following newspapers for inviting objections/ suggestions from the stakeholders on the Tariff Petition:

Table 7: Details of Public Notices published by the Petitioner

S.No.	Date	Name of Newspaper	Language	Place of Circulation
1	1st March 2023	Ajit	Punjabi	Chandigarh
2		Amar Ujala	Hindi	Chandigarh
3		The Tribune	English	Chandigarh
4		Hindustan Times	English	Chandigarh

1.9. Public Hearing

The Public Hearing was held on 17th March 2023 at the Auditorium Hall, Government Museum and Art Gallery, Chandigarh to discuss the issues related to the Petition filed by the Petitioner. The issues and concerns raised by the stakeholders in writing and as voiced by them during the Public Hearing have been examined by the Commission. The major issues discussed, the responses of the Petitioner thereon and the views of the Commission, have been summarized in Chapter 2 of this Order.

2. Chapter 2: Summary of Suggestions/ Objections received, Response from the Petitioner and the Commission's Views

2.1. Regulatory Process

On admitting the Petition, the Commission directed the Petitioner to make copies of the Petition available to the public, upload the Petition on the website and also publish the same in the newspapers duly inviting comments/ objections from the public as per the provisions of the JERC MYT Regulations, 2021.

The Public Hearing was held at Auditorium Hall, Government Museum and Art Gallery, Chandigarh on 17th March 2023 on the Petition for the True-up of the FY 2020-21, True-up of the FY 2021-22, APR of the FY 2022-23, ARR and retail tariff for the FY 2023-24. During the Public Hearing, a few of the stakeholders who had submitted their comments in writing also presented their views in person before the Commission. Other participants from the general public, who had not submitted written comments/objections earlier, were also given an equal opportunity to present their views/suggestions in respect to the Petition. The names of the stakeholders who attended the Public Hearing are provided in Annexure-I.

2.2. Suggestions/ Objections, Response of the Petitioner and Commission's Views

The Commission is appreciative of the efforts of various stakeholders in providing their suggestions/comments/observations to make the Electricity Distribution Sector responsive and efficient. The Commission has noted the concerns of all the stakeholders and has tried to address them to the extent possible in the Chapters on tariff design and directives. Relevant observations have been suitably considered by the Commission while finalizing the Tariff Order. The submissions of the stakeholders, response of the Petitioner and views of the Commission are summarized as follows:

2.2.1. Hike in tariff proposed by the Electricity Department

Stakeholder's Comment:

We strongly oppose the hike in tariff proposed by the Electricity Department. It should improve its functioning in cutting the costs by purchasing cheaper power. They should improve their functioning to provide quality of power at cheaper rates.

Necessity to propose average increase of 10.25% tariff on existing retail supply tariff has arisen due to ED delaying Energy Audit every year from last few years. The example is that True-Up of two FYs 2020-21 and FY 2021-22 is being taken up for approval in this petition. This practice must come to an end especially when installation of smart meters PAN India will not take place in coming few years. It is therefore recommended that tariff should not be increased till ED submits the petition for next FY by 30th November 2023 after getting Energy Audit of FY 2022-23 completed

Petitioner's Response:

The tariff in U.T. Chandigarh has not been hiked from last many years by EWEDC, however, to bridge the revenue gap for FY 2023-24, the tariff hike ~10.25% has been proposed for FY 2023-24.

Commission's View:

The Commission has noted the concerns of the Stakeholders. Although EWEDC is revenue deficit on standalone basis for FY 2023-24, it is revenue surplus due to accumulated revenue surplus in previous years. Hence, the Commission has retained the existing retail supply tariff for all consumer categories.

2.2.2. High Transaction charges/ fee in payment of bills through Sampark Centres

Stakeholder's Comment:

We want to draw your kind attention against the action of the Electricity Department in forcing the consumers to pay high transaction charges in payment of bills through Sampark Centres. They are charging INR 10/- per bill for online payment and INR 20/- for offline payment of bills. This has become an indirect mechanism to fund operations of Sampark Centres.

The Electricity Department has no arrangement for payment of bills and is entirely dependent on the Sampark Centers (and online Sampark portal). For the last more than 10 years we have not paid any transaction charges and now from the month of March 2023, Sampark Centers have started demanding exorbitant charges. There is no other method to pay the bills as specified in the section-7.32 of the Supply Code Regulations.

In many Electricity Boards no extra charges are demanded for online payments of bills. As per information gathered, the West Bengal Electricity Board and nearby Delhi Discoms, Punjab and Haryana Discoms, no transaction charges are charged for online payment.

Hon'ble JERC has never approved the charging of such a fee from the consumers in the Supply Code. The action of the Electricity Department in forcing the consumers to pay high fee without approval/Public Hearing is illegal and against the Electricity Act. The lower middle class/Below poverty line are the most affected by this action and nobody is caring for them.

The lower middle class/Below poverty line are the most affected by this action and nobody is caring for them.

Recently as per news report in, the National Payment Corporation· of India, a Govt. of India company for promotion of digital payments had directed all payment Apps, not to charge any platform/transaction fee from consumers. It is therefore requested that till some arrangements are made by the Electricity Department to adopt modes of digital payments other than Sampark Centers.

Further, they should be restrained to charge any transaction fee for payments of Electricity Bills and only Electricity Department should bear the cost (if any) through the Tariff Petition after approval of the Regulatory Commission.

Petitioner's Response:

The facilitation charges for payment of electricity bills to be collected by Sampark Centers have not been imposed by EWEDC. Instead, it is a policy decision taken at the level of Chandigarh Administration to provide facilitation fees/charges to the Sampark Centers for various services which are being offered by Sampark Centers. EWEDC has not proposed any of these charges either in Tariff Petition nor the same has been approved by the Hon'ble Commission.

Commission's View:

The Commission has noted the concerns of the Stakeholders. The Petitioner is directed to ensure that these transaction charges/ fees are not being recovered from the consumers and are being borne by EWEDC.

2.2.3. Availability of digital payment modes

Stakeholder's Comment:

The Govt. of India is promoting digital payment modes through UPI, PhonePe, Paytm, BBPS, RTGS/NEFT, Debit/Credit cards through Banks. There are many such modes as approved by the Govt. of India/Reserve Bank, but the Electricity Department is only sticking to acceptance of bill payments through Sampark Centers only.

Further, Electricity Department and Sampark (including online Sampark) have not been able to provision bill payments through BBPS (non-operational since years on BBPS) which aims to provide facility to make bill payments through any banking/non ·banking mobile-app. (like Google Pay, Paytm etc.). This not only deprives the citizens of opportunity to avail benefit of cashbacks, offers and zero- transaction charges but forces them to pay additional charges. As per directions, only INR 2.50/per transaction is to be charged from the Billers/Electricity Department and there are no charges from the consumers. While, about 80 electricity billers across the country are on BBPS providing citizens of India with hassle free and charge free payment services, bill payments for Chandigarh are not operational as on date. This is keeping the residents of the city at a disadvantage.

Different online/offline modes of payments, being followed by BSEB, NDPL, Tata, Reliance, etc. in Delhi/Bombay should be followed for payments of Electricity Bills.

Petitioner's Response:

The payments of electricity bills through UPI, Paytm, RTGS/ NEFT, Debit/ Credit Cards is already operational in U.T. Chandigarh. Further, the payments through BBPS is now operational and consumers can also make payment of electricity bills through any banking/ non-banking mobile apps through BBPS.

The EWEDC is also exploring the options of direct gateway to allow consumers to make payments of electricity bills through online mode without going through the Sampark Portal.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Petitioner is directed to publicize the payment methods available to the customers through their website/ newspaper.

2.2.4. Shortage of manpower in ED

Stakeholder's Comment:

In view of Electricity (rights of consumers) Rules 2020 notification, there is an acute shortage of manpower at all levels to render satisfactory services to consumers. JERC had earlier approved manpower levels in 2014 vide order dated 29th December 2014 after proper study. JERC had approved manpower of 1419 personnel against sanctioned post of 1720. Posts filled as on 31st March 2015 were only 1014. There was a deficiency of 30 Class A, 194 Class B and 105 Class C personnel. Shortfall is requested to be made up.

Petitioner's Response:

It is submitted that the concurrence to the recommendations dated 29.12.2014 of the Joint Electricity Regulatory Commission (JERC) has been submitted to the Govt. of India, MoP, New Delhi vide Secy. Engg. Chandigarh Admn. Memo No.4981, dated 14.07.2015. The Govt. of India, MoP vide letter dated 05.05.2017 had raised certain observations which were remained under consideration of the competent authority and the matter remained in abeyance and is under process. Further, in view of decision taken at different stages due to Privatization /corporatization of EWEDC, number of posts under various categories have fallen under the category of deemed abolished. Accordingly, case has been forwarded to higher authorities for revival of 612 Nos. of group-C, so that these can be filled on regular basis. Apart from this, the filling up of alive posts of various categories is already under process.

Commission's View:

The concern of the stakeholder is noted. The Stakeholder may note the reply of the Petitioner. The Petitioner is directed to ensure that sufficient manpower is available for proper functioning of the department.

2.2.5. Functioning of EWEDC

Stakeholder's Comment:

The Electricity Department is part of Chandigarh Administration UT and as I understand, the Chief Engineer, Civil is the head of the department under whom SE (Electricity) functions. It is strongly felt that in case it is not possible to upgrade the post of SE (Electricity) to Chief Engineer (Electricity), SE (Electricity) should be made Head of the Department for taking quick decisions on matters pertaining to electricity department. Incidentally, JERC had approved posts of Three Chief Engineers against none existing.

Petitioner's Response:

It is submitted that the concurrence to the recommendations dated 29.12.2014 of the Joint Electricity Regulatory Commission (JERC) has been submitted to the Govt. of India, MoP, New Delhi vide Secy. Engg. Chandigarh Admn. Memo No.4981, dated 14.07.2015. The Govt. of India, MoP vide letter dated 05.05.2017 had raised certain observations which were remained under consideration of the competent authority and the matter remained in abeyance and is under process.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Petitioner is directed to ensure that sufficient manpower is available for proper functioning of the department.

2.2.6. Electricity Supply Code Review Panel

Stakeholder's Comment:

This was constituted vide order dated 7th February 2020. I am a member on the Panel. The last meeting was held online on 15th January 2021. Confirmation is requested whether the Review Panel still exists. Necessary review of the members is requested.

Petitioner's Response:

The point/suggestion may be considered only at the time of any amendments in the Supply code, as the same do not pertain to ARR petition.

Commission's View:

The Commission has noted the submission made by the Stakeholder. The Stakeholder may note the reply of the Petitioner.

2.2.7. Pilot Project for laying U/G Power cable in Sector-8, Chandigarh

Stakeholder's Comment:

The Project sanctioned in the year 2021 has already been completed except shifting of meters outside houses. In the beautiful city, underground cable was laid from overhead lines to the meters. This service cable laid about more than 60 years back has become faulty in large number of cases. Now, overhead cable is being laid from the nearest pole to the meter (road crossing involved in few cases). As replacement in Sector-8 as a pilot project has taken more than 2 years, ED may kindly appraise other sector residents about the plans to replace the overhead cable to underground for the remaining sectors.

Petitioner's Response:

The work has been allotted to the firm and is under execution. Further, The conversion of the existing O/H lines/cables with U/G cables will be done as per requirement.

Commission's View:

The Commission has noted the submission made by the Stakeholder. The Stakeholder may note the reply of the Petitioner.

2.2.8. Effect of Midway termination of Smart Grid Project for installation of Smart Meter in PAN City

Stakeholder's Comment:

Pilot Project for installing Smart Meters in whole of Chandigarh has been terminated after installing only 24000 meters at a cost of 28 crores in Sub-Division No. 5 and nearby areas. ED has linked various issues with installation of smart meters in PAN City. These issues are:

i. Energy Audit, Monthly Billing, Pre-paid Electric Meters, Replacement of single phase faulty meters, Installation of MDI based energy meters, kVAh based tariff, Installation of TOD Meters, Targeting 24x7 supply, Service Quality, Metering/Replacement of non-functional or defective 11 kV meters

ii. Suitable action requested

Petitioner's Response:

The smart Grid project for PAN city has been dropped by NSGM. However, the EWEDC is exploring other possibility for installation of smart meters in remaining areas of Chandigarh.

Commission's View:

The concern of the stakeholder is noted. The Petitioner is directed to ensure that installation of smart meters is done on priority.

2.2.9. Privatization of ED

Stakeholder's Comment:

Change of Management was expected in early part of FY 2022-23. There is undue delay in this regard. This is reducing the efficiency of staff as there Is uncertainty in the minds of employees about their Absorption in new management and the retirement benefits. Procurement of stores and achievement of capitalization targets has suffered considerably during last 2 to 3 years. This shows not enough efforts have been made for enhancing reliability and quality of supply to consumers. ED was directed to achieve targets approved in complete MYT period (FY 2022-23 to FY 2024-25) as a whole by 31st March 2023. Latest position is requested.

Petitioner's Response:

The matter of Privatization of EWEDC is sub judice with next date of hearing being 28.03.2023

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.10. Refund of Excess ED charges from Solar consumers

Stakeholder's Comment:

JERC Order dated 12 November 2018 on Review Petition No. 262/2018 states that ED shall be payable on Net Energy Imported/consumed from the grid. ED has started charging the same on net imported energy w.e. f. July 2019. Refund of excess electricity duty charged till June 2019 is requested.

Petitioner's Response:

The ED from the Solar consumer is already charged and reconciled in account statements. The EWEDC follows Regulations approved by JERC and EWEDC is taking action as per JERC order dated 12.11.2018 on Review Petition No. 262/2018 vide which the Commission has directed that ED shall be payable on net energy imported/ net power consumed from the grid.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Petitioner is directed to take necessary action in this regard.

2.2.11. Over charging of fixed charges w.e.f. 4th April, 2015

Stakeholder's Comment:

ED is not taking any action on this point for last few years. It is for ED to have taken up case with JERC for bifurcation of charging fixed charges on fraction of load. It was clearly mentioned in guidelines issued by SDO (Ops) sub-divisions that subject to minimum load of 1 KW, the fraction of load below 500 Watts shall be rounded to its nearest lower level of whole number and 500 watts and above shall be rounded to nearest higher level of whole number. Decision on refund is requested from 4th April 2015 onwards.

Petitioner's Response:

The Electricity Wing of Engineering Department, UT, Chandigarh (EWEDC) follows the tariff structure as approved by Commission through its Tariff Orders on yearly basis and as per latest Tariff Order approved for FY 2022-23, the fixed charge is charged at respective rates for each category on load of per KW and no such bifurcation of charging fixed charge at fraction of load is approved by the Commission.

Commission's View:

The Commission notes the stakeholder's comment for taking necessary action in this regard.

2.2.12. Replacement of Service Connection Cable from Pole to the Meter in Consumer Premises

Stakeholder's Comment:

A very unrealistic statement by ED that service connection cable from pole to meter in consumer premises is issued by EWEDC as an when required. The required gauge cables are not available. The consumers are requested by the department officials to procure the cable at their own cost in case they want reliability of power supply. This needs closer examination at supervisory levels.

Petitioner's Response:

The service connection cable from pole to meter in consumer premises are replaced by concerned Sub-division whenever required and EWEDC has already procured cables of different sizes and are available in Department store. However, field offices have been instructed to avoid such situations.

Commission's View:

The Commission has noted the concerns of the Stakeholders and directs the Petitioner to resolve the Stakeholder's issue at the earliest.

2.2.13. Procurement of Materials (Meters, Tools and Safety Equipment)

Stakeholder's Comment:

Single Phase Meters installed by ED are substandard and cost about Rs 300/- each. The consumers when asked to procure meters under their own arrangements have to buy the meters specified by ED at higher cost. Why ED cannot procure high quality meters and charge higher rental based on the life of the meters.

Petitioner's Response:

Materials have already been procured including cables, ACSR, etc. and are available in Department. Store. Further, the procurement of energy meters single phase & three phase is under process through GeM.

Commission's View:

The Commission has noted the concerns of the Stakeholders and the Stakeholder may note the reply of the Petitioner.

2.2.14. Maintenance of Roads/Passage Stretch from V-6, Road/Internal Sector Road to Substations in various Sectors of Chandigarh

Stakeholder's Comment:

Road metalling is not done for last 5 to 6 years. Sub-Stations fans, Lights and coolers etc. are in bad condition. The answer of ED that the matter does not fall under Tariff Petition is not convincing.

Petitioner's Response:

All the field XENs have been directed to take necessary action for proper maintenance of all the Grid Sub Stations.

Commission's View:

The Commission has noted the concerns of the Stakeholders. The Stakeholder may note the reply of the Petitioner.

2.2.15. Public Hearings

Stakeholder's Comment:

No public hearing being held for last 4-5 years.

Petitioner's Response:

Public hearings on tariff petitions are held annually.

Commission's View:

Public hearings on tariff petitions are held annually and the same is communicated in advance through newspapers by the Commission as well as the Petitioner.

2.2.16. Consumer's Grievance Cell

Stakeholder's Comment:

Consumer's grievance cell not very active in office of SE(Electrical).

Petitioner's Response:

No such cell exists under SE office.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.17. Central Complaint Centre

Stakeholder's Comment:

With establishment of Central Complaint Center in Sector-9, U.T. Chandigarh on 24 hours basis, detailed procedure for lodging complaints should be published in newspapers. Few landline telephones existing at Sub-stations have been disconnected and the consumers waste their time in contacting the concerned sub-division fault control which do not exist.

Petitioner's Response:

Public notice regarding lodging of complaint at CFC and other complaint centers is published every year with complete details of all the contact/ mobile numbers.

Commission's View:

The Commission has noted the concerns of the Stakeholder. The Stakeholder may note the reply of the Petitioner.

2.2.18. Latest position on decisions given by JERC in tariff order for FY 2022-23

Stakeholder's Comment:

Latest position on decisions given by JERC in tariff order for FY 2022-23.

Petitioner's Response & Commission's View:

The Petitioner's response and Commission's view on directives given by the Commission in Tariff Order for FY 2022-23 are discusses in the Chapter 10. The Commission has not mentioned the same here for brevity.

2.2.19. Compliance of Directives issued in tariff order dated 11.07.2022

Stakeholder's Comment:

Directive 9.1.1- Metering/replacement of non functional defective 11 KV meter.

The petitioner has submitted that Smart Grid Project has been dropped by the Ministry of Power, Govt of India. Regarding replacement of non functional meters nothing mentioned in the petition. Non functional meter is a very important issue **without which proper audit of energy cannot be possible.** This issue is lying pending from the last many years & the licensee is not serious about the replacement of non functional defective 11 KV meters.

On the above cited objection raised in the previous year petition, Hon'ble JERC in his order dated 11. 7.22 vide Para 2.2. 7 had clearly directed the petitioner to ensure that faulty meters be replaced in a timely manner in accordance with the Supply Code Regulations,2018. No intimation on this issue provided in the instant petitions.

Hence Licensee should be asked to act upon the previously given directions for time bound completion.

Directive 9.1.2 Energy Audit.

When non functional 11 KV meters are not being replaced it is not understood how proper/correct audit is being carried out by the petitioner Commission in his previous orders dated 11. 7 .22 under Para 2.2.8 had already directed the petitioner to expedite the process & complete Annual Energy Audit of the UT on priority. Hence Licensee should be advised for early completion.

Directive 9.1.4 (Segregation of T&P loss Reduction Trajectory)

Commission in his previous order dated 11.7.22 had directed to submit a detailed report of voltage wise losses along with the next tariff petition. The petitioner has not complied with the directions given by the commission rather giving excuses like provision of smart meters. The replacement of non functional meters should be the priority of the licensee. Hence it is necessary to curtail the losses so the directive may kindly be issued to complete this issue as it is most important to reduce the losses.

Directive No.9.1.9 Monthly billing for Domestic and NRS category of Connection:

Supply code regulation 7.1 is reproduced as under:

7. 1 Tariff and charges for supply of electricity shall be determined by the Commission from time to time. The Licensee shall intimate the consumer, in the beginning of the financial year, the following:

(1) Billing cycle, which shall be monthly for all categories of consumers except agricultural consumers, i.e., pump set connections, in which case, depending upon the local conditions, the Licensee shall specify the billing cycle separately with the approval of the Commission.

In case of consumers with LT single phase supply, if the Licensee experiences difficulty in monthly billing of such a large number of consumers, it may carry out the billing on bi-monthly basis (i.e., once in two months) with the approval of the Commission. ***The Commission may consider the difficulties of the Licensee and may approve the billing on bi-monthly basis for a limited time period beyond which the billing cycle shall be on monthly basis.***

Further as per Directive the Commission too is not serious to impose for monthly billing & stressing the licensee for smart grid project. Thus, UTED has not started giving monthly bill stating the reason that DS/NRS category of consumers at this stage is not feasible. The reply of petitioner is not satisfactory. Hence strict action for compliance of the directive is required to be issued by the commission in the interest of public/consumers of these two categories.

The following are the losses to consumer if bills are not issued monthly

i) Due to bimonthly billing consumers are being forced to pay surcharges @ 4% for the total bill if any consumer is missed to pay the bill by due date even for one day only. UTED also come to know after 4 month about the nonpayment. For the speedy recovery of departmental dues monthly billing must be started in the interest of revenue gain of the department & to reduce the defaulting amount. If still commission wants to retain the bimonthly billing surcharge due to late payment should be reduced to 2% per cycle instead of per month, the interest rate on the **principal amount should not be exceeded to the bank rate as presently 24%**

surcharges are being charged yearly. UTED as per Para 3.13.2 of this petition has submitted that the delay payment surcharge should not be treated as the part of non-tariff income. Hence the licensee is delaying the monthly billing to gain amount of surcharge as a tariff income.

ii) As per SOP Regulation under mentioned services are badly affected in case of bimonthly bill cycle is allowed to be followed

Name of Service	Period as per SOP Regulation,2015	Benefit to consumer in case of monthly billing cycle
First Bill	Within 2 billing cycle i.e. 120 days	Within 2 billing cycle i.e. 60 days
Change of consumer name	Within 2 billing cycle of acceptance of application i.e, 120 days	In 60 days
Load Reduction	30 days after verification of load applied	The reduced load shall be shown in next bill immediately

Hence the quality of service to the consumers shall also be improved Our NGO raised this issue in the previous petition on ARR & it was stated by the petitioner as per Para 2.2.1 O of the tariff order dated 11. 7.22 that

"At present, more than 85% consumers (Domestic & Commercial) are billed bi-monthly. The conversion of these reading from Bio-monthly basis will lead to various issues as *there is acute shortage of staff, i.e., MR/BO/Revenue staff etc. Further, the software is also required to be amended for monthly billing and requirement of necessary stationary* as *well. After installation of the smart meters under NSGM will help for monthly-billing of all categories of consumers, including DSINRS."*

Since conversion of bio-monthly to monthly billing for DS/NRS some other measure like monthly reading & **distribution of bills can be got done through some private agency as** the shortage of staff in the UTED has told. **Distribution of bills is already done in UTED through a private agency.** If the monthly billing may be too, be allowed to a private agency the aim of monthly billing, can be successful. Regarding development of software it is the responsibility of agency who is presently preparing bills for the UTED. In the neighboring states of Punjab & Haryana even spot billing is in progress.

Hence the commission is requested to look into this suggestion favorably, on priority due to the above-mentioned improvement of service in the best interest of consumer as well as for improvement of financial health of UTED.

Petitioner's Response & Commission's View:

The Petitioner's response and Commission's view on directives given by the Commission in Tariff Order for FY 2022-23 are discusses in the Chapter 10. The Commission has not mentioned the same here for brevity.

2.2.20. Non Framing of Instruction manual/Term & Conditions of supply:

Stakeholder's Comment:

As per Supply code regulation 2018 UT ED is required to frame conditions of supply and all circulars, orders and any other document or communication relating to supply of electricity to consumers to make them consistent with these Regulation as provided under sec.10.11 of Supply code to avoid unnecessary harassment to the innocent consumers. Up to date Commercial instructions issued by the department is not available on its website despite directions on this issue was given on in the Tariff order dated 30.3.21 under Para 2.2.2 and also in tariff order dated 11.07.22 under Para 2.2.11 it was directed by the Hon'ble Commission to make all the terms & conditions of Supply code and commercial instructions available on website at the earliest but of no avail.

Petitioner's Response:

The Electricity Wing of Engineering Department is following the various provisions of Supply Code and Tariff Order issued time to time by JERC. Moreover, Electricity supply code regulation alongwith its amendments and commercial instructions are issued/ uploaded on the website of Department in consonance with the provisions of supply code regulation issued by JERC.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.21. Delay in completion of 66 kV works

Stakeholder's Comment:

66 KV Sub Station in village Raipur Kalan was constructed & completed by UT ED about more than 10 years ago with the funds approved by JERC but substation is not in use **as the 66 kV line to feed substation are yet to be laid.** The warranty clause for machinery given by the manufacturer worth about 15-20 crores might have already been expired due to the lapses on the part of Engineers of the department of the SMART CITY for poor planning.

In the previous tariff order dated 11.7.22 as per Para 2.2.13 it was directed by the commission to expedite the matter so that work may completed as early as possible. Hence the progress in this matter may be intimated to the public.

Petitioner's Response:

The 39% work has been completed and the matter is sub-judice in Hon'ble Punjab and Haryana Court and due to stay orders of Hon'ble Court the work is held up and next date of hearing is 29.03.2023. Further, a miscellaneous application was filed for an early disposal, but the same has been declined by Hon'ble Court.

Commission's View:

The Commission has noted the concerns of the Stakeholder. The Stakeholder may note the reply of the Petitioner.

2.2.22. Sale of scrap

Stakeholder's Comment:

As pointed out in the previous petition as per Para 2.2.15 of tariff order dated 11. 7.22 that UTED should Quarterly dispose of all its scrap, so as to increase source of Other Income. There are many old vehicles/CG Sets as more than 50 year are lying in their offices/store as a scrap. The parts of these vehicles are also being stolen by the miscreants on many such vehicle & only Chaises are left, but no care taken by the senior competent officers to dispose such material/vehicles lying un-attended/abundant. The department does not know the number of such vehicles lying shuttered, in the open.

No action for disposal of old vehicles lying unattended on the premises of the department. taken till date although petitioner was directed by the commission to ensure proper disposal. So action taken report by the UTED may be intimated to the public.

Petitioner's Response:

The sale/ auction of the scrap material stocked in store was done earlier. Now, the case for disposal of scrap material received subsequently is under process and action to dispose of the same through e-portal developed by NIC.

Commission's View:

The Commission has noted the concerns of the Stakeholder. The Stakeholder may note the reply of the Petitioner and **the Petitioner should ensure proper disposal of scraps**.

2.2.23. Abandoned Diesel Power House of UTED located in Timber Market Sector 26, Chandigarh

Stakeholder's Comment:

Diesel Power house was **constructed probably in the year 1952-53 by the than Govt.** and was taken over by UT administration from PSEB at the time of bifurcation of Punjab Electricity Board on 2.5.1967.lt remained in service & provided supply in emergency to PGI, General Hospital sector 16 & Pb. Haryana High Courts as long as the original staff of PSEB remained in service with the UTED. It stopped working about 30-35 years back as all such trained workers taken over by UT from PSEB retired. **So now this power house is lying abandoned. The imported machinery can be sold & good amount/revenue can be earned on sale of this abandoned power house as well as spares parts lying in the stores of this power house.**

In previous orders dated 11.7.22 as per Para 2.2.16 it was intimated by the petitioner that the case for disposal of old vehicle has been initiated at e-auction portal developed by NIC but nothing about disposal of Diesel power house lying abounded from the last more than thirty years was intimated by the Electricity department of CITY BEAUTIFUL Chandigarh.

Hence the petitioner may be pulled for its proper early disposal in order to get good return for the benefit of public as well as UTED.

Petitioner's Response:

The condemnation of Diesel power house has already been approved by Chief Engineer, UT, Chd. and the process for auction of the same was started via MSTC, but in meanwhile it has been decided to initiate the disposal of Scrap/ obsolete items through e-auction portal developed by NIC. Accordingly, Disposal of Diesel power house Diesel is already under process through e auction portal.

Commission's View:

The Commission has noted the concerns of the Stakeholder. The Stakeholder may note the reply of the Petitioner and **the Petitioner should ensure proper disposal of scraps**.

2.2.24. Availability of material at departmental store

Stakeholder's Comment:

UTED should make sure that sufficient material like meters, cables poles & other fitting be available with its store to perform necessary R&M of its network & timely release of new connection and other co-related services.

Petitioner's Response:

The department has already procured about (200Km) of different sizes of HT/LT Cables & (150Km) ACSR conductor of size 80mm^2 & 100mm^2 during last 6 months. It is continuous process and material is procured as per requirement.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.25. Presentation of ARR & Compilation of Information

Stakeholder's Comment:

That the utility while framing the present ARR's has not considered the directives issued by the Commission in the previous years and has rather totally overlooked the same while framing the present ARR. The utility has not taken into consideration the various heads while compilation of information and figures approved by the Commission in respect of
a. expenditure
b. revenue
c. tariff.

Petitioner's Response:

The basic ingredients for preparation of Tariff petition are Expenditure, revenue and Tariff. Therefore, tariff petition is prepared and filed before the Commission after taking all parameters of Expenditure, revenue and Tariff into consideration.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Commission has directed the Petitioner to file the Petition as per the relevant JERC MYT Regulations.

2.2.26. T & D Losses

Stakeholder's Comment:

The Commission has approved the T&D Losses in respect of the FY 2020-21 to 9.30% whereas the Electricity Department has incurred actual T&D Losses to extent of 13.80%. So, the consumer like the present respondent cannot be made liable to pay for the inefficiencies of the petitioner Department.

Petitioner's Response:

The Commission vide Tariff Order for FY 2020-21 had approved T&D losses of 9.30 % for FY 2020-21. However, the T&D loss reduction Target of 9.30% for FY 2020-21 is not rational as T&D loss for FY 2017-18 of 9.51% arrived at EWEDC was considered as benchmark by the Commission for fixing T&D loss target for future. Although, the T&D loss of 9.51% FY 2017-18 was arrived at due to extreme increase in energy sales through UI/exchange and excess energy sales towards banked units in FY 2017-18 against energy received in FY 2015-16 and 2016-17. The EWEDC has prayed to the Commission to review T&D loss targets in view of T&D loss trajectory over the past few years to get realistic and achievable targets. It is pertinent to mention that in last nine years T&D losses have reduced from 20.20% to 13.81% from FY 2011-12 to FY 2020-21 regularly, and EWEDC is making all out efforts to further reduce T&D losses even under the staff crunch.

Commission's View:

The Commission has noted the concerns of the Stakeholder. The Commission has been approving the ARR based on the trajectory set by the Commission along with the dis-incentive on account of under-achievement of Intra-State Transmission & Distribution (T&D) loss.

2.2.27. Request to categorise telecommunication towers under the Industry (General) Tariff Category,

Stakeholder's Comment:

It is humbly requested before the Commission to categorise telecommunication towers under the Industry {General) Tariff Category, by prescribing a new sub-category for IT and IT enabled services.

Petitioner's Response:

The EWEDC follows the tariff structure approved vide Tariff order every year by the Commission and as per latest tariff order for FY 2022-23 the electricity connection to Telecom towers are to be charged under commercial category and there is no provision of charging the electricity connection to Telecom towers under industrial category. The change of category to said type of connection comes under the purview of JERC.

Commission's View:

The Commission has taken a note of the concern of the objector. Telecom towers are commercial in nature and are being treated as such.

2.2.28. Manpower Planning

Stakeholder's Comment:

The sufficient resources and Manpower are available with the department otherwise it is purpose less. In this connection, the kind attention of the Commission is invited on the fact that although sufficient expenses have been projected for the manpower in past, but only 50% of the same is exhausted out of salary expenses. The reason behind it is consistent failure of the employer to recruit/appoint sufficient no. of manpower to run the show of Electricity Department smoothly. It Is also worth mentioning the Directives of the JERC from time to time could not become fruitful as the Administration seems to have been sitting Deaf and Dumb.

Petitioner's Response:

The privatization of Electricity Wing of Engineering Department, UT, Chandigarh (EWEDC) is undertaken as per decision of MoP, GoI. Further, the matter is sub-judice with next date of hearing on 28.03.2023 in the Hon'ble Punjab & Haryana High Court.

Commission's View:

The concern of the stakeholder is noted. The Stakeholder may note the reply of the Petitioner. The Petitioner is directed to ensure that sufficient manpower is available for proper functioning of the department.

2.2.29. Directives on Manpower Deployment

Stakeholder's Comment:

The Directives of JERC in various matters of Electricity Department are merely on papers where.is its ımplementatıon seems nowhere. The Electricity Department of Chandigarh Administration has drastically failed on the platform of Manpower deployment. The Commission has given a number of directives to the Chandigarh Administration to fill up the posts by the way of recruitment, but the Department has done nothing in this regard. This pressure is gradually developed, and a day will come when the system will get flip flop and for this responsibility will lie upon the shoulders of the Administration. The Commission must come with iron clad hands so as to get their orders implemented in toto otherwise the purpose of carrying the public hearings will only be public drama and the basic purpose will be wholly forfeited.

Th Commission had conducted the survey of manpower of the electricity department through a consultant and report of the same is self-speaking, but it is shocking that the implementation of the same could not be done despite lapse of 8 years. It is not understood as to how the qualitative services in the presence of So and now Right to Service will be delivered to the public of the beautiful city Chandigarh. The reply of the Department is very sluggish and beyond truth. It is worth mentioning that the Ministry of Finance, Department of Expenditure had also conducted the survey of the staff by way of carrying out the on-spot study of duty of the staff through their integrated wing known as STAFF INSPECTION UNIT during the year 2001 whereby sufficient no. of vacancies were generated to cater to the rising load of the electricity department. There is till date no action on any of the reports which reflects the major failure of the Chandigarh Administration m filling up of vacant posts, None of the reports of either the Govt itself or JERC has been implemented, nor has any initiative been taken to fill up the posts as per sanctioned strength /yardsticks It is quite unfortunate that the recruitment of the staff has now been linked with the corporatisation earlier and now with the privatization of the department and merely just by floating the tender have been trying to divert the issue. The process of privatisation is already under the strong protest of the UT Powermen Union, thus prayed to fill up the posts of direct recruitment and Promotional strictly as per sanctioned posts Le 1780 In the larger interest of employees. Hence prayed for immediate intervention so that stagnated employees shall get promotions.

Petitioner's Response:

The directions of JERC on manpower study have been partially complied by recently recruiting 338Nos. ALM, 56 Nos. L/man and 50 Nos, LDC on outsource basis. Further, in view of decision taken at different stages due to Privatization /corporatization of EWEDC, number of posts under various categories have fallen under the category of deemed abolished. Accordingly, case has been forwarded to higher authorities for revival of 612 Nos. posts of group-C, so that these can be filled on regular basis. Apart from this the filling up of alive posts of various categories is already under process.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.30. Safety Training for EWEDC employees

Stakeholder's Comment:

In the recent past the JERC had also given the directives to the Chandigarh Administration whereby for the safety as well as for the welfare of staff means and measures have to be devised. The reply filed by the Chandigarh Administration is very funny. The figures reflected are only figures which the existing employees are contributing towards their group insurances whereas it was being pressurized that the job involving more and more risk be provided with sufficient quantum of the health as well as other Insurance so that at belated stage of time, the families of the sufferer may not have to run from pillar to the post.

It is also suggested to find out the weighs and measures for the safety of the staff by undergoing rigorous type of trainings at the hand of institutes in the state of Punjab and Haryana where the employees may get sufficient exposure before placing them on the work profiles.

In view of the observations made above, LIT Powermen Union Requests to kindly allow the petition and hope for the redressal of the observations made here above and pass the appropriate order to the Chandigarh Administration so that the qualitative services may be rendered and Standard of Performance/Right to service may be achieved.

Petitioner's Response:

The training of 20 Nos. Lineman under EWEDC has already been completed at PSPCL Patiala in year 2020. Further, due to privatization process of EWEDC, the training of employees could not be conducted during FY 2020-21. Now, matter regarding finalization of fresh training schedule for Lineman of Electricity Wing of Engineering Department, UT, Chandigarh (EWEDC) w.r.t. safety has already been taken up with PSPCL Training Institute. As soon as the training schedule is received, the proposal will be submitted to the competent authority for final approval.

Commission's View:

The Commission appreciate the stakeholders suggestions and directs the Petitioner to finalise the training plan and secure the necessary approvals from the Chandigarh Administration. Further, he Petitioner is directed to keep the Commission apprised of the progress made in this regard.

2.2.31. Management Information System

Stakeholder's Comment:

UT ED has been sending bills mentioning requisite information as desired under sec Sec.7.7 of Supply Code-2018.

In the bills the date of payment of amount with prompt payment rebate is missing though required separately to be provided in **each** bill **as per supply code-2018 under Sec 7.7**

(19) i.e. *Due date of payment (separately specified for payment by cash, cheque, credit card/Debit card, etc if necessary) and date of payment with prompt rebate: so It was desired by JERC to be mentioned on each bill. It is therefore requested to ask the licensee to add date of payment with prompt rebate.* Further computerization of office records like posting of applications for new connection/extension/reduction/shifting of connection & further completion of such job is yet to be done by UTED. If the such record is also computerized efficiency of the department can be checked for the service provided to the consumers licensee & violations of supply code instructions shall be avoided.

On the above cited objection raised in the previous year petition, Hon'ble JERC in his order dated 11. 7.23 vide Para 2.2.6 had clearly directed the petitioner to expedite the process of computerization of office records and had further directed **to add the due date of payment** (separately for cash, cheque, credit card/Debit card, bank transfer etc., if necessary and date of payment with prompt rebate to be mentioned in each bill. It is regretted to point out that neither any progress on this issue provided in the instant petition nor implemented as per commission's direction. It would be highly appreciated by us to provide us the necessary clarification on the subject at the earliest. An early action may kindly be taken in the interest of consumers of UTED.

Petitioner's Response:

The specific mentioning of date for prompt payment rebate on bills is not feasible due to different billing cycle. However prompt payment rebate is given to the consumers who deposit the bills before due date (7 Days in cash and 10 days via online).

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Petitioner is further directed to add the Due date of payment (separately specified for payment by cash, cheque, credit card / Debit card, bank transfers, etc., if necessary) and date of payment with prompt rebate to be mentioned on each bill.

2.2.32. Delay in filing Petition

Stakeholder's Comment:

It has been noticed by the commission that historically the Petitioner has never filed its Petition on time. In the Tariff Order dated 22.3.2017, the Commission has already given direction to the Petitioner to submit the subsequent Tariff Petitions on or before 30th November , Failing the commission will be constrained to take appropriate action against the Petitioner as per judgement issued.

Petitioner's Response:

The tariff petition prepared on the basis of commercial account audited by AG, UT, Chandigarh. However, the audit certificate was issued by AG, UT, Chandigarh in Novemeber-2022. Further, the tariff petition prepared by consultant was submitted to competent authority of Chandigarh Administration for its approval and this whole process took some time causing delay in filing of petition with the Commission.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Petitioner is directed to adhere to the timeline towards submission of tariff petition in future.

3. Chapter 3: True-up for the FY 2020-21

3.1. Applicable Provisions and Background

The MYT Order for 2nd Control Period was issued by the Commission on 20th May 2019 approving the ARR (hereinafter referred to as 'MYT Order'). Subsequently, the Tariff Order approving True-up of the FY 2018-19, APR of the FY 2019-20 and ARR and determination of retail tariff for the FY 2020-21 was issued on 19th May 2020. Subsequently, the Tariff Order approving True-up of the FY 2019-20, APR of the FY 2020-21 and ARR and determination of retail tariff for the FY 2021-22 was issued on 30th March 2021. The Petitioner had submitted for True-up of FY 2020-21 vide Petition No. 80/2022 along with unaudited accounts, whereas the Commission decided that the true-up would be taken up only after submission of the Auditors' Certificate.

Now, the Petitioner has submitted the True-up of FY 2020-21 along with the True-up of FY 2021-22, Annual Performance Review (APR) of FY 2022-23, and Aggregate Revenue Requirement (ARR) for FY 2023-24 and Determination of Retail Tariff for FY 2023-24.

The True up for the FY 2020-21 has to be carried out in accordance with Regulation 11 of the JERC MYT Regulations, 2018, stated as following:

*"11. **Annual Performance Review, Truing-up and tariff determination during the Control Period***

11.1 The Generating Company, Transmission Licensee and Distribution Licensee shall be subject to annual performance review and truing up of expenses and revenue during the Control Period in accordance with these Regulations.

11.2 The Generating Company, Transmission Licensee and Distribution Licensee shall file an application for the annual performance review of the current year, truing up of the previous Year or the Year for which the audited accounts are available and determination of tariff for the ensuing Year on or before 30th November of each Year, in formats specified by the Commission from time to time:

Provided that the Generating Company, Transmission Licensee or Distribution Licensee, as the case may be, shall submit to the Commission information in such form as may be specified by the Commission, together with the audited accounts, extracts of books of account and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges.

11.3 The scope of the annual performance review, truing up and tariff determination shall be a comparison of the performance of the Generating Company, Transmission Licensee or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges and shall comprise of the following:

*a) **True-up:** a comparison of the audited performance of the Applicant for the Financial Year for which the true up is being carried out with the approved forecast for such previous Financial Year, subject to the prudence check;*

*b) **Annual Performance Review**: a comparison of the revised performance targets of the Applicant for the current Financial Year with the approved forecast in the Tariff Order corresponding to the Control Period for the current Financial Year subject to prudence check;*

*c) **Tariff determination** for the ensuing Year of the Control Period based on the revised forecast of the Aggregate Revenue Requirement for the Year;*

d) Review of compliance with directives issued by the Commission from time to time;

e) Other relevant details, if any.

11.4 Upon completion of the exercise, the Commission shall attribute any variations or expected variations in performance for variables specified under Regulation 12below, to factors within the control of the Applicant (controllable factors) or to factors beyond the control of the Applicant (uncontrollable factors):

Provided that any variations or expected variations in performance, for variables other than those specified under Regulation 12 below shall be attributed entirely to controllable factors.

11.5 Upon completion of the exercise, the Commission shall pass an order recording:

a) Components of approved cost pertaining to the uncontrollable factors, which were not recovered during the previous Year, to be passed through in tariff as per Regulation 13 of these Regulations:

Provided that, for a Generating Company, the above exercise shall be in accordance with prevalent CERC Tariff Regulations.

b) Approved aggregate gain or loss to the Transmission Licensee or Distribution Licensee on account of controllable factors, and the amount of such gains or such losses that may be shared in accordance with Regulation 14 of these Regulations:

Provided that, for a Generating Company, the above exercise shall be in accordance with prevalent CERC Tariff Regulations.

c) Carrying cost shall be allowed for a Generating Company, Transmission Licensee or Distribution Licensee on the amount of revenue gap for the period from the date on which such gap has become due, i.e., from the end of the Year for which true-up has been done, till the end of the Year in which it is addressed, on the basis of actual rate of loan taken by the Licensee to fund the deficit in revenue:

Provided that carrying cost on the amount of revenue gap shall be allowed subject to prudence check and submission of documentary evidence for having incurred the carrying cost in the years prior to the year in which the revenue gap is addressed:

Provided also that if no loan has been taken to fund revenue deficit, the Commission shall allow Carrying Cost on simple interest basis at one (1) Year State Bank of India (SBI) MCLR /any replacement thereof as notified by RBI for the time being in effect applicable for 1 Year period, as may be, applicable as on 1st April of the relevant Year plus 100 basis points;

Provided further that in case of revenue surplus, the Commission shall charge the Licensee a Carrying Cost from the date on which such surplus has become due, i.e., from the end of the Year for which true up has been done, till the end of the Year in which it is addressed on simple interest basis at one(1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for 1 Year period, as may be, applicable as on 1st April of the relevant Year plus 100 basis points.

d) Revision of estimates and tariff for the ensuing Financial Year."

3.2. Approach for True-up for FY 2020-21

The Petitioner has requested for True-up of FY 2020-21 on the basis of audited annual accounts for FY 2020-21. The Petitioner has submitted the audited accounts based on audit conducted by Comptroller and Auditor General (CAG) of India. The Commission in this chapter now carries out the True-up of FY 2020-21, the second year of the second control period (FY 2019-20 to FY 2021-22) in accordance with the principles laid down in the JERC MYT Regulations, 2018.

3.3. Energy Sales

Petitioner's Submission

The Petitioner has submitted the total quantum of energy sales for the FY 2020-21 as 1,342.08 MU as against the approved energy sales quantum of 1,449.98 MU during the APR of FY 2020-21 vide Tariff Order dated 30th March 2021.

Commission's Analysis

Regulation 12.1 of the JERC MYT Regulations, 2018 provides:

"12.1 For the purpose of these Regulations, the term "uncontrollable factors" for a Transmission or Distribution Licensee shall comprise of the following factors, which were beyond the control of the Licensee, and could not be mitigated by the Licensee:

- *a) Force Majeure events;*
- *b) Change in Law, judicial pronouncements and Orders of the Central Government, State Government or Commission;*
- *c) Variation in the number or mix of Consumers or quantities of electricity supplied to Consumers;*
- *d) Transmission loss;*
- *e) Variation in the cost of power purchase due to variation in the rate of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission;*
- *f) Variation in fuel cost;*
- *g) Change in power purchase mix;*
- *h) Inflation;*
- *i) Transmission Charges for a Distribution Licensee;*
- *j) Variation in market interest rates for long-term loans;*
- *k) Employee expenses limited to one time payment owing requirements of a pay commission and terminal liability of employees;*
- *l) Taxes and Statutory levies;*
- *m) Taxes on income;*
- *n) Income from the realisation of bad debts written off:*

Provided that where the Applicant believes, for any variable not specified above, that there is a material variation or expected variation in performance for any Financial Year on account of uncontrollable factors, such Applicant may apply to the Commission for inclusion of such variable at the Commission's discretion, under this Regulation for such Financial Year:

Provided further that the uncontrollable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations."

The Commission had approved the energy sales of 1,736.02 MU in the MYT Order, 1,579.64 MU during tariff determination of FY 2020-21 and 1,449.98 MU during the APR of FY 2020-21, against which the Petitioner has now submitted the actual energy sales of 1,342.08 MU. The quantum of energy sales was verified from the audited accounts submitted by the Petitioner and the same were found to be in order.

The following table provides the energy sales approved by the Commission in the Tariff Order for APR of FY 2020-21, the Petitioner's submission, and quantum of energy sales now trued-up by the Commission.

Table 8: Energy Sales (MU) Trued-up by the Commission for FY 2020-21

S. No	Category	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Domestic -LT	738.37	674.63	674.63
2	Domestic -HT		15.11	15.11
3	**Domestic -Total**	**738.37**	**689.74**	**689.74**
4	Commercial - LT	374.44	154.14	154.14
5	Commercial - HT		177.02	177.02
6	**Commercial - Total**	**374.44**	**331.17**	**331.17**
7	**Large Industrial supply**	120.14	109.11	109.11
8	**Medium Industrial supply**	98.95	101.65	101.65
9	**Small Industrial supply**	16.21	16.26	16.26
10	**Agriculture**	1.28	1.36	1.36
11	**Public lighting**	15.49	12.21	12.21
12	**Bulk supply**	81.22	77.18	77.18
13	**Temp. Supply**	3.87	3.41	3.41
14	**Total**	**1449.98**	**1342.08**	**1342.08**

The Commission approves 1,342.08 MU as energy sales in the True-Up of FY 2020-21.

3.4. *Inter-State Transmission Loss*

Petitioner's submission

The Petitioner has submitted the Inter-State Transmission Loss of 3.95%, as against the value of 4.03% approved in the APR of the FY 2020-21. The Petitioner vide deficiency reply has submitted that the interstate transmission losses for the audited years have been computed based on the ex-bus generation given in the energy bills and energy drawl provided at transmission periphery in REA accounts.

Commission's analysis

Based on the power purchased by the Petitioner and the power available to the Petitioner at the State periphery, the Commission finds the Inter-State Transmission Loss as submitted by the Petitioner to be in order.

The following table provides the Inter-State Transmission Loss as approved in the MYT Order, the Petitioner's submission and now trued-up by the Commission.

Table 9: Inter-State Transmission Loss Trued-up by the Commission for FY 2020-21 (%)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Inter-State Transmission Loss	4.03%	3.95%	3.95%

The Commission approves the Inter-State Transmission Loss at 3.95% in the True-Up of FY 2020-21.

3.5. *Intra-State Distribution Loss*

Petitioner's submission

Intra-State Distribution Loss for the FY 2020-21 has been arrived at 13.81% as compared to 9.30% approved by the Commission in the APR Order.

The Petitioner submitted that the UT of Chandigarh is one of the most well-planned cities in the nation. It stands in top five position in terms of per capita income. Also, it ranked higher than the national average in terms of per capita electricity consumption. Though, being a place of immense potential, the UT of Chandigarh is a land locked territory and has no further possibility of geographical expansion. This has resulted in saturation of energy sales and consumer mix within the UT of Chandigarh. The Petitioner has further submitted that due to the saturation in expansion of energy sales and consumer mix, the T&D loss reduction has attained a linear progression curve and become very much sensitive to the variation in energy sales mix. The Petitioner has submitted that unless there is a dedicated capital intervention planned for strengthening of electrical network, drastic reduction in T&D losses would not be possible.

The Petitioner has submitted that on the Abraham Committee recommendations given on fixation of loss reduction targets for Distribution Utilities at time of the roll out of the APDRP Scheme, the Committee has suggested that distribution utilities having losses more than 40% shall be given loss reduction targets of 4% per year; utilities having losses between 30%-40% shall be given reduction target of 3% per years; utilities having losses between 20%-30% shall be given reduction target of 2% per year and utilities having losses below 20% shall be given reduction target of 1% per year. Hence, the Petitioner has requested the Commission to consider the above submission and realign the targets for T&D losses in a pragmatic manner.

The Petitioner has also submitted that the business as usual were severely affected due to the COVID-19 Pandemic in FY 2020-21. The energy sales were largely contributed by LT Categories i.e. ~70% of the overall consumption, and HT Categories energy sales have reduced significantly due to COVID-19 Lockdowns. Because of change in energy sales mix the T&D losses have swelled drastically in FY 2020-21. The Petitioner further submits that in last nine years, T&D losses have reduced from 20.20% to 13.81% from FY 2011-12 to FY 2020-21. This evidently shows that average loss reduction ~0.60% is possible on annual basis. However, the T&D loss reduction Target of 9.30% for FY 2020-21 is unrealistic and would not be possible without substantial capital intervention.

The Petitioner has proposed the actual T&D losses of 13.81% for the FY 2020-21 and has requested the Commission to kindly consider the above submissions & approve the actual distribution losses.

Commission's analysis

The Petitioner in its submission has failed to submit the Energy Audit Report of the State for FY 2020-21. In the absence of the Energy Audit Report, the Commission, for verification of the Intra-State T&D loss levels has relied on the information of energy drawal at the UT periphery, and the energy sales as approved above.

The Commission has considered the net energy available for sales to retail consumers by the Petitioner consisting of energy available from firm sources, energy under the Deviation Settlement Account (DSA), energy purchased from Open market and energy procured from Solar sources within the UT. The Commission has further considered actual sales of 1,342.08 MU as approved in the previous section. Considering the difference in energy available at the periphery of the Petitioner and the sales approved, actual Intra-State Distribution Loss of the FY 2020-21 stands at 13.81%, as shown in the following table:

Table 10: Intra-State Distribution Loss calculation

S. No	Particulars	Trued-up by Commission
1	Energy Sales within the UT (MU)	1,342.08
2	Energy Available at State Periphery (MU)	1,557.18
3	T&D Losses (MU)	215.09
4	**T&D Loss (%)**	**13.81%**

Since, the Petitioner has under-achieved the Intra-State Distribution Loss target of 9.30% for the year, the Petitioner has been dis-incentivized in accordance with the JERC MYT Regulations, 2018. The calculation of the same has been discussed in detail in Section 3.20 of this Order.

The following table provides the Intra-State T&D loss approved in the APR of FY 2020-21, the Petitioner's submission and now trued-up by the Commission.

Table 11: Intra-State Distribution Loss Trued-up by the Commission for FY 2020-21 (%)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Intra-State Distribution Loss	9.30%	13.81%	13.81%

The Commission, while Truing-up for the FY 2020-21 has considered the actual intra-state T&D loss of 13.81% and hence considered a dis-incentive in Section 3.20 in accordance with the JERC MYT Regulations, 2018 for under-achievement of Intra-State Distribution Loss target approved by the Commission in the APR Order.

3.6. Power Purchase Quantum & Cost

Petitioner's submission:

The Petitioner meets its annual energy requirement is met from the allocations from Central Generating Stations (CGS) such as NTPC, NHPC, NPCIL, BBMB, SJVNL, THDC along with bilateral agreement and banking arrangements. The allocation from CGS is consisted of two parts, fixed and variable, the variable share keeps changing as the per allocation statement of unallocated power issued by the Govt. of India. Since, during the peak summer season the allocation of power from various sources is inadequate, therefore the EWEDC procures power under short–term power arrangement through power exchanges.

The following table shows the summary of actual Power Purchase from various sources for the FY 2020-21 including Transmission Charges, power sale and purchase power exchanges and grid under Deviation Settlement Mechanism:

Table 12: Power Purchase quantum and cost submitted by the Petitioner

Sr. No.	Source	Actual	
		Energy Units (MU)	Total Cost (Cr)
1	NTPC Stations	344.94	135.83
2	NHPC Stations	272.30	99.80
3	NPCIL	149.53	51.61
4	SJVNL	119.61	29.36
5	BBMB	686.62	159.72
6	THDC	175.12	69.14
7	MUNPL	25.20	15.33
8	CREST	5.95	4.59
9	Private Solar	1.43	1.11
10	APCL	15.87	14.75
11	UI (Over drawl)	70.07	20.95
12	UI (Under drawl)	-48.10	-
13	PX- Purchase	43.45	15.44
14	PX-Sale	-241.08	-

Sr. No.	Source	Actual	
		Energy Units (MU)	Total Cost (Cr)
15	Trans. & SLDC Charges (PGCIL, UPPTCL, PSPTCL, NRPC, POSOCO & ULDC)	-	68.77
Grand Total		**1,620.93**	**686.42**

EWEDC has submitted that the income from interstate sale of power (either to power exchange or to the grid under deviation settlement mechanism) and rebate on timely payment of energy bills have been accounted under the non-tariff income as per the provisions specified in the Regulation 64 of the JERC MYT Regulations, 2018. Only, the quantum of surplus energy has been accounted in Power Purchase Cost to determine the overall energy requirement for FY 2020-21.

EWEDC has further submitted that the actual net power purchase cost for FY 2020-21 is lower than the approved power purchase cost allowed in Tariff Order dated 30th March, 2021. EWEDC has prayed to the Commission to consider the gross power purchase cost as submitted in above table and kindly approve the same for FY 2020-21.

Commission's analysis

The JERC MYT Regulations, 2018 stipulate that Variation in the cost of power purchase due to variation in the rate of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission shall be treated as an uncontrollable factor. Regulation 58.1 of the JERC MYT Regulations, 2018 stipulates the following:

"58.1 The Distribution Licensee shall be allowed to recover the cost of power generated by the Generating Stations owned by it or purchased from approved sources for supply to Consumers based on the power procurement plan of the Distribution Licensee, approved by the Commission."

The Petitioner procures power mainly from NTPC Stations, Hydro Stations, NPCIL stations, and IPPs. The Petitioner has submitted the overall power purchase cost as INR 686.42 Cr against a procurement of 1620.93 MU, inclusive of transmission cost but exclusive of revenue due to sale of surplus power/UI Under-drawl.

The Commission observed that there were discrepancies in the Power Purchase quantum and cost as submitted by the Petitioner and as given in the audited accounts. In response to the query raised by the commission during Technical Validation, the Petitioner submitted a reconciliation of the Power purchase quantum and cost and the Commission has considered the same.

The revenue on account of surplus power sale/UI Under-drawl has been considered as a revenue item by the Petitioner and considered separately in the ARR. The Commission for the purpose of finalising the Power Purchase quantum and cost for FY 2020-21 has adjusted the revenue of INR 73.40 Cr on account of surplus power sale/UI Under-drawl (verified as per the audited accounts) in the Total Power Purchase cost to arrive at the Net Power Purchase cost.

Further, Regulation 34.4 of the JERC MYT Regulations, 2018 stipulates the following:

"34.4 The delayed payment charge paid or payable by the Distribution Licensee to the Generating Company or the Transmission Licensee shall not be allowed as an expense for such Distribution Licensee."

Accordingly, the delayed payment charge of INR 1.36 Cr is disallowed by the Commission.
Further, the Commission has also considered and deducted the rebate of INR 5.55 Cr on timely payment of energy bills while allowing the Power Purchase cost as the Plant wise data provided by the Petitioner was net of rebate.
Further, the financing cost related to Letter of Credit (LC) Charges of Rs. 3.13 Cr are allowed separately in Section 3.13 of this Order

The Petitioner submitted that the total power purchase cost is inclusive of the cost incurred towards compliance of Renewable Purchase Obligation (RPO) target for the FY 2020-21. The compliance status of RPO has been discussed in detail in the subsequent section.

The following table provides the summary of the power purchase quantum and the cost approved by the Commission during FY 2020-21.

Table 13: Power Purchase quantum and cost Trued-up by the Commission for FY 2020-21

S. No.	Source	Energy Units Ex-bus (MU)	Fixed Charges (Cr)	Energy Charges (Cr)	Other Charges (Cr)	Total Cost* (Cr)
1	NTPC	344.94	62.39	69.87	2.35	134.61
2	NHPC	272.30	43.28	41.75	14.26	99.29
3	NPCIL	149.53	0.00	49.86	0.93	50.79
4	SJVNL	119.61	14.20	15.60	-0.72	29.08
5	BBMB	686.62	0.00	144.54	13.63	158.17
6	APCPL	15.87	9.71	5.13	-0.23	14.60
7	THDC	175.12	35.77	35.01	-2.37	68.41
8	MUNPL	25.20	8.93	6.49	-0.28	15.15
9	PTC	43.45	0.00	15.44	0.00	15.44
10	UI Over-drawal	70.07	0.00	20.93	0.00	20.93
11	**Total Availability from firm sources outside UT - @Ex-bus**	**1902.73**	**174.27**	**404.63**	**27.57**	**606.47**
11	Crest	5.95	0.00	4.59	0.00	4.59
12	Pvt. solar (Gross + Net Metering)	1.43	0.00	1.11	-0.02	1.09
13	Others (PGCIL, Reactive Power etc)	0.00	0.00	0.00	68.02	68.02
14	**Total Availability**	**1910.11**	**174.27**	**410.33**	**95.57**	**680.17**
15	Less: Revenue from Sale of Surplus Power/ UI under-drawal	289.18	-	73.40	-	73.40
16	Less: Delayed payment charge	-	-	-	1.36	1.36
17	Less: Letter of Credit (LC) Charges	-	-	-	3.13	3.13
17	**GRAND TOTAL**	**1620.93**	**174.27**	**336.93**	**91.08**	**602.28**
	*These figures are inclusive of rebate.					

The Commission approves power purchase cost of INR 602.28 Cr (adjusted for sale of surplus power/UI Under-drawal) in the True-up of FY 2020-21.

3.7. Renewable Purchase Obligation (RPO)

Petitioner's submission

The Petitioner submitted that in True Up of FY 2019-20 in Tariff Order dated 30th March 2021, the Commission has allowed to carry forward the backlog of RPO Target in FY 2020-21. The RPO backlog in FY 2019-20 was attributable to the shortfall of non-solar RPO to the tune of 1.70 MU. The EWEDC has tied up with wind generation capacity of 40 MW through SECI to meet the non-solar RPO targets and its backlogs in a combined manner. The total annual generation from tied up capacity would be ~151 MU which will meet the overall non-solar RPO target as well as its backlog. The power flow from the tied-up capacity will start in FY 2021-22. Thus, EWEDC has prayed to the Commission that in consideration of the above submission, the shortfall in non-solar RPO targets for FY 2020-21 may kindly be carried forward to FY 2021-22

The details of compliance to RPO targets for FY 2020-21 are as follows:

Table 14: RPO compliance submitted by the Petitioner

Particulars	RPO %	Target		Actual
		Conventional Power consumed (MU)	Units (MU)	Units (MU)
Solar	6.10%	266.44	16.25	50.71
Solar Rooftop (Gross Generation)				16.22
CREST				34.49
Non-Solar (REC)	8.00%	266.44	21.32	0.23
Total	**14.10%**		**37.57**	**50.94**

Commission's analysis

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

"Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year."

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and revised the RPO targets. In accordance with the Regulations, the Petitioner had to purchase 14.10% of its total consumption (excluding hydro) from renewable sources for the FY 2020-21.

The effective energy sales used for calculation of the RPO have been arrived at as follows:

Table 15: Effective energy sales (except hydro) for calculation of RPO

S.No.	Particular	Formula	FY 2020-21
1	Energy Sales within UT (MU)	a	1342.08
2	Hydro Power Purchase (MU)	b	1,300.40
3	Inter-State Loss (%)	c	3.95%
4	Inter-State Loss (MU)	d= c*b	51.38
5	Intra-State Loss (%)	e	13.81%
6	Intra-State Loss (MU)	f=e*(b-d)	172.53
7	Hydro Power Sale (MU)	g=b-d-f	1076.49
8	Conventional Power Sale	h= a-g	**265.59**

The Petitioner has complied with the RPO target till FY 2018-19. In True Up of FY 2019-20 in Tariff Order dated 30th March 2021, the Commission has allowed to carry forward the shortfall of non-solar RPO to the tune of 1.70 MU of RPO Target in FY 2020-21.

The Petitioner vide 1st Deficiency reply has submitted that no REC has been purchased in the past two audited years and as well as in the ongoing financial year. Further, the Petitioner submitted the details of month-wise Solar Generation from CREST and private solar. The Commission has considered the same for computing the RPO compliance.

The standalone RPO target for FY 2020-21 has been provided in the following table:

Table 16: Summary of Renewable Purchase Obligation (RPO) (MU)

Description	FY 2020-21
Conventional Power Consumed (F)	**265.59**
RPO obligation (%)	**14.10%**
Solar (G)	6.10%
Non-Solar (H)	8.00%
RPO obligation for the year (MU)	**37.45**
Solar (F * G)	16.20
Non-Solar (F * H)	21.25

Description	FY 2020-21
Backlog upto previous FY	**1.70**
Solar	0.00
Non-Solar	1.70
Total RPO to be fulfilled for the year (MU)	**39.15**
Solar	16.20
Non-Solar	22.95
RPO Compliance (actual/proposed purchase) (MU)	**50.93**
Solar	50.71
Non-Solar	0.22
Standalone RPO Compliance Backlog (MU)	**21.03**
Solar	-
Non-Solar	21.03
Cumulative RPO Compliance Backlog (MU)	**22.73**
Solar	-
Non-Solar	22.73

The RPO compliance status in the FY 2020-21 has been done based on the renewable energy purchased by the Petitioner. The Petitioner has not been able to meet the standalone RPO target for the FY 2020-21 and the backlog of 22.73 MU shall be carried forward to FY 2021-22.

The cost towards compliance of RPO incurred in FY 2020-21 has been considered in the Power Purchase cost approved for FY 2020-21.

3.8. Energy Balance

Petitioner's submission

The Petitioner has submitted the energy requirement as shown in the following table.

Table 17: Energy requirement submitted by the Petitioner (in MU)

Particulars	Petitioner's submission
Units Procured from firm sources	1,789.20
Less: Outside Sale - Trading	175.66
Energy Available	1613.55
Inter-State Transmission Loss	3.95%
Transmission Loss (MU)	63.75
Net Energy Available at UT Periphery	**1,549.80**
Power Available within UT	
Power procured from Gross & NET Metering Mode (In MUs)	7.38
Total Energy Available	**1,557.18**
Actual Energy Sales (Mus)	**1,342.08**
T&D Loss (%)	13.81%
T&D Loss (in MUs)	215.09
Total Energy Required at UT Periphery (MUs)	**1,557.18**

Commission's analysis:

The information submitted by the Petitioner on power purchase quantum, UI over/ under drawl, IEX/ Bilateral purchase etc. has been examined and accordingly the energy balance for FY 2020-21 has been derived. In accordance with the publicly available information from the Regional Energy Accounts (REA) maintained by

NRPC and ERPC and documentary evidence submitted by the Petitioner against the Inter-State Transmission Loss, the Commission has determined the energy balance at the Periphery of the UT of Chandigarh.
The following table provides the energy balance approved in the Tariff Order for APR of FY 2020-21 issued on 30th March 2021, submitted by the Petitioner and now trued-up by the Commission.

Table 18: Energy balance Trued-up by the Commission for FY 2020-21 (in MU)

Particulars	Formulae	Approved in Tariff Order for APR of FY 2020-2	Petitioner's Submission	Trued-up by Commission
Energy Requirement				
Energy sales within the State/UT	a	1,449.98	1,342.08	1,342.08
Distribution losses				
%	b	9.30%	13.81%	13.81%
MU		148.67	215.09	215.09
Total Energy requirement	**c=a/(1-b)**	**1,598.65**	**1,557.18**	**1,557.18**
Energy Availability				
Availability from firm sources outside UT	d	1,812.60	1,789.20	1,789.20
Availability from UI Over-drawal/ Under-drawal	e	50.54	21.97	21.97*
Less: Sale in Open Market	f	203.50	241.08	241.08
Add: Net Purchase in Open Market	g	32.41	43.45	43.45
Total Energy Availability for UT from Firm Sources	**h=d+e-f+g**	**1,692.05***	**1,613.55**	**1,613.55**
Inter-State Transmission Loss				
%	i	-	3.95%	3.95%
MU		-	63.75	63.75
Total Energy Availability at UT Periphery	**j=h*(1-i)**	**1,692.05**	**1,549.80**	**1,549.80**
Availability from firm sources within UT	k	-	7.38	7.38
Total Energy Availability	**l= j + k**	**1,692.05**	**1,557.18**	**1,557.18**

**includes UI over drawal of 70.07 MU and under drawal of 48.10 MU*

3.9. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). The JERC MYT Regulations, 2018 considers the variation of O&M Expenses except to the extent of inflation to be controllable. Regulation 12.2 of the MYT Regulation, 2018 states the following:

"For the purpose of these Regulations, the term "controllable factors" for a Transmission or Distribution Licensee shall comprise of the factors which were within the control of the Licensee, shall inter-alia include:

a) Variations in capitalisation on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

b) Variation in Interest and Finance Charges, Return on Equity, and Depreciation on account of variation in capitalisation, as specified in clause (a) above;

c) Variations in technical and commercial losses of Distribution Licensee;

d) Availability of transmission system;

e) Variations in performance parameters;

f) Failure to meet the standards specified in the Joint Electricity Regulatory Commission for the State of Goa & UTs (Standard of Performance for Distribution Licensees) Regulation, 2015, as amended from time to time;

g) Variations in labour productivity;

h) Variation in O&M Expenses, except to the extent of inflation;

i) Bad debts written off, in accordance with the provisions of Regulation 62:

Provided further that the controllable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations."

Therefore, any variation in O&M Expenses is attributable to the Petitioner and is not passed on in the ARR, other than any cost which is beyond the control of the Petitioner. Further Regulations 51.6 provides as follows:

"51. Operation and Maintenance (O&M) expenses for Distribution Wires Business

….

51.6 For the purpose of estimation, the same value of factors – $CPI_{inflation}$ and $WPI_{inflation}$ shall be used for all Years of the Control Period. ***However, the Commission shall consider the actual values of the factors – $CPI_{inflation}$ and $WPI_{inflation}$ during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation." (Emphasis supplied)***

3.9.1. Employee Expenses

Petitioner's submission

Actual Employee expenses of INR 72.70 Cr have been incurred. The employee expenses comprise of Salaries, Dearness allowance, Bonus, Terminal benefits in the form of Pension and Gratuity, Leave encashment and staff welfare expenses. The Petitioner has claimed the normative Employee expenses of INR 78.65 Cr against approved expenses of INR 79.26 Cr in the APR.

Commission's analysis

As per the audited accounts submitted by the Petitioner, the employee expenses during the FY 2020-21 are reflected as INR 72.70 Cr.

In accordance with the JERC MYT Regulations, 2018, the Commission had determined the Employee expenses for each year of the MYT Control Period. The Regulation 6 of the JERC MYT Regulations, 2018 stipulates the following:

"6. Values for Base Year

6.1 The values for the Base Year of the Control Period shall be determined on the basis of the audited accounts or provisional accounts of last three (3) Years, and other factors considered relevant by the Commission:

Provided that, in absence of availability of audited accounts or provisional accounts of last three (3) Years, the Commission may benchmark the parameters with other similar utilities to establish the values for Base Year:

Provided further that the Commission may change the values for Base Year and consequently the trajectory of parameters for Control Period, considering the actual figures from audited accounts

……"

As per Regulation 6.1 and 51.6 provided above, the Commission had approved the normative employee expense of INR 75.63 Cr during True-up of FY 2019-20 and the same is considered as base for determining the employee expenses for FY 2020-21. The base year employee expenses have been escalated by Growth Rate determined based on the manpower plan as per actuals submitted by the Petitioner and actual CPI Inflation of FY 2020-21 to arrive upon the employee expenses for FY 2020-21.

The CPI Inflation has been computed as follows:

Table 19: Computation of CPI Inflation (%)

FY	Average of (Apr-Mar)	Increase in CPI Index
2019-20	322.50	5.02%
2020-21	338.69	

The growth rate has been computed as follows:

Table 20: Computation of Manpower Growth rate (%)

Sr. No.	Particulars	FY 2020-21
1	Opening Employee	977
2	Recruitment during the year	184
3	Retirement during the year	90
4	Closing Employee	1,071
5	**Growth rate**	**9.62%**

Accordingly, the employee expenses approved by the Commission for FY 2020-21 have been provided in the following table:

Table 21: Employee Expenses (In INR Cr)

S. No	Particulars	FY 2019-20 (As approved in True-up)	FY 2020-21
1	Employee Expenses base year		75.63
2	Growth in number of employees (Gn)		9.62%
3	CPI Inflation		5.02%
4	**Employee Expenses**	**75.63**	**87.07**

The Commission approves the normative Employee Expenses of INR 87.07 Cr in the True-up of FY 2020-21.

Table 22: Employee Expenses Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Actual Employee Expenses	Revised Normative Employee Expenses Trued-up by Commission
1	Total Employee Expenses	79.26	78.65	72.70	87.07

The Commission approves Employee Expenses of INR 87.07 Cr in the True-up of FY 2020-21.

3.9.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted the actual A&G expenses of INR 5.42 Cr as reflected in audited accounts and claimed the normative A&G expenses of INR 7.28 Cr against the approved expenses of INR 7.30 Cr in the APR.

Commission's analysis

A&G expenses mainly comprise of telephone and other communication expenses, professional charges, conveyance and travelling allowances, etc. As per the audited accounts submitted by the Petitioner the A&G expenses for FY 2020-21 are reflected as INR 5.00 Cr.

Similar to the methodology followed while estimating the employee expenses, the Commission has determined the A&G expenses for the FY 2020-21 using the actual CPI Inflation for FY 2020-21.

The A&G expenses approved by the Commission in FY 2020-21 have been provided in the following table:

Table 23: A&G Expenses approved by Commission (In INR Cr)

S. No	Particulars	FY 2019-20 (As approved in True-up)	FY 2020-21
1	A&G Expenses base year		6.93
2	CPI Inflation		5.02%
3	**A&G Expenses**	**6.93**	**7.28**

The Commission considers the normative A&G expenses of INR 7.28 Cr.

Table 24: A&G Expenses Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Actual A&G Expenses	Revised Normative A&G Expenses Trued-up by Commission
1	Administration & General Expenses (A&G)	7.30	7.28	5.00	7.28

The Commission approves the Administrative & General (A&G) expenses of INR 7.28 Cr.

3.9.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

Actual R&M expenses of INR 16.65 Cr have been incurred. The Petitioner has submitted the normative R&M expenses of INR 10.76 Cr against approved expenses of INR 10.93 Cr in the APR of FY 2020-21.

Commission's analysis

In accordance with the JERC MYT Regulations, 2018, the 'K' factor has been considered same as approved in the MYT Order. The 'K' factor is then multiplied with the opening GFA approved for (n-1)th year. The resultant amount is then escalated by the actual WPI for FY 2020-21 to arrive upon the R&M Expenses for FY 2020-21.

The WPI Inflation has been computed as follows:

Table 25: Computation of WPI Inflation (%)

FY	Average of (Apr-Mar)	WPI Inflation for FY 2020-21
2019-20	121.80	**1.29%**
2020-21	123.38	

The R&M expenses approved by the Commission in FY 2020-21 have been provided in the following table:

Table 26: R&M Expenses approved by the Commission (In INR Cr)

S. No	Particulars	FY 2020-21
1	GFAn-1 for FY 2019-20	457.77
2	K factor approved (K) in MYT Order	2.32%
3	WPI Inflation for FY 2019-20	1.29%
4	**R&M Expenses = (K x (GFA $_{n-1}$) x (1+WPI$_{inflation}$)**	**10.76**

Table 27: R&M Expenses Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Actual R&M Expenses	Revised Normative R&M Expenses Trued-up by Commission
1	Repair & Maintenance Expenses (R&M)	10.93	10.76	16.65	10.76

The Commission approves the Repair & Maintenance (R&M) expenses of INR 10.76 Cr in the True-up of FY 2020-21.

3.9.4. Total Operation and Maintenance Expenses (O&M)

The Regulation 14 of the JERC MYT Regulations, 2018 stipulates the following:

"14. Mechanism for sharing of gains or losses on account of controllable factors

14.1 Approved aggregate gain to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be shared equally between Licensee and Consumers:

Provided that the mechanism for sharing of gains or losses on account of controllable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations.

14.2 Approved aggregate loss, if any to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be on account of the Licensee, and shall not be passed to the Consumers."

The following table provides the O&M expenses, approved by the Commission in the APR Order, Petitioner's submission and O&M expenses now trued-up by the Commission after sharing of gains or losses.

Table 28: O&M Expenses Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Revised Normative Expenses (A)
1	Employee Expenses	79.26	78.65	87.07
2	Administrative & General Expenses (A&G)	7.30	7.28	7.28
3	Repair & Maintenance Expenses	10.93	10.76	10.76
	Total Operation & Maintenance Expenses	**97.49**	**96.69**	**105.11**

The Commission approves the Operation & Maintenance (O&M) expenses of INR 105.11 Cr in the True-up of FY 2020-21 along with equal gain sharing for Employee and A&G expenses. Further,

the incentive/dis-incentive on account of over/under-achievement of O&M Norms has been detailed in Section 3.20.

3.10. Capitalisation

Petitioner's submission

The Petitioner has managed to achieve capitalisation of INR 18.08 Cr during the year against approved capitalisation of INR 5.15 Cr in the APR of FY 2020-21.

Commission's analysis:

The Commission with regard to the capitalisation proposed to be undertaken during the year directed the Petitioner to submit the details of the schemes to be undertaken during the year along with the supporting documents. Against a capitalisation of INR 5.15 Cr approved in the Tariff Order for APR of FY 2020-21, capitalisation of INR 18.08 Cr has been achieved in FY 2020-21.

Post thorough scrutiny and review of the submissions made by the Petitioner with regards to the capitalization of schemes undertaken and the Fixed Asset Register (FAR) as submitted by the Petitioner, the Commission approves the capitalisation for the year as shown in the following table:

Table 29: Capitalisation approved by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Capitalisation	5.15	18.08	18.08

The Commission approves Capitalisation of INR 18.08 Cr in the True-up of the FY 2020-21.

3.11. Capital Structure

Petitioner's Submission

The entire capital deployment at the Petitioner is through equity for the FY 2020-21.

Commission's analysis

In the Technical Validation Session held at the Commission's office, the Petitioner was directed to submit the relevant documents specifying the nature of capital deployed for creation of assets. The Petitioner submitted that the entire capital is infused as equity by the Government. Further, the Petitioner also submitted that no assets have been created through consumer contribution.

The Regulation 26 of the JERC MYT Regulations, 2018 specifies the following:

*"**26. Debt to Equity Ratio***

26.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2018 shall be considered:

Provided that in case of retirement or replacement or De-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or De-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

26.2 For New Projects, the debt-equity ratio as on the Date of Commercial Operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 23, after prudence check for determination of tariff:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of tariff:

Provided also that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan for the Licensee for determination of tariff:

Provided also that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Provided further that the premium, if any, raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the transmission system or the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

26.3 Any expenditure incurred or projected to be incurred on or after April 1, 2019, as may be admitted by the Commission, as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in this Regulation."

In accordance with the JERC MYT Regulations, 2018 the Commission has determined the Capital Structure for FY 2020-21 as shown in the following tables.

Table 30: Funding Plan Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Capitalisation	5.15	18.08	18.08
2	Debt (%)	70%	70%	70%
3	Equity (%)	30%	30%	30%
4	Normative Loan	3.60	12.66	12.66
5	Equity	1.55	5.42	5.42

Table 31: GFA addition Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	457.77	457.77	457.77
2	Addition During the FY	5.15	18.08	18.08
3	Adjustment/Retirement During the FY	-	-	-
4	Closing Gross Fixed Assets	462.92	475.85	475.85

Table 32: Normative Loan addition Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	-	0.00	0.00
2	Add: Normative Loan During the year	3.60	12.66	12.66
3	Less: Normative Repayment equivalent to Depreciation	3.60	14.33	9.75
4	Closing Normative Loan	-	0.00	2.91

Table 33: Normative Equity addition Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	131.38	131.38	131.38
2	Additions on account of new capitalisation	1.55	5.42	5.42
3	Closing Equity	132.93	136.80	136.80

3.12. Depreciation

Petitioner's submission

The Petitioner has submitted that it has prepared the Fixed Asset Register for the FY 2020-21 and considered the GFA accordingly. Further, depreciation for the year has been considered based on the Fixed Asset Register prepared for FY 2020-21.

The Petitioner has submitted the actual depreciation of INR 14.33 Cr as reflected in audited accounts against the approved depreciation of INR 11.57 Cr in the APR.

Commission's analysis

Regulation 30 of the JERC MYT Regulations, 2018 stipulates the following:

30. Depreciation

30.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided also that the no depreciation shall be allowed on the assets financed through consumer contribution, deposit work, capital subsidy or grant.

30.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

30.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets.

30.4 In case of existing assets, the balance depreciable value as on April 1, 2019, shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to March 31, 2018, from the gross depreciable value of the assets.

30.5 The depreciation shall be chargeable from the first Year of commercial operations. In case of projected commercial operation of the assets during the Year, depreciation shall be computed based on the average of opening and closing value of assets:

Provided that depreciation shall be re-calculated during truing-up for assets capitalised at the time of truing up of each Year of the Control Period, based on documentary evidence of asset capitalised by the Applicant, subject to the prudence check of the Commission.

30.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

30.7 The depreciation for a Distribution Licensee shall be calculated annually, based on the Straight Line Method, over the Useful Life of the asset at rates specified in Appendix I of the Regulations.

30.8 In addition to allowable depreciation, the Distribution Licensee shall be entitled to advance against depreciation (AAD), computed in the manner given hereunder:

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure, subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations:

Provided that advance against depreciation shall be permitted only if the cumulative repayment upto a particular Year exceeds the cumulative depreciation upto that Year:

Provided further that advance against depreciation in a Year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation upto that Year.

30.9 The Distribution Licensee shall provide the list of assets added during each Year of Control Period and list of assets completing 90% of depreciation in the Year along with Petition for annual performance review, true-up and tariff determination for ensuing Year.

30.10 The remaining depreciable value for a Distribution Licensee shall be spread over the balance useful life of the asset, on repayment of the entire loan.

The Commission has derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in JERC MYT Regulations, 2018, provided in the following table:

Table 34: Depreciation Rate (%)

Description	Rate
Plant & Machinery	3.60%
Buildings	1.80%
Vehicles	18.00%
Furniture & Fixtures	6.00%
Computers & Others	6.00%
Land	0.00%

The closing GFA of FY 2019-20 as approved in the True-Up has been considered as opening GFA of FY 2020-21. The Commission has determined the depreciable GFA after deducting the value of assets that have achieved 90%

depreciation as reflected in the FAR of FY 2020-21. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition approved for FY 2020-21. Accordingly, the weighted average rate of depreciation is as per the following table:

Table 35: Asset wise and overall effective Depreciation Rate (%)

Description	Rate	Opening Depreciable GFA (Less: Assets achieved 90% depreciation	Asset Addition	Closing Depreciable GFA	Average Depreciable GFA	Effective Rate
Plant & Machinery	3.60%	245.13	17.82	262.95	254.04	
Buildings	1.80%	29.84	-	29.84	29.84	
Vehicles	18.00%	0.25	0.07	0.32	0.29	
Furniture & Fixtures	6.00%	0.04	0.06	0.10	0.07	
Computers & Others	6.00%	0.10	0.13	0.23	0.17	
Land	0.00%	-	-	-		
Total	**-**	**275.36**	**18.08**	**293.44**	**284.40**	**3.43%**

The following table provides the depreciation as approved in the APR of FY 2020-21, Petitioner's submission and now approved by the Commission:

Table 36: Depreciation approved by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Opening GFA for FY 2020-21 (a)	332.74	457.77	457.77
2	Less: Assets depreciated upto 90% (b)	0.00	0.00	182.41
3	Revised opening Gross Fixed Assets (a-b)	332.74	457.77	275.36
4	Addition During the FY	5.15	18.08	18.08
5	Adjustment/Retirement During the FY	-	-	-
6	Closing Gross Fixed Assets	337.89	475.85	293.44
7	Average Gross Fixed Assets	335.31	466.81	284.40
8	Effective Rate of Depreciation (%)	3.45%	3.07%	3.43%
	Depreciation	**11.57**	**14.33**	**9.75**

The Commission now approves depreciation of INR 9.75 Cr in the True-up of the FY 2020-21.

3.13. Interest on Loan

Petitioner's submission

The Petitioner has submitted that the closing of normative loans approved for FY 2019-20 in Tariff Order dated 30th March 2021 has been considered as the opening loans for FY 2020-21. The addition in normative loans is calculated by considering the debt-equity ratio of 70:30, as per the Regulations 26 of JERC MYT Regulations, 2018, and capitalisation of assets during the year in FY 2020-21. The loan repayment to the extent of outstanding loans has been funded through depreciation during the year. The same is kept in line with the approach adopted by the Commission in Tariff Order dated 30th March 2021, for approving the expenses of interest on loans in APR for FY 2020-21. The interest rate considered is equivalent to 1 Year SBI MCLR rate applicable on 1st April of 2020 plus 100 basis points has been applied on the average loan amount to estimate the interest cost on normative loans for FY 2020-21.

Accordingly, the Petitioner has submitted the interest on normative loans as NIL for FY 2020-21 against NIL as approved in APR.

Further, the Petitioner has claimed actual Bank Charges of INR 1.35 Cr as incurred during FY 2020-21.

Commission's analysis:

The Regulation 28 of the JERC MYT Regulations, 2018 specifies the following:

*"**28. Interest on Loan***

28.1 The loans arrived at in the manner indicated in Regulation 26 on the assets put to use, shall be considered as gross normative loan for calculation of interest on the loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided further that in case of De-capitalisation or retirement or replacement of assets, the loan capital shall be reduced to the extent of outstanding loan component of the original cost of the de-capitalised or retired or replaced assets, based on documentary evidence.

28.2 The normative loan outstanding as on April 1, 2019, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2018, from the gross normative loan.

28.3 Notwithstanding any moratorium period availed by the Transmission Licensee or the Distribution Licensee, as the case may be, the repayment of loan shall be considered from the first Year of commercial operation of the project and shall be equal to the annual depreciation allowed in accordance with Regulation 30.

28.4 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Transmission Licensee or the Distribution Licensee:

Provided that at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the Year applicable to the Transmission Licensee or the Distribution Licensee shall be considered as the rate of interest:

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered:

Provided further that if the Transmission Licensee or the Distribution Licensee does not have actual loan, then one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1)Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.

28.5 The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest:

Provided that at the time of truing up, the normative average loan of the Year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the Year.

28.6 For new loans proposed for each Financial Year of the Control Period, interest rate shall be considered as lower of (i) one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the *time being in effect applicable for one (1)Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points, and (ii) weighted average rate of interest proposed by the Distribution Licensee.*

28.7 The above interest computation shall exclude the interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, deposit work, capital subsidy or grant, carried out by Transmission Licensee or Distribution Licensee.

28.8 The finance charges incurred for obtaining loans from financial institutions for any Year shall be allowed by the Commission at the time of Truing-up, subject to prudence check.

28.9 The excess interest during construction on account of time and/or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Transmission Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

28.10 The Transmission Licensee or the Distribution Licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the equally between the beneficiaries and the Transmission Licensee or the Distribution Licensee and the Consumers of Distribution Licensee.

28.11 Interest shall be allowed on the amount held as security deposit held in cash from Retail Consumers at the Bank Rate as on 1st April of the Financial Year in which the Petition is filed:

Provided that at the time of truing-up, the interest on the amount of security deposit for the Year shall be considered on the basis of the actual interest paid by the Licensee during the Year, subject to prudence check by the Commission."

Hence, the rate of interest to be considered while determining the ARR shall be the weighted average interest rate of the actual loan portfolio. However, the Petitioner has submitted that capitalisation during each year has been funded by the Petitioner's equity and no loan has been taken against any of the capitalised assets. In absence of any actual loans, the Commission has considered the SBI MCLR rate, as on 1st April 2020 (7.75%), plus 100 basis points as Rate of Interest, in accordance with the JERC MYT Regulations, 2018.

As per the JERC MYT Regulations 2018, if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Further, the Commission has considered the capitalisation of assets as approved in the foregoing paragraphs. The Commission for the purpose of funding of the capitalisation has considered the normative debt equity ratio of 70:30.

The Interest on Loan has been calculated on the average loan during the year with the opening loan considered equivalent to the closing loan approved for FY 2019-20 in the True-Up. The total normative loan has been considered to be repaid through depreciation during the year. Further, Bank charges of INR 1.35 Cr is approved as reflected in audited accounts of FY 2020-21. Further, the financing cost related to Letter of Credit (LC) Charges of Rs. 3.13 Cr are allowed as given in the Power Purchase cost reconciliation submitted by the Petitioner.

The following table provides the Interest on Loan approved in APR, Petitioner's submission and now approved by the Commission:

Table 37: Interest and Finance Charges approved by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued Up by Commission
1	Opening Normative Loan	0.00	0.00	0.00
2	Add: Normative Loan During the year	3.60	12.66	12.66
3	Less: Normative Repayment	3.60	14.33	9.75
4	Closing Normative Loan	0.00	0.00	2.91
5	Average Normative Loan	0.00	0.00	1.45
6	Rate of Interest (%)	8.75%	8.75%	8.75%
7	**Interest on Loan**	**0.00**	**0.00**	**0.13**
8	**Bank Charges**	**0.00**	**1.35**	**1.35**
9	**Letter of Credit (LC) Charges**	**0.00**	**0.00**	**3.13**
10	**Total Interest and Finance Charges**	**0.00**	**1.35**	**4.61**

The Commission approves Interest and Finance Charges of INR 4.61 Cr in the True-up of the FY 2020-21.

3.14. Return on Equity (RoE)

Petitioner's submission

The RoE is calculated in accordance with the Regulation 27 of JERC MYT Regulations, 2018. The Petitioner has submitted that the closing equity approved in True Up for FY 2019-20 in Tariff Order dated 30th March 2021 has been considered as the opening Equity for FY 2020-21 and 30% of proposed capitalisation for the FY 2020-21 has been considered for arriving at the total equity for the year. Accordingly, the Petitioner has computed the Return on Equity at 15.50% for Wire Business and 16.00% for Retail Supply Business.

Accordingly, the Petitioner has submitted the return on equity as INR 20.85 Cr for FY 2020-21 against INR 20.55 Cr as approved in APR.

Commission's analysis:

The Regulations 27.2 and 27.3 of the JERC MYT Regulations, 2018 stipulate the following:

"27.2 The return on equity for the Distribution Wires Business shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use at post-tax rate of return on equity specified in the prevalent CERC Tariff Regulations for transmission system.

27.3 The return on equity for the Retail Supply Business shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use, at the rate of sixteen (16) per cent per annum."

Further, in this regard, the Regulation 30(2) of the CERC (Terms and Conditions of Tariff) Regulations, 2019 stipulates the following:

*"30. Return on Equity: ……… 30.2 Return on equity shall be computed at the base rate of **15.50%** for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage: ……." (**Emphasis supplied)***

The Commission has segregated the approved average equity (average of opening and closing equity) into average equity for Distribution Wires Business and Retail Supply Business based on the Allocation Statement provided in the JERC MYT Regulations, 2018 i.e. 90% allocation for the Distribution Wires Business and 10% allocation for the Retail Supply Business. The Commission has considered a rate of 15.50% for the Distribution Wires Business (as per the prevalent CERC Regulations as mentioned above) and a rate of 16.00% for the Retail Supply Business.

As the complete asset capitalisation during the year has been funded through equity, the Commission, for the purpose of equity addition during the year, has limited it to 30% of the total capitalisation in line with the JERC MYT Regulations, 2018. The following table provides the total return on equity approved in the APR, Petitioner's submission and now approved by the Commission:

Table 38: RoE approved by the Commission for FY 2020-21 (In INR Cr)

Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
Opening Equity	131.38	131.38	131.38
Additions on account of new capitalisation	1.55	5.42	5.42
Closing Equity	132.93	136.80	136.80
Average Equity	132.15	134.09	134.09
Average Equity (Wires Business) (90%)	118.94	120.68	120.68
Average Equity (Retail Supply Business) Business) (10%)	13.22	13.41	13.41
Return on Equity for Wires Business (%)	15.50%	15.50%	15.50%
Return on Equity for Retail Supply Business (%)	16.00%	16.00%	16.00%
Return on Equity for Wires Business	18.44	18.71	18.71
Return on Equity for Retail Supply Business	2.11	2.15	2.15
Return on Equity	**20.55**	**20.85**	**20.85**

The Commission approves the Return on Equity of INR 20.85 Cr for FY 2020-21.

3.15. Interest on Consumer Security Deposits

Petitioner's submission

Actual Payments of INR 3.78 Cr were released to the consumers towards interest on security deposits during the FY 2019-20 against INR 12.62 Cr approved by the Commission in the APR.

Commission's analysis:

Regulation 28.11 of the JERC MYT Regulations, 2018 stipulates the following:

"28.11. Interest shall be allowed on the amount held as security deposit held in cash from Retail Consumers at the Bank Rate as on 1st April of the Financial Year in which the Petition is filed:

Provided that at the time of truing-up, the interest on the amount of security deposit for the Year shall be considered on the basis of the actual interest paid by the Licensee during the Year, subject to prudence check by the Commission. "

The Commission has considered the actual interest on security deposit disbursed to the consumers in their bills, as reflected in the audited accounts of the FY 2020-21 for Truing-up.

The following table provides the interest on security deposit as approved in the APR, the Petitioner's submission and the interest now trued-up by the Commission:

Table 39: Interest on Consumer Security Deposits Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Opening Security Deposit	195.72	195.72	195.72
2	Add: Deposits During the year	8.00	-5.62	0.00
3	Less: Deposits refunded	0.00	0.00	5.62
4	Closing Security Deposit	203.72	190.10	190.10
5	Average Security Deposit	199.72	192.91	192.91
6	RBI Bank Rate (%)	4.65%	1.96%	1.96%
	Interest paid to consumers	**9.29**	**3.78**	**3.78**

The Commission approves interest on security deposit as INR 3.78 Cr in the True-up of the FY 2020-21.

3.16. Interest on Working Capital

Petitioner's submission

As per clause 31 & 52 of JERC MYT Regulations, 2018 the working capital of a licensee shall consist of:

(a) Receivable of two months of billing

(b) O&M Expenses of one month

(c) 40% of Repair & maintenance expenses for one month

(d) Less consumer security deposit but excluding Bank Guarantee

The interest on working capital is computed at 8.65% (SBI base rate as on 1st April 2020 plus 200 basis point) as has been shown in the following table:

Table 40: Interest on Working Capital submitted by Petitioner (In INR Cr)

S. No	Particulars	Petitioner's Submission
1	Two months receivables	119.31
2	Add: one month O&M Expenses	7.86
3	Add: 40% of R&M expenses for one month	0.56
4	Less: Security Deposit excluding BG/FDR	192.91
5	Net Working Capital	(65.18)
6	Rate of Interest (%)	8.65%
	Interest on Working Capital	**-**

Commission's analysis:

The Regulation 52 of the JERC MYT Regulations, 2018 stipulates the following:

"52. Norms of Working Capital for Distribution Wires Business

52.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Distribution Wires Business for the Financial Year, computed as follows:

(a) O&M Expenses for one (1) month; plus

(b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus

(c) Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution

wires at the prevailing tariff;

Less:

(d) Amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from distribution system users except the security deposits held in the form of Bank Guarantees:

Provided that at the time of truing up for any Year, the working capital requirement shall be re-calculated on the basis of the values of components of working capital approved by the Commission in the truing up."

The Regulation 63 of the JERC MYT Regulations, 2018 stipulates the following:

"63. Norms of Working Capital for Retail Supply Business

63.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Retail Supply Business for the Financial Year, computed as follows:

(a) O&M Expenses for one (1) month; plus

(b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus

(c) Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff;

Less

(d) Amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from Consumers except the security deposits held in the form of Bank Guarantees:

Provided that at the time of truing up for any Year, the working capital requirement shall be re-calculated on the basis of the values of components of working capital approved by the Commission in the truing up."

Further, Regulation 31.3 of the MYT Regulation, 2018 stipulates the following:

"31.3 The interest on working capital shall be a payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures.

31.4 The rate of interest on working capital shall be equal one (1)Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1)Year period, as may be applicable as on 1st April of the Financial Year in which the Petition is filed plus 200 basis points."

In accordance with the MYT Regulation, 2018, the Commission has computed the Interest on Working Capital for FY 2020-21. The actual Working Capital requirement, after deduction of the average amount of Consumer Security Deposit is coming out to be negative. Thus, the Interest on Working Capital has been considered as NIL, as shown in the following table:

Table 41: Interest on Working Capital approved by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	O&M Expense for 1 month	8.12	8.06	8.06
2	Maintenance spares at 40% of R&M expenses for one (1) month;	0.36	0.36	0.36
3	Receivables equivalent to two (2) months of the expected revenue from charges at the prevailing tariff	128.97	116.90	117.01
4	Less: Amount, held as security deposits	199.72	192.91	192.91
5	Net Working Capital	0.00	(67.59)	0.00
6	Rate of Interest (%)	9.75%	8.65%	9.75%
	Interest on Working Capital	**0.00**	**0.00**	**0.00**

The Commission approves the Interest on Working Capital as NIL for FY 2020-21.

3.17. Income Tax

Petitioner's submission

No submission has been made in this regard.

Commission's analysis:

Regulation 32 of the JERC MYT Regulations, 2018, states the following:

*"**32. Tax on Income***

32.1 The treatment of tax on income for a Transmission Licensee shall be in accordance with the prevalent CERC Tariff Regulations.

32.2 The Commission in its MYT Order shall provisionally approve Income Tax payable for each Year of the Control Period, if any, based on the actual income tax paid, including cess and surcharge on the same, if any, as per latest audited accounts available for the Distribution Licensee, subject to prudence check.

32.3 Variation between Income Tax actually paid, including cess and surcharge on the same, if any, and approved, if any, on the income stream of the Licensed business of the Distribution Licensees shall be reimbursed to/recovered from the Distribution Licensees, based on the documentary evidence submitted at the time of truing up of each Year of the Control Period, subject to prudence check.

32.4 Under-recovery or over-recovery of any amount from the Consumers on account of such tax having been passed on to them shall be adjusted every Year on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors. The Distribution Licensee may include this variation in its truing up Petition:

Provided that tax on any income stream other than the core business shall not be a pass-through component in tariff and tax on such other income shall be borne by the Distribution Licensee."

As the Regulation above stipulates that the income tax shall be approved as per actuals, the Commission considers the income tax payable for the year as nil as no Income Tax has been paid by the Petitioner for FY 2020-21.

Table 42: Income Tax Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Income Tax	0.00	0.00	0.00

The Commission approves Income Tax liability as NIL for the FY 2020-21.

3.18. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has submitted that the audited accounts for FY 2020-21 had no book entry related to the written off of bad debts. Hence no claim against the Provision for Bad and Doubtful Debts has been proposed for FY 2020-21.

Commission's analysis:

As per Regulation 62.1 of the JERC MYT Regulations, 2018:

"62.1 The Commission may allow bad debts written off as a pass through in the Aggregate Revenue Requirement, based on the trend of write off of bad debts in the previous years, subject to prudence check:

Provided that the Commission shall true up the bad debts written off in the Aggregate Revenue Requirement, based on the actual write off of bad debts excluding delayed payment charges waived off, if any, during the year, subject to prudence check:

Provided also that the provision for bad and doubtful debts shall be limited to 1% of the annual Revenue Requirement of the Distribution Licensee:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realised from such bad debt, the same shall be included as an uncontrollable item under the Non-Tariff Income of the year in which such revenue is realised."

The Commission had enquired for details of actual write off of bad and doubtful debts for the FY 2020-21. The Petitioner has submitted that no bad debts are written off by it during the year.

The Commission therefore has not considered any bad and doubtful debts in the True-up of FY 2020-21.

3.19. Non-Tariff Income (NTI)

Petitioner's submission

The Petitioner has submitted that the Non-Tariff Income for FY 2020-21 is calculated as per the provisions of Regulation 64 of JERC MYT Regulations, 2018.

The Petitioner has submitted that the delay payment surcharge should not be treated as the part of non-tariff income, as the same commensurate the burden of interest cost incurred on the excess drawl of working capital on account of the shortfall of revenue collected during the concerned billing cycle. Hence, the same should not be included in the non-tariff income.

The recovery from the doubtful debts is not considered as non-tariff income as provisioning of bad and doubtful debts have not been allowed at the time of approval of ARR.

Accordingly, the Petitioner has submitted the Non-Tariff Income of INR 117.77 Cr and has been shown in the following table:

Table 43: Non-Tariff Income submitted by the Petitioner for FY 2020-21 (In INR Cr)

S. No	Particulars	Petitioner's Submission
1	Miscellaneous Charges	30.77
2	Miscellaneous Receipts	8.05
3	Income from Trading of Surplus Power (PX & UI)	73.40
4	Rebate on timely payment of energy bills	5.55
5	**Total**	**117.77**

Commission's analysis:

The Commission observed that the Petitioner has included Miscellaneous Receipts of INR 8.05 Cr in Non-Tariff Income whereas the Miscellaneous receipts of INR 69.61 Cr are reflected in the audited accounts of the FY 2020-21 and the Commission has considered the same as NTI. In response to Commission's query regarding the details of Miscellaneous receipts and charges claimed as Non-Tariff Income, the Petitioner has not submitted the same.

Further, the Commission has already deducted the rebate of INR 5.55 Cr on timely payment of energy bills and considered the Income from Trading of Surplus power while allowing the Power Purchase cost and hence not considered in NTI.

The Commission authenticated the submission of the Petitioner from the audited accounts. Accordingly, the Non-Tariff Income considered by the Commission is shown in the following table:

Table 44: Non-Tariff Income considered by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Petitioner's Submission
1	Miscellaneous Charges	30.77
2	Miscellaneous Receipts	69.61
5	**Total**	**100.39**

The NTI approved in the APR, Petitioner's submission and now trued-up by the Commission is shown in the following table:

Table 45: Non- Tariff Income Trued-up by the Commission for FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	**Non-tariff income**	**17.77**	**117.77**	**100.39**

The Commission approves Non-Tariff Income of INR 100.39 Cr in the True-up of the FY 2020-21.

3.20. Incentive/Disincentive towards over/under achievement of norms

3.20.1. Dis-incentive on account of under-achievement of Intra- State Transmission & Distribution (T&D) loss

Petitioner's submission:

No submission has been made in this regard.

Commission's analysis:

In the APR for FY 2020-21, the Commission had approved the T&D loss level of 9.30%. The Petitioner has achieved T&D loss of 13.81% against the approved loss level of 9.30%. The Commission, in accordance with Regulation 14.2 of the JERC MYT Regulations, 2018 (reproduced below) has determined the dis- incentive towards the under-achievement of the target of Intra-State distribution loss for the FY 2020-21 as follows:

As per Regulation 14.2 of the JERC MYT Regulations 2018,
"14.2 Approved aggregate loss, if any to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be on account of the Licensee, and shall not be passed to the Consumers"

The dis-incentive has been considered at INR 3.31/kWh, which is the Average Power Purchase cost (APPC) of the Petitioner. The APPC has been derived at State/UT Periphery based on the Power Purchase cost approved in the True-up and the Energy at the State/UT Periphery has been computed after grossing up the retail energy sales (1,342.08 MU) with the actual Intra-State T&D Loss (13.81%).

The assessment of incentive for lower T&D losses is shown in the following table:

Table 46: Dis-incentive due to under-achievement of Intra-State Distribution Loss target (In INR Cr)

S. No	Particulars	As per Approved Intra-State T&D Loss	Trued-up by Commission
1	Retail Sales	1,342.08	1,342.08
2	T&D Loss (%)	9.30%	13.81%
3	Power Purchase at State/UT Periphery	1,479.69	1,557.18
4	Gain/(Loss) (MU)		(77.48)
5	Average Power Purchase Cost (APPC)		3.31
6	Gain/ (Loss) (INR Cr)		(25.65)
7	**Sharing of 100% of Loss with the Petitioner**		**(25.65)**

The Commission determines and approves INR 25.65 as dis-incentive for under- achieving the Intra-State Distribution Loss target for the FY 2020-21.

3.20.2. Incentive on account of norms for Operations & Maintenance (O&M) Expenses

Petitioner's submission:

No submission has been made in this regard.

Commission's analysis:

The Regulation 14 of the JERC MYT Regulations, 2018 stipulates the following:

"14. Mechanism for sharing of gains or losses on account of controllable factors

14.1 Approved aggregate gain to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be shared equally between Licensee and Consumers:

Provided that the mechanism for sharing of gains or losses on account of controllable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations.

14.2 Approved aggregate loss, if any to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be on account of the Licensee, and shall not be passed to the Consumers."

The following table provides the Petitioner's submission and O&M expenses now trued-up by the Commission after sharing of gains or losses.

Table 47: O&M Expenses approved by Commission (In INR Cr)

S. No	Particulars	Petitioner's Submission	Normative Expenses (A)	Actual Expenses (B)	Gain/Loss (C)=(A)-(B)	Gain sharing (D)=(C)/2	Trued-up by Commission (E)=(B)+(D)
1	Employee Expenses	78.65	87.07	72.70	14.37	7.19	79.88
2	Administrative & General Expenses (A&G)	7.28	7.28	5.00	2.28	1.14	6.14
3	Repair & Maintenance Expenses	10.76	10.76	16.65	-5.90	0.00	10.76
	Total Operation & Maintenance Expenses	**96.69**	**105.11**	**94.35**	**10.76**	**8.33**	**96.78**

The Commission approves the Operation & Maintenance (O&M) expenses of INR 96.78 Cr in the True-up of FY 2020-21 after adjusting incentive/dis-incentive on account of over/under-achievement of O&M Expenses.

3.21. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner has submitted the net aggregate revenue requirement of INR 705.65 Cr for approval in the True-up of the FY 2020-21.

Commission's analysis

The Commission on the basis of the detailed analysis of the cost parameters of the ARR approves the net revenue requirement in the True-up of the FY 2020-21 as given in the following table:

Table 48: Aggregate Revenue Requirement Trued-up by Commission for the FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Power Purchase Cost	652.71	686.42	602.28*
2	Operation & Maintenance Expenses	97.49	96.69	96.78
3	Depreciation	11.57	14.33	9.75
4	Interest and Finance Charges	-	1.35	4.61
5	Return on Equity	20.55	20.85	20.85
6	Interest on Security Deposit	9.29	3.78	3.78
7	Interest on Working Capital	-	-	-
8	Income Tax	-	-	-
9	Provision for Bad & Doubtful Debt	-	-	-
10	Incentive/ (Disincentive)on achievement of norms	-	-	(25.65)
11	**Total Revenue Requirement**	**791.60**	**823.42**	**712.40**
12	Less: Non-Tariff Income	17.77	117.77	100.39
13	**Net Revenue Requirement**	**773.83**	**705.65**	**612.01**

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission

Adjusted with revenue from outside sale of power and Rebate

The Commission approves net Aggregate Revenue Requirement of INR 612.01 Cr in the True-up of the FY 2020-21.

3.22. *Revenue at existing Retail Tariff*

Petitioner's submission

The actual revenue from retail sale for the FY 2020-21 is INR 701.38 Cr as against INR 830.69 Cr approved by the Commission in the APR of FY 2020-21. The Petitioner has also considered revenue recovered through FPPCA of INR. 0.65 Cr. The detailed reconciled statement of revenue from the sale of power at existing tariff and FPPCA with reference to the final actual figures of income & expenditure as per the audited accounts of the FY 2020-21 has also been submitted.

Further, an amount of INR 0.01 Cr on account of Regulatory Surcharge billed by the Petitioner has also been considered.

Commission's analysis

The Commission has analysed the sales and revenue figures for each consumer category and checked the revenue from audited accounts. The consumer category-wise revenue as submitted by the Petitioner and approved by the Commission is shown in the following table:

Table 49: Revenue at existing tariff Trued-up by Commission for the FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Domestic	370.68	287.78	287.78
2	Commercial	254.53	220.10	220.10
3	Large Industrial supply	74.07	65.89	65.89
4	Medium Industrial supply	60.70	63.86	63.86
5	Small Industrial Supply	8.56	8.53	8.53
6	Agriculture	0.37	0.39	0.39
7	Public lighting	8.84	7.52	7.52
8	Bulk supply	49.79	44.59	44.59
9	Temp. Supply	3.13	2.72	2.72
10	**Sub-total**	**830.69**	**701.38**	**701.38**
11	FPPCA	1.15	0.65	0.65
12	Regulatory Surcharge	0.00	0.01	0.01
13	**Grand total**	**831.84**	**702.04**	**702.04**

The Commission approves the revenue from sale of power as INR 702.04 Cr (including FPPCA charges and Regulatory Surcharge) in the True-up of the FY 2020-21.

3.23. Standalone Revenue Gap/ (Surplus)

Petitioner's submission

Based on the ARR and the revenue from retail tariff, the standalone revenue gap of INR 3.61 Cr is arrived at in the True-up of the FY 2020-21.

Commission analysis

The Commission based on the approved ARR and retail tariff has arrived at the Revenue Gap/Surplus as follows:

Table 50: Standalone Revenue Gap/ (Surplus) for the FY 2020-21 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for APR of FY 2020-21	Petitioner's Submission	Trued-up by Commission
1	Net Revenue Requirement	773.83	705.65	612.01
2	Revenue from Retail Sales at Existing Tariff	830.69	701.38	701.38
3	Regulatory Surcharge	0.00	0.01	0.01
4	FPPCA Charges	1.15	0.65	0.65
5	**Total Revenue**	**831.84**	**702.04**	702.04
	Net Gap /(Surplus)	**(58.01)**	**3.61**	**(90.03)**

The Commission, in the True-up of the FY 2020-21 approves a standalone surplus of INR 90.03 Cr. This standalone surplus has been carried over to the subsequent years and has been dealt with while determining the tariff for the FY 2023-24.

4. Chapter 4: True-up of the FY 2021-22

4.1. Applicable provisions

The True-up of FY 2021-22 is to be carried out as per Regulation 11 of the JERC MYT Regulations, 2018:

"11. Annual Performance Review, Truing-up and tariff determination during the Control Period

11.1 The Generating Company, Transmission Licensee and Distribution Licensee shall be subject to annual performance review and truing up of expenses and revenue during the Control Period in accordance with these Regulations.

11.2 The Generating Company, Transmission Licensee and Distribution Licensee shall file an application for the annual performance review of the current year, truing up of the previous Year or the Year for which the audited accounts are available and determination of tariff for the ensuing Year on or before 30th November of each Year, in formats specified by the Commission from time to time:

Provided that the Generating Company, Transmission Licensee or Distribution Licensee, as the case may be, shall submit to the Commission information in such form as may be specified by the Commission, together with the audited accounts, extracts of books of account and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges.

11.3 The scope of the annual performance review, truing up and tariff determination shall be a comparison of the performance of the Generating Company, Transmission Licensee or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges and shall comprise of the following:

***a) True-up:** a comparison of the audited performance of the Applicant for the Financial Year for which the true up is being carried out with the approved forecast for such previous Financial Year, subject to the prudence check;*

.........."

4.2. Approach for the True-up of FY 2021-22

Petitioner's submission:

The Petitioner has submitted the True-Up Petition for FY 2021-22. Further, the Petitioner has submitted that that audit works is in progress for FY 2021-22 by CAG. The accounts for FY 2021-22 are completed and submitted to CAG, the process of auditing is in progress.

Commission's analysis:

The Commission in its previous orders had stressed upon the requirement of the audited accounts to reflect the true picture and bring in accuracy in the estimates made by the Commission. The JERC MYT Regulations, 2018 require the licensee to file the True up along with the audited accounts in the filing.

Since, the Petitioner has only submitted the unaudited accounts and is yet to submit the audited accounts with the Audit report, the Commission has decided that the true-up would be taken up only after submission of the Auditors' Certificate. Accordingly, the Commission has decided not to take up True-up for FY 2021-22 in the current Order. The Commission directs the Petitioner to prepare and submit the audited accounts for FY 2021-22 along with the next tariff Petition by 30th November 2023.

5. Chapter 5: Annual Performance Review for the FY 2022-23

5.1. Applicable Provisions and Background

The MYT Order for each year of the Control Period from FY 2022-23 to FY 2024-25 was issued by the Commission on 11th July 2022 approving the Aggregate Revenue Requirement (ARR) and tariff for the FY 2022-23.

This Chapter covers the Annual Performance Review (APR) for the FY 2022-23 vis-à-vis the cost parameters approved by the Commission in the Tariff Order for FY 2022-23. The Annual Performance Review for the FY 2022-23 is to be carried out in accordance with the Regulation 12 of the JERC MYT Regulations 2021:

"12. Annual Performance Review, Truing-up and tariff determination during the Control Period

12.1 The Generating Company, Transmission Licensee and Distribution Licensee shall be subject to annual performance review and truing up of expenses and revenue during the Control Period in accordance with these Regulations.

12.2 The Generating Company, Transmission Licensee and Distribution Licensee shall file an application for the annual performance review of the current year, truing up of the previous Year or the Year for which the audited accounts are available and determination of tariff for the ensuing Year on or before 30th November of each Year, in formats specified by the Commission from time to time:

Provided that the Generating Company, Transmission Licensee or Distribution Licensee, as the case may be, shall submit to the Commission information in such form as may be specified by the Commission, together with the audited accounts, extracts of books of account and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges.

12.3 The scope of the annual performance review, truing up and tariff determination shall be a comparison of the performance of the Generating Company, Transmission Licensee or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges and shall comprise of the following:

*a) **True-up:** a comparison of the audited financial and actual operational performance of the Applicant for the Financial Year for which the true up is being carried out with the approved forecast for such previous Financial Year, subject to the prudence check;*

*b) **Annual Performance Review**: a comparison of the revised estimates of performance targets of the Applicant for the current Financial Year with the approved forecast in the Tariff Order corresponding to the Control Period for the current Financial Year subject to prudence check;*

………."

5.2. Approach for the Review for the FY 2022-23

Petitioner's submission:

The Petitioner has submitted the APR of FY 2022-23 based on the actual performance during the H1 (April-September 2023) of the year and the revised estimates for H2 (October - March 2022) of the year. The projections for H2 of FY 2022-23 are arrived at by considering the approved values for FY 2021-22 by the Commission vide its Tariff Order dated 30th March, 2021.

Commission's analysis:

The review of the Aggregate Revenue Requirement requires assessment of the quantum of energy sales, energy loss as well as the various cost elements like Power Purchase Cost, O&M expenses, interest on long term loans, interest on working capital loans, depreciation etc. The Annual Performance Review for the FY 2022-23 has been done based on provisional Power Purchase Quantum and Cost of the FY 2022-23, provisional Energy Sales, etc. The Commission for the purpose of estimating the energy demand of the UT sought the information of month-wise historical sales, number of consumers and connected load from FY 2020-21 to FY 2021-22 from the Petitioner in the first Deficiency Note dated 13th February 2023. Various anomalies and gaps were observed in the data provided. The various cost elements constituting the Aggregate Revenue Requirement have been approved based on the information submitted by the Petitioner, the JERC MYT Regulations 2021 on the basis of the norms approved in the MYT Order dated 11th July 2022. Since the Commission could not take up True-up for FY 2021-22 in the current Order due to non-availability of audited accounts, all the values of the True-up of FY 2021-22 as submitted by the Petitioner has been considered by the Commission for carry forward in the APR of FY 2022-23. Also, the provisional data for FY 2022-23 as submitted by the Petitioner has been considered for the APR.

5.3. Energy Sales

Petitioner's Submission

The sales for the FY 2022-23 have been estimated based on actual sales for the first half (H1) i.e., for April to September 2022 and revised estimates of energy sales for second half based on the CAGR approach. The Petitioner has submitted that he energy sales in first half of FY 2022-23 have shown a strong recovery trend in economic activities and stands highest amongst the energy sales of first half in past financial years before the COVID-19 Pandemic. The energy sales of the second half for FY 2022-23 have been estimated by considering CAGR of the energy sales in second half from FY 2014-15 to FY 2021-22. It is submitted that the energy sales in second half of the last two financial year has shown normal energy consumption trend, therefore, FY 2020-21 and FY 2021-22 has been considered for CAGR computation. The CAGR of four/three/two-year is applied on the actual energy sales of the second half for FY 2021-22 to arrive at the revised estimates of energy sales for FY 2022-23. However, where the negative trend has been observed, the actual figures of past year with nil growth rate has been considered for projection purpose

Total sales of 1,610.42 MU have been estimated against the1,536.24 MU as approved by the Commission in the Tariff Order for FY 2022-23.

Table 51: Energy Sales (MU) submitted by the Petitioner for the FY 2022-23

S. No.	Category	Petitioner's Submission
1	Domestic	787.30
2	Commercial	474.93
3	Large Supply	122.43
4	Medium Supply	103.54
5	Small Supply	18.59
6	Agriculture	1.49
7	Public lighting	14.69
8	Bulk supply	83.53
9	Temp. Supply	3.92
	Gross Total	**1,610.42**

Commission's Analysis

The Commission has noted the provisional information provided by the Petitioner for the FY 2022-23. The Commission is of the view that the energy sales for FY 2022-23 is significantly higher in comparison to the actual energy sales of last few years. For all the categories, the Commission has considered the provisional energy sales for FY 2022-23 till December 2022 as submitted by the Petitioner in reply to the replies to 2nd Deficiency Note vide email dated 24th March 2023. However, for January 2023 to March 2023, the Commission has considered the energy sales submitted by the Petitioner for January 2022 to March 2022 for arriving at proper estimation.

The following table provides the energy sales approved by the Commission in the Tariff Order, the Petitioner's submission and now approved by the Commission:

Table 52: Energy Sales (MU) approved by the Commission for the FY 2022-23

S. No.	Category	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission		
				Apr-Dec (Actual)	Jan – Mar (Actuals of FY 2021-22)	Revised Estimates
1	Domestic	798.15	787.30	654.33	142.17	796.50
2	Commercial	406.67	474.93	400.56	86.24	486.80
3	Large Supply	118.77	122.43	97.33	29.12	126.45
4	Medium Supply	98.26	103.54	79.10	24.20	103.30
5	Small Supply	16.35	18.59	14.74	3.68	18.42
6	Agriculture	1.49	1.49	1.32	0.25	1.57
7	Public lighting	14.75	14.69	11.58	3.64	15.22
8	Bulk supply	78.25	83.53	68.10	16.61	84.71
9	Temp. Supply	3.56	3.92	2.68	0.90	3.57
10	Electric Vehicle Charging Station	-	-	-	0.68	0.68
	Gross Total	**1,536.24**	**1,610.42**	**1,329.75**	**307.47**	**1,637.23**

The Commission approves energy sales of 1,637.23 MU in the APR of the FY 2022-23.

5.4. *Inter-State Transmission Loss*

Petitioner's submission

The Petitioner has considered the Inter-State Transmission Loss of 4.03%, as approved in Tariff Order dated 11th July 2022.

Commission's analysis

The Commission in the APR of FY 2022-23 considers the Inter-State transmission losses in line with those approved in the Tariff Order dated 11th July 2022. The same shall be revised based on actuals during the True-up exercise.

The following table provides the Inter-State Transmission Loss approved by the Commission in the Tariff Order for FY 2022-23, the Petitioner's submission and Loss level now approved by the Commission.

Table 53: Inter-State Transmission Loss (%) approved by the Commission for the FY 2022-23

S. No	Particulars	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission
1	Inter-State Transmission Losses	4.03%	4.03%	4.03%

The Commission approves Inter-State Transmission Loss of 4.03% for the APR of the FY 2022-23.

5.5. Intra-State Distribution Loss

Petitioner's submission

The Petitioner submitted that as per the Tariff Order dated 11th July, 2022, the Commission has approved the T&D loss target for FY 2022-23 as 8.80% against 13.06% proposed in the Petition. EWEDC submits that it is making concerted efforts toward reduction the T&D losses. However, it is pertinent to note here that UT of Chandigarh is a land locked territory and due to limitation in geographical expansion there is very little possibility in increase of energy sales as well as drastic reduction in overall T&D losses.

EWEDC also submits that a major portion of energy sales ~60% is contributed by the LT consumer categories. Due to limitation of geographical expansion of UT of Chandigarh, the electrical network of the EWEDC got inherited with consumers having higher T&D losses for electricity supply. Also, the absence of interconnection point within the UT boundary has caused higher T&D losses. The input energy for EWEDC is being metered at 400 kV Nalagarh, 220 kV Mohali and 220 kV Dhoolkot (BBMB), which is causing additional burden ~4% of interstate circuit losses to EWEDC

The Petitioner has further submitted that as per the Abraham Committee recommendations given on fixation of loss reduction targets for Distribution Utilities at time of the roll out of the APDRP Scheme, the Committee has suggested that distribution utilities having losses more than 40% shall be given loss reduction targets of 4% per year; utilities having losses between 30%-40% shall be given reduction target of 3% per years; utilities having losses between 20%-30% shall be given reduction target of 2% per year and utilities having losses below 20% shall be given reduction target of 1% per year. Hence, the Petitioner has requested the Commission that in consideration to the above submission, the targets for T&D losses may kindly be realigned in a pragmatic manner. Further, the T&D losses in last ten years has reduced from 20.20% to 12.88% from FY 2011-12 to FY 2021-22, which evidently depicts that annual loss reduction ~0.70% can be achieved under the business-as-usual scenario. However, drastic reduction in losses to achieve the T&D loss target of 8.80% approved by the Commission in the Tariff Order Dated 11th July, 2017, would not be possible with any capital intervention. Accordingly, the Petitioner has proposed a T&D loss target of 12.38% for FY 2022-23.

Commission's analysis

The Commission in the Business Plan of 3rd MYT Control Period in Order dated 11th July 2022 had discussed in detail the approach and the basis of setting the Intra-State Distribution Loss trajectory for the MYT Period from FY 2022-23 to FY 2024-25 and retained the same in Tariff Order for FY 2022-23. The Commission decides to retain the same T&D loss as approved earlier.

The following table provides the Intra-State Distribution Loss approved in the Tariff Order for FY 2022-23, the Petitioner's submission and now approved by the Commission.

Table 54: Intra-State Distribution Loss (%) approved by the Commission for the FY 2022-23

S. No	Particulars	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission
1	Intra-State Distribution Loss	8.80%	12.38%	8.80%

The Commission approves Intra-State Distribution Loss of 8.80% in the APR of the FY 2022-23.

5.6. Power Purchase Quantum & Cost

Petitioner's submission:

The Petitioner procures power from various sources such as:

- Central Generating Stations (CGS) such as NTPC, NHPC and NPCIL

- Other Generating Stations such as SJVNL, BBMB, THDC, APCPL and MUNPL
- Other Sources such as SECI, State Solar, bilateral agreement, banking arrangement and power exchanges.

EWEDC has estimated the power purchase availability for FY 2022-23 by considering the firm and unallocated power allocations from the Central Generating stations and shared projects. The unallocated share has been calculated by averaging the unallocated power share as per the allocation statements issued by Northern Regional Power Committee against the Ministry of Power vide letter No. NRPC/OPR/103/02/2022 dated 25th March 2022 and 14th October 2022.

Energy availability from the generating sources for FY 2022-23 is projected based on the average energy scheduled from the generating stations in FY 2021-22 and FY 2019-20. The energy scheduled in FY 2020-21 is not considered for projection purpose as the same year was largely affected by the COVID-19 Pandemic.

Energy availability from BBMB generation stations has been project by considering 1 LU/Day and 10 LU/Day of committed generation and allocating the balance availability among the generating stations as per the REA Accounts.

Shortfall of power from the allocated generating plants, if any, is considered to be procured from the short-term power arrangements i.e. power exchanges, UI & other trading sources.

The revised estimate of power purchase cost for FY 2022-23 is calculated by considering the following approach for the capacity charges and energy charges:

- Capacity charges of FY 2021-22 escalated by 3% on annual basis;
- Rebate and Late Payment Surcharge deducted from the capacity charges;
- Energy charges realised in first half of FY 2022-23 are escalated by 2.5%;
- Surplus energy is sold at average variable power purchase cost, since the capacity charges are unavoidable in nature;
- Revenue from sales of surplus power is treated as Non-Tariff Income.

Further, the Petitioner has submitted the revised estimated power purchase cost for FY 2022-23 as presented in the following table:

Table 55: Power Purchase quantum (MU) and cost (In INR Cr) submitted by the Petitioner

Sr. No.	Sources	Generating Stations	Approved in T.O. dated 11th July, 2022				Revised Estimates			
			Qty	Capacity Charges	Energy Charges	Total	Qty	Capacity Charges	Energy Charges	Total
			MU	INR Cr	INR Cr	INR Cr	MU	INR Cr	INR Cr	INR Cr
1	NHPC	DULHASTI	47.81	11.67	13.19	24.86	38.06	15.39	9.15	24.54
2		PARBATI-III	14.69	6.38	2.37	8.75	12.86	6.40	2.03	8.43
3		URI II	39.27	5.32	8.45	13.78	25.11	7.94	5.49	13.43
4		SEWA II	12.84	0.22	3.57	3.79	7.16	0.89	1.94	2.83
5		CHAMERA III	23.25	5.30	4.81	10.11	20.45	5.33	4.13	9.46
6		TANAKPUR	6.35	1.13	1.08	2.21	4.81	1.17	0.81	1.99
7		DHAULI GANGA	29.60	3.95	3.77	7.72	25.98	5.55	3.28	8.83
8		CHAMERA I	84.06	7.45	10.07	17.52	77.17	8.33	9.03	17.35

Sr. No.	Sources	Generating Stations	Approved in T.O. dated 11th July, 2022				Revised Estimates			
			Qty	Capacity Charges	Energy Charges	Total	Qty	Capacity Charges	Energy Charges	Total
			MU	INR Cr	INR Cr	INR Cr	MU	INR Cr	INR Cr	INR Cr
9		CHAMERA II	36.04	4.04	3.80	7.84	29.77	4.22	3.07	7.28
10		URI	18.45	1.71	1.59	3.30	16.82	2.76	1.42	4.18
11		SALAL	9.50	0.73	0.61	1.34	8.42	1.76	0.53	2.29
11		Kishan Ganga	26.00	4.83	5.37	10.20	16.73	5.21	3.38	8.59
12		**Total (A)**	**347.86**	**52.73**	**58.68**	**111.42**	**283.34**	**64.93**	**44.25**	**109.18**
13	THDC	TEHRI	168.13	34.12	35.25	69.37	150.15	36.57	32.01	68.58
14		KOTESHWAR	17.85	3.64	4.32	7.96	14.11	4.43	3.35	7.78
15		**Total (B)**	**185.98**	**37.76**	**39.57**	**77.33**	**164.27**	**41.00**	**35.36**	**76.36**
16	SJVNL	RAMPUR	21.56	4.78	4.84	9.61	17.53	5.54	3.62	9.17
17		NATHPA JHAKRI	119.48	14.11	14.40	28.51	103.25	14.14	11.67	25.81
18		**Total (C)**	**141.04**	**18.89**	**19.24**	**38.12**	**120.78**	**19.69**	**15.29**	**34.98**
19	BBMB	BBMB 1 LU					38.03	-	15.01	15.01
20		BBMB 10 LU					380.33	-	150.09	150.09
21		Bhakhra	523.12	-	-	-	233.49	6.53	-	6.53
22		Dehar	80.97	-	14.16	14.16	35.84	4.90	-	4.90
23		Pong	14.63	-	141.60	141.60	7.12	1.96	-	1.96
24		**Total (D)**	**618.72**	**-**	**155.76**	**155.76**	**694.81**	**13.39**	**165.10**	**178.49**
25	NTPC	DADRI II	8.53	1.80	2.95	4.75	4.83	2.05	2.43	4.48
26		UNCHAHAR I	9.77	1.69	3.39	5.08	10.92	2.03	5.01	7.04
27		UNCHAHAR II	18.00	2.69	6.37	9.06	16.37	3.72	7.55	11.26
28		UNCHAHAR III	7.53	1.32	2.63	3.95	8.04	1.56	3.68	5.24
29		UNCHAHAR IV	27.38	5.70	8.96	14.66	25.00	5.87	10.69	16.55
30		KAHALGAON II	18.03	2.33	4.22	6.55	21.36	2.44	7.38	9.82
31		SINGRAULI	30.23	1.44	4.83	6.28	11.04	1.87	1.68	3.55
32		RIHAND III	59.80	7.60	8.75	16.35	40.08	7.33	6.28	13.61
33		RIHAND I	81.24	6.78	12.10	18.89	55.01	7.61	8.19	15.80
34		RIHAND II	69.99	4.62	10.46	15.09	48.68	4.77	7.09	11.86
35		Tanda II	21.25	6.44	6.13	12.57	24.53	6.61	6.88	13.49
36		KOLDAM HYDRO	50.50	13.58	13.00	26.58	43.70	13.77	10.98	24.76
37		SINGRAULI HYDRO	1.22	-	0.65	0.65	0.27	0.00	0.14	0.14

Sr. No.	Sources	Generating Stations	Approved in T.O. dated 11th July, 2022				Revised Estimates			
			Qty	Capacity Charges	Energy Charges	Total	Qty	Capacity Charges	Energy Charges	Total
			MU	INR Cr	INR Cr	INR Cr	MU	INR Cr	INR Cr	INR Cr
38		DADRI	18.63	7.30	6.36	13.65	16.52	9.85	5.43	15.28
39		AURIYA	12.11	6.96	5.24	12.21	5.66	6.49	2.39	8.88
40		ANTA	7.43	5.89	1.93	7.83	2.18	6.17	0.55	6.72
41		**Total (E)**	**441.64**	**76.14**	**97.97**	**174.15**	**334.19**	**82.14**	**86.34**	**168.48**
42	**APCPL**	JAJJAR	40.43	13.14	14.90	28.05	44.66	14.44	21.76	36.21
43		**Total (F)**	**40.43**	**13.14**	**14.90**	**28.05**	**44.66**	**14.44**	**21.76**	**36.21**
44	**MUNPL**	MEJA I	54.26	17.13	13.80	30.94	62.09	18.14	15.30	33.45
45		**Total (G)**	**54.26**	**17.13**	**13.80**	**30.94**	**62.09**	**18.14**	**15.30**	**33.45**
46	**NPCIL**	RAPP (5 & 6)	108.64	-	42.56	42.56	92.35	1.21	35.38	36.59
47		RAPP (3 & 4)	19.84	-	6.59	6.59	18.45	0.46	5.99	6.45
48		NAPS	88.14	-	27.50	27.50	85.90	0.51	26.16	26.67
49		**Total (H)**	**216.62**	**-**	**76.65**	**76.65**	**196.70**	**2.18**	**67.53**	**69.71**
50	**SECI**	Tranche-VI	120.66	-	34.43	34.43	151.48	0.14	43.93	44.07
51		**Total (I)**	**120.66**	**-**	**34.43**	**34.43**	**151.48**	**0.14**	**43.93**	**44.07**
52	**Intra Solar**	Crest	9.59	-	7.28	7.28	15.82	-	9.76	9.76
53		Pvt. Solar					1.31	-	1.16	1.16
54		Net Solar					0.90	-	0.32	0.32
55		**Total (I)**	**9.59**	**-**	**7.28**	**7.28**	**18.03**	**-**	**11.24**	**11.24**
56		**Total-1**	**2,176.80**	**215.78**	**518.32**	**734.10**	**2,070.36**	**256.05**	**506.10**	**762.15**
57	**Trans. Charges**	PGCIL	-	105.79	-	105.79	-	111.16	-	111.16
		UPPTCL					-	0.70	-	0.70
		ULDC					-	0.08	-	0.08
		NRLDC					-	0.31	-	0.31
58		**Total (J)**	**-**	**105.79**	**-**	**105.79**	**-**	**112.26**	**-**	**112.26**
59	**Short-Term**	Short Term & UI	(492.33)	-	(189.96)	(189.96)	(155.70)	-	-	-
60		**Total (K)**	**(492.33)**	**-**	**(189.96)**	**(189.96)**	**(155.70)**	**-**	**-**	**-**
61		**Total-2**	**(492.33)**	**105.79**	**(189.96)**	**(84.17)**	**(155.70)**	**112.26**	**-**	**112.26**
	Grand Total- (1+2)		**1,684.48**	**321.57**	**328.36**	**649.94**	**1,914.66**	**368.31**	**506.10**	**874.41**

Commission's Analysis:

The Commission while estimating the power purchase quantum and cost for FY 2022-23 has considered the actual quantum and cost of power as submitted by the Petitioner in replies to 2nd Deficiency Note. The Commission has considered the actual power purchase quantum and cost submitted by the Petitioner till December 2022.

The methodology followed for projecting the quantum and cost for the remaining months of FY 2022-23 has been discussed as follows:

5.6.1. Availability of power

Availability of energy from Central Generating Stations:

- The energy availability from NTPC, NHPC, NPCIL, SJVNL, BBMB, THDC, APCPL, MUNPL are considered based on the either the energy available as per the actuals submitted by the Petitioner vide replies to 2nd Deficiency Note or the average energy available in the past three financial years FY 2019-20 to FY 2021-22, whichever is lowest.

Availability of power from CREST and other Renewable Energy Sources

- The energy availability from CREST and other Renewable Energy are considered as per the actuals submitted by the Petitioner vide replies to 1st Deficiency Note.

Availability of power from the Open Market, Unscheduled Interchange and Banking

- The quantum of purchase/sale has been considered as estimated in the energy balance, discussed in the subsequent section.
- No quantum of energy under banking has been considered for FY 2022-23.
- The quantum of purchase/sale under UI has been considered as per actuals submitted by the Petitioner for the FY 2022-23.

5.6.2. Power Purchase Cost

Variable Charges:

- The variable charges for various power stations have been considered as per actuals submitted by the Petitioner for 9 months of FY 2022-23.
- For purchase/sale of power from the Open Market, the Average Power Purchase Cost (APPC) for the FY 2022-23 has been considered
- For purchase/sale of power due to UI has been considered as per actuals submitted by the Petitioner.

Fixed Charges:

- Actual Fixed Costs have been considered for all stations for first 9 months of FY 2022-23 and the remaining 3 months have been pro-rated.

Other Charges:

- Other charges have not been considered for FY 2022-23. The same shall be considered as per actuals during the true-up of FY 2022-23.

5.6.3. Transmission Charges

The Transmission Charges have been considered as submitted by the Petitioner.

5.6.4. Total power purchase quantum and cost

The following table provides the quantum of energy availability and the power purchase cost approved by the Commission for the FY 2022-23:

Table 56: Power Purchase Quantum (MU) and cost (INR Cr) approved by the Commission for the FY 2022-23

Sr. No.	Details of the stations	Units Purchased (MU)	Fixed Charges (INR. Cr.)	Variable Charges (INR. Cr.)	Total Charges (INR. Cr.)
A	**Central Sector Power Stations (HYDRO)**				
I	**NTPC (HYDRO)**				
1	*KOLDAM*	57.06	13.84	13.99	27.84
2	*SINGRAULI HYDRO*	0.47	-	0.24	0.24
	Subtotal	**57.53**	**13.84**	**14.23**	**28.07**
II	**NHPC**				
3	*DHULSATI*	46.18	10.42	10.79	21.21
4	*PARBATI-III*	16.78	6.31	2.58	8.89
5	*URI-II*	17.27	6.18	3.67	9.85
6	*SEWA-II*	11.69	3.81	3.10	6.91
7	*CHAMERA-III*	27.05	4.31	5.64	9.95
8	*TANAKPUR*	6.33	1.36	1.04	2.40
9	*DHAULIGANGA GANGA*	36.48	4.24	4.50	8.74
10	*CHAMERA-I*	55.55	8.19	6.33	14.52
11	*CHAMERA-II*	20.29	4.31	2.04	6.35
12	*URI*	16.54	1.69	1.36	3.05
13	*SALAL*	8.27	0.77	0.51	1.28
14	*KISHAN GANGA*	28.82	5.88	5.68	11.56
	Subtotal	**291.25**	**57.47**	**47.23**	**104.71**
III	**THDC**				
15	*TEHRI*	136.90	33.69	28.46	62.15
16	*KOTESHWAR*	17.32	3.99	4.16	8.15
	Subtotal	**154.22**	**37.68**	**32.62**	**70.30**
IV	**SJVNL**				
17	*RAMPUR*	23.20	5.02	4.70	9.72
18	*NATHPA JHAKRI*	99.32	15.94	11.05	26.99
	Subtotal	**122.52**	**20.97**	**15.75**	**36.71**
V	**BBMB**				
19	*BHAKRA*	390.49	-	-	-
20	*DEHAR*	83.26	-	11.91	11.91
21	*PONG*	20.33	-	135.48	135.48
	Subtotal	**494.08**	**-**	**147.38**	**147.38**

B	**Central Sector Power Stations (THERMAL/GAS/NUCLEAR)**				
VI	**APCPL THERMAL**				
22	*JHAJJAR*	**44.18**	**14.05**	**20.89**	**34.94**
VII	**NTPC (THERMAL)**				
23	*DADRI-II*	10.38	2.09	4.95	7.04
24	*UNCHAHAR-I*	6.86	1.68	3.04	4.72
25	*UNCHAHAR-II*	17.58	2.91	7.65	10.56
26	*UNCHAHAR-III*	10.05	1.32	4.47	5.79
27	*UNCHAHAR-IV*	20.64	6.18	8.59	14.77
28	*KAHALGAON-II*	22.59	2.28	7.50	9.78
29	*SINGRAULI*	22.82	1.79	3.40	5.19
30	*RIHAND-III*	48.35	7.83	7.32	15.15
31	*RIHAND-I*	58.70	6.65	8.65	15.30
32	*RIHAND-II*	61.48	5.40	8.90	14.31
33	*Tanda-II*	32.77	7.45	12.87	20.32
	Subtotal	**312.21**	**45.58**	**77.36**	**122.94**
VIII	**MUNPL**				
34	*MEJA-I*	**58.26**	**15.40**	**17.81**	**33.21**
IX	**NTPC (GAS)**				
35	*DADRI G*	0.14	6.42	0.19	6.60
36	*AURIYA G*	-	7.06	-	7.06
37	*ANTA G*	0.01	5.73	0.01	5.75
	Subtotal	**0.14**	**19.21**	**0.20**	**19.41**
X	**NPCIL**				
38	*RAPS 5 & 6*	80.52	-	30.09	30.09
39	*RAPS 3 & 4*	13.04	-	4.13	4.13
40	*NAPS*	67.66	-	20.11	20.11
	Subtotal	**161.22**	**-**	**54.33**	**54.33**
C	**RPO Obligation**				
XI	**SECI (WIND)**				
41	*Tranche-VI*	**151.48**	**0.14**	**43.93**	**44.07**
XII	**Intra-Solar**				
42	*Crest, Pvt.solar & Net Solar*	**18.03**	**-**	**11.24**	**11.24**
D	**SUB TOTAL**	**1,865.11**	**224.35**	**482.96**	**707.31**

E	**IEX Purchase/Sale**	**(69.91)**	**-**	**(25.94)**	**(25.94)**
G	**UI Purchase/ Sale**	**(8.70)**		**0.48**	**0.48**
i	*UI sales*	(44.52)		(20.70)	(20.70)
ii	*UI purchase*	35.83		21.18	21.18
H	**OTHER CHARGES**				
	PGCIL Charges and NRLDC Charges	**-**	**112.26**	**-**	**112.26**
I	**Total Power Purchase Cost**	**1,786.51**	**336.61**	**457.49**	**794.10**

The Commission approves the revised quantum of power purchase as 1,786.51 MU at the UT Periphery with total cost of INR 794.10 Cr in the APR of the FY 2022-23 which includes certain quantum based on T&D losses of 8.80% for FY 2022-23 as given in the Energy Balance section which is sold at the APPC of INR 3.71/kWh.

5.7. Renewable Purchase Obligation (RPO)

Petitioner's submission:

The Petitioner has submitted that the Commission had notified fourth amendment to the JERC (Procurement of Renewable Energy) (Fourth Amendment) Regulations, 2022 on 24th March, 2022. As per the aforesaid amendment, 18.35% of total energy is to be procured by EWEDC from renewable sources for FY 2022-23, which includes 9.00% from Solar, 9.00% from Non-Solar and 0.35% from Large Hydro Plants (commissioned after 8th March,2019).

EWEDC has submitted that the present tied up sources of renewable power generation will be sufficient to meet the Solar and Non-Solar RPO compliance. Solar power is sourced from the plants installed under gross & net metering arrangements and non-solar power is sourced from wind generating plants tied up through SECI. EWEDC further submits that total solar generation from net metering and gross plants is reconciled at the end of the financial year, thus the RPO compliance will be achieved at the end of the financial year, as experienced in past years. Hence no additional cost for compliance of Solar & Non-Solar RPO has been proposed.

The RPO requirement for FY 2022-23 and the compliance status as submitted by the Petitioner has been provided in the following table:

Table 57: Effective Energy Sales (Excluding Hydro) as submitted by Petitioner

S. No.	Particular	Formula	FY 2022-23
1	Energy Sales within UT (In MUs)	a	1,610.42
2	Hydro Power Purchase (In MUs)	b	1,307.17
3	Inter-State Loss	c	4.03%
4	Inter-State Loss (In MUs)	d=b*c	52.68
5	Intra-State Loss	e	12.38%
6	Intra-State Loss (In MUs)	f=e*(b-d)	155.36
7	Hydro Power Consumed (In MUs)	g=b-d-f	1,099.13
8	**Conventional Power Consumed (In MUs)**	**h=a-g**	**511.29**

Table 58: RPO Requirement (Solar and Non-Solar) as submitted by Petitioner

Particulars	RPO %	Conventional Power Consumed (in MU)	RPO for current year (MU)	Back-log (MU)	Total RPO Target (MU)	RPO Complied (MU)	RPO Balance

Solar	9.00%	511.29	46.02	-	46.02	18.03	27.98
Non-Solar	9.00%	511.29	46.02	-	46.02	151.75	-
Total	**18.00%**		**92.03**	**-**	**92.03**	**169.78**	**27.98**

EWEDC has submitted that the best efforts are being made to allocate a hydro generating source to meet the HPO compliance. However, this process may take some time to get finalize, hence, for the interim measure, adjustment of excess achieved solar and non-solar RPO targets may kindly be allowed to meet the HPO targets. Similar, provision was once allowed by the Commission in the Tariff Order dated 20th May, 2019 for meeting the non-solar RPO targets with the excess achieved solar RPO compliance. The Petitioner has requested to the Commission that in view of the same, the excess achieved solar and non-solar RPO targets may be allowed to comply the HPO targets. The details of HPO calculations for FY 2022-23 are as follows:

Table 59: HPO targets for FY 2022-23 (in MU)

Particulars	Approved in MYT order dated 11th July 2022	Revised Estimates
Sales within State (MU)	1536.24	1,610.42
HPO obligation (%)	0.35%	0.35%
HPO compliance for the year (MU)	**5.38**	**5.64**

Commission's analysis:

The Commission has approved the Renewable Purchase Obligation (RPO) and Hydro Purchase Obligation (HPO) for the 3rd MYT Control Period considering the JERC (Procurement of Renewable Energy), (Fourth Amendment) Regulations, 2022 notified on 24th March 2022 wherein the revised RPO targets and the HPO targets for the 3rd Control Period were approved and are as follows:

Table 60: RPO and HPO targets

Year	Minimum quantum of Renewable purchase obligation (RPO) of renewable energy (in kWh)				Total RPO
	Solar RPO	Non-Solar RPO			
		HPO	Other Non-Solar	Total Non-Solar	
FY 2022-23	9.00%	0.35%	9.00%	9.35%	18.35%
FY 2023-24	10.00%	0.66%	9.25%	9.91%	19.91%
FY 2024-25	11.00%	1.08%	9.50%	10.58%	21.58%
FY 2025-26	12.00%	1.48%	9.75%	11.23%	23.23%
FY 2025-26	13.00%	1.80%	10.20%	12.00%	25.00%

The effective energy sales used for calculation of the RPO has been arrived at as follows:

Table 61: Effective energy sales (adjusted for hydro) (in MU)

S.No.	Particular	Formula	FY 2022-23
1	Energy Sales within UT	a	1637.23
2	Hydro Power Purchase at ex-bus	b	1,166.12
3	Inter-State Loss (%)	c	4.03%
4	Inter-State Loss (MU)	d= c*b	46.99
5	Intra-State Loss (%)	e	8.80%
6	Intra-State Loss (MU)	f=e*(b-d)	98.48
7	Hydro Power Consumed (MU)	g=b-d-f	1020.64
8	Conventional Power consumed	h= a-g	616.58

In accordance with the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2022 and the Petitioner's submission, the Commission has determined the following Renewable Purchase Obligation for the Petitioner for the FY 2022-23. There was a backlog of 22.73 MUs of Non-solar in FY 2020-21. The Petitioner has complied to the same in FY 2021-22 as shown in the table below and the same shall be considered during True-up of FY 2021-22. Accordingly, no cumulative backlog of solar and non-solar compliance up to FY 2021-22 has been considered as per the provisional values as submitted by the Petitioner.

Table 62: Summary of Renewable Purchase Obligation (RPO) (MU)

Description	FY 2021-22 (as per provisional values submitted by the Petitioner)	FY 2022-23
Sales within State from conventional sources (MU)	**291.17**	**616.58**
RPO obligation (%)	**17.00%**	**18.00%**
Solar (G)	8.00%	9.00%
Non-Solar (H)	9.00%	9.00%
RPO obligation for the year (MU)	**49.50**	**110.98**
Solar (F * G)	23.29	55.49
Non-Solar (F * H)	26.21	55.49
Backlog upto previous FY	**22.73**	**0.00**
Solar	0.00	0.00
Non-Solar	22.73	0.00
Total RPO to be fulfilled for the year (MU)	**72.23**	**110.98**
Solar	23.29	55.49
Non-Solar	48.93	55.49
RPO Compliance (actual/proposed purchase) (MU)	**144.82**	**169.94**
Solar	45.22	18.03
Non-Solar	99.60	151.91
Standalone RPO Compliance Backlog (MU)	**-**	**37.46**
Solar	-	37.46
Non-Solar	-	-
Cumulative RPO Compliance Backlog (MU)	**-**	**37.46**
Solar	-	37.46
Non-Solar	-	-

Table 63: Hydro Purchase Obligation (HPO) approved by the Commission for FY 2022-23

Particulars	FY 2022-23
Sales within State (MU) (A)	1637.23
HPO obligation (%)	0.35%
HPO obligation for the year (MU)	**5.73**

The Commission has observed that the Licensee has projected under-achievement of Solar RPO. The actual compliance in respect of the pending RPO would be reviewed at the time of true-up along with the submission of supporting details such as purchase of RECs, bills from Solar/Non-Solar plants for the year.

The Commission has considered the cost towards compliance of RPO in the APR of FY 2022-23 in the Power Purchase cost approved for FY 2022-23.

The Commission observes that all the Hydro Power procured by EWEDC is from large hydropower projects commissioned before 8th March 2019. **In order to fulfil the HPO, the Petitioner is directed to procure power from large hydropower projects commissioned on and after 8th March 2019 and upto 31st March 2030.**

5.8. Energy Balance

Petitioner's submission

The energy requirement as submitted by the Petitioner has been shown in the following table:

Table 64: Energy Requirement of the System (MU)

Energy Available	**Petitioner's Submission**
Units Procured	2,052.33
Less: Outside Sale - Trading	(155.70)
Energy Available	1,896.62
Inter-State Transmission Loss	4.03%
Transmission Loss (Mus)	76.60
Net Energy Available at UT Periphery	**1,820.02**
Power procured from Gross & NET Metering Mode (In MUs)	18.03
Total Energy Available	**1,838.05**
Actual Energy Sales (Mus)	1,610.42
T&D Loss (%)	12.38%
T&D Loss (in MUs)	227.63
Total Energy Required at UT Periphery (MUs)	**1,838.05**
Demand Supply (Gap) / Surplus	**0.00**

Commission's analysis

Based on the revised estimates of energy sales and power purchase quantum, the Commission approves the following energy balance:

Table 65: Energy Balance approved by the Commission for the FY 2022-23 (MU)

Particulars	**Now Approved by Commission**
Energy Required	
Energy sales within the State (A)	1,637.23
T&D Loss (%) (B)	8.80%
Energy required at State Periphery (C = A/(1-B))	**1,795.20**
Within State Generation (Co-Gen) (D)	-
Net energy required at State Periphery (E = C – D)	**1,795.20**
Energy Available	
Central Generating Stations including UI over/under drawl (F)	1,695.60
Renewable Power (G)	169.51
Energy available at State Periphery (H = F + G)	**1,865.11**

Particulars	Now Approved by Commission
(Sale)/ Purchase in Open Market (I = E - H)	(69.91)
Net energy available at State Periphery (J = H + I)	**1,795.20**

The Commission has estimated a surplus of 69.91 MU. The revenue from sale of surplus power has been adjusted by the Commission in power procurement cost approved in the earlier section. Further, the Commission has approved higher energy procurement due to high T&D losses and the same is not considered while calculating the APPC.

5.9. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 61 of the JERC MYT Regulation, 2021 states the following:

"61.1 The Operation and Maintenance Expenses for the Retail Supply Business shall be computed in accordance with this Regulation.

61.2 O&M Expenses shall comprise of the following:

a) Employee expenses - salaries, wages, pension contribution and other employee costs;

b) Administrative and General expenses including insurance charges if any; and

c) Repairs and Maintenance expenses.

61.3 The Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the Distribution Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

61.4 O&M expenses for the nth Year of the Control Period shall be approved based on the formula given below:

O&Mn = (R&Mn + EMPn + A&Gn) x (1 - Xn) + Terminal Liabilities

Where,

R&Mn = K x GFAn-1 x (1+WPIinflation)

EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)

A&Gn = (A&Gn-1) x (1+CPIinflation)

'K' is a constant (expressed in %). Value of K for each Year of the Control Period shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPIinflation – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3) Years before the base Year;

WPIinflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three (3) Years before the base Year;

EMPn – Employee expenses of the Distribution Licensee for the nth Year;

A&Gn – Administrative and General expenses of the Distribution Licensee for the nth Year;

R&Mn – Repair and Maintenance expenses of the Distribution Licensee for the nth Year;

GFAn-1 – Gross Fixed Asset of the Distribution Licensee for the n-1th Year;

Xn is an efficiency factor for nth Year. Value of Xn shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;

Gn is a growth factor for the nth Year. Value of Gn shall be determined by the Commission for each Year in the Multi Year Tariff Order for meeting the additional manpower requirement based on Licensee's filings, benchmarking, approved cost by the Commission in past and any other factor that the Commission feels appropriate:

Provided that in case the Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, the O&M Expenses shall be determined on a case to case basis.

61.5 Terminal liabilities of employees of Licensee including pension expenses etc. shall be approved as per actuals submitted by the Licensee, subject to prudence check or be established through actuarial studies. Additionally, any variation due to changes recommended by the pay commission shall be allowed separately by the Commission, subject to prudence check.

61.6 For the purpose of estimation, the same value of factors – CPIinflation and WPIinflation shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors – CPIinflation and WPIinflation during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation.

Provided that at the time of truing up, the variation in the normative and actual O&M expenses shall be dealt in accordance with Regulation 15."

5.9.1. Employee Expenses

Petitioner's submission

The Petitioner has claimed the Employee Expenses, A&G Expenses and R&M Expenses for the FY 2022-23 based on the Operation and Maintenance expenses for the base year i.e. FY 2021-22, approved by the Commission in Tariff Order dated 11th July, 2022 and are escalated with inflation factor of appropriate indices and other approved factors to revised the O&M Expenses for FY 2022-23. The Petitioner has claimed Employee expenses of INR 92.82 Cr against the INR 92.92 Cr as approved by the Commission in Tariff Order dated 11th July, 2022.

The Petitioner has further submitted that due to implementation of 6th Pay Commission in FY 2022-23, the employee expenses have significantly increased due to the arrears. The impact of arrears is INR 25 Cr and is incorporated in the revised estimates of the employee cost for FY 2022-23.

Commission's analysis

In accordance with the JERC MYT Regulations, 2021, the Commission has determined the Employee expenses for each year of the MYT Control Period. The Regulation 6 of the JERC MYT Regulations, 2021 stipulates the following:

"6. Values for Base Year

6.1 The values for the Base Year of the Control Period shall be determined on the basis of the audited accounts or provisional accounts of last three (3) Years, and other factors considered relevant by the Commission:

Provided that, in absence of availability of audited accounts or provisional accounts of last three (3) Years, the Commission may benchmark the parameters with other similar utilities to establish the values for Base Year:

Provided further that the Commission may change the values for Base Year and consequently the trajectory of parameters for Control Period, considering the actual figures from audited accounts."

The Commission has considered the actual audited employee expenses from FY 2018-19 to FY 2020-21 to arrive at the Base Year estimates i.e. for the FY 2021-22. The average of these three years i.e. FY 2018-19 to FY 2020-21 has been considered as employee expenses for the FY 2019-20. This has been escalated with the average CPI Inflation of the last two years to arrive at the employee expenses for the Base Year i.e. FY 2021-22. The resultant employee expenses of the Base Year have been escalated by Growth Rate determined based on the manpower plan submitted by the Petitioner and the average CPI Inflation of the last three years to arrive upon the employee expenses of FY 2022-23. The CPI inflation has been computed as follows:

Table 66: CPI inflation computed for FY 2022-23

FY	Average of (April – March)	Increase in CPI Index	Average increase In CPI indices over 3 year
FY 2019-20	322.50	7.53%	5.89%
FY 2020-21	338.68	5.02%	
FY 2021-22	356.06	5.13%	

Further, the Commission has considered the Growth factor as submitted by the Petitioner in its 1st Deficiency reply.

Table 67: Manpower Growth factor considered by the Commission for FY 2022-23

Sl. No.	Particulars	FY 2022-23
1	Number of employees as on 1st April	1,071
2	Recruitment	108
3	Number of employees retired/ retiring during the year	93
4	Number of employees at the end of the year (1+2-3)	1,086
5	**Gn (Growth factor)**	**7.83%**

Accordingly, the employee expenses approved by the Commission in the MYT Control Period have been provided in the following table:

Table 68: Employee Expense approved by the Commission for 3rd MYT Control Period

Particular	Base Year	FY 2022-23
	FY 2021-22	
Gn (Growth factor as per the Manpower Plan approved in the Business Plan Order)		7.83%
CPI (3 previous year avg.) (in %)		5.89%
Employee Expenses (INR Cr)	**81.29**	**92.82**

The Commission approves Employee Expenses of INR 92.82 Cr. for the FY 2022-23, However, as the base expenses have been computed on the basis of provisional annual accounts, the trajectory may be revised again for the 3rd MYT Control Period after the availability of audited annual accounts for FY 2021-22.

Further, the Commission has not considered the impact of arrears is INR 25 Cr due to implementation of 6th Pay Commission in FY 2022-23 and the same shall be considered during True-up of FY 2022-23.

5.9.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has claimed A&G expenses of INR 6.65 Cr against the INR 6.65 Cr as approved by the Commission in Tariff Order dated 11th July, 2022.

Commission's analysis

Similar to the methodology followed while estimating the employee expenses, the Commission has determined the A&G expenses for the FY 2022-23 using the CPI Inflation for preceding three years.

The A&G expenses approved by the Commission in FY 2022-23 have been provided in the following table:

Table 69: A&G Expenses approved by the Commission for the FY 2022-23 (In INR Cr)

Particulars	Units	Base Year FY 2021-22	FY 2022-23
A&G Expenses (A)	INR Cr	6.28	
CPI Inflation (B)	%		5.89%
A&G Expenses C= A*(1+B)	INR Cr	**6.28**	**6.65**

The Commission approves the Administrative & General (A&G) expenses of INR 6.65 Cr for FY 2022-23.

5.9.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has claimed R&M expenses of INR 16.20 Cr against the INR 15.51 Cr as approved by the Commission in Tariff Order dated 11th July, 2022.

Commission's analysis

In accordance with the JERC MYT Regulations, 2021, the 'K' factor has been considered same as approved in the MYT Order. The 'K' factor is then multiplied with the opening GFA approved for (n-1)th year. The resultant amount is then escalated by latest WPI Inflation to arrive upon the R&M Expenses for FY 2022-23.

The WPI Inflation has been computed as follows:

Table 70: WPI inflation computed for 2nd MYT Control Period

FY	Average of (April – March)	Increase in WPI Index	Average increase In WPI indices over 3 years
FY 2018-19	119.79	4.28%	
FY 2019-20	121.80	1.68%	**5.32%**
FY 2020-21	123.38	1.29%	
FY 2020-21	139.41	13.00%	

The R&M expenses approved by the Commission in FY 2022-23 have been provided in the following table:

Table 71: R&M Expenses approved by the Commission for the FY 2022-23 (In INR Cr)

S. No	Particulars	FY 2022-23
1	Opening GFA (GFA_{n-1})	479.22
2	K factor approved (K) in MYT Order	3.21%
3	WPI Inflation (Average of preceding three years)	5.32%
4	**R&M Expenses = (K x (GFA_{n-1}) x ($1+WPI_{inflation}$)**	**16.21**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 16.21 Cr for FY 2022-23.

5.9.4. Total Operation and Maintenance Expenses (O&M)

The following table provides the O&M expenses, approved by the Commission in the Tariff Order for FY 2022-23, Petitioner's submission and O&M expenses now approved by the Commission.

Table 72: O&M Expenses approved by the Commission for the FY 2022-23 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	92.92	117.82	92.82
2	Administrative & General Expenses (A&G)	6.65	6.65	6.65
3	Repair & Maintenance Expenses	15.51	16.20	16.21
	Total Operation & Maintenance Expenses	**115.08**	**140.67**	**115.68**

The Commission approves the Operation & Maintenance (O&M) expenses of INR 115.68 Cr in the APR of the FY 2022-23.

5.10. Capital Expenditure and Capitalisation

Petitioner's submission

The following table provides the capital expenditure and capitalisation proposed during FY 2022-23 by the Petitioner.

Table 73: Capitalisation for FY 2022-23 as submitted by the Petitioner (In INR Cr)

Sr. No.	Particulars	FY 2022-23
1	Capital Expenditure	37.13
2	Capitalisation	64.48

Commission's analysis

The Commission with regard to the capital expenditure and capitalisation proposed to be undertaken during the year directed the Petitioner to submit the details of the schemes to be undertaken during the year along with the supporting documents.

Post thorough scrutiny and review of the supporting documents submitted by the Petitioner with regards to the capital expenditure and capitalization of schemes undertaken, the Commission approves the capital expenditure and capitalisation for the year as shown in the following table:

Table 74: Capitalisation approved by the Commission for the FY 2022-23 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission
1	Capital Expenditure	37.13	37.13	37.13
2	Capitalisation	73.64	64.48	64.48

The Commission approves capital expenditure of INR 37.13 Cr and capitalisation of INR 64.48 Cr in the APR of the FY 2022-23.

5.11. Capital Structure

Petitioner's Submission

The Petitioner has proposed that the entire capitalisation for FY 2022-23 shall be through deployment of capital equity.

Commission's analysis

Regulation 27 of the JERC MYT Regulations, 2021 specifies the following:

"27.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2022 shall be considered:

Provided that in case of retirement or replacement or De-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or De-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

27.2 For New Projects, the debt-equity ratio as on the Date of Commercial Operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 24, after prudence check for determination of tariff:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of tariff:

Provided also that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan for the Licensee for determination of tariff:

Provided also that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Provided further that the premium, if any, raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the scheme,

shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the transmission system or the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

27.3 Any expenditure incurred or projected to be incurred on or after April 1, 2022, as may be admitted by the Commission, as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in these Regulations"

In accordance with above, since the Petitioner has submitted that the entire capitalisation is funded through equity, equity higher than 30% of capitalisation has been considered as normative loan.

Therefore, in accordance with the JERC MYT Regulations, 2021, the Commission has determined the Capital Structure for FY 2022-23 as follows:

Table 75: Capital Structure considered by the Commission (INR Cr.)

S. No.	Particulars	FY 2022-23
1	Total Capitalisation	64.48
2	Less: Grant	0.00
3	**Net Capitalisation excluding grant**	**64.48**
4	Debt (%)	70%
5	Equity (%)	30%
6	**Normative Loan**	**45.13**
7	**Normative Equity**	**19.34**

5.12. Depreciation

Petitioner's submission

The closing GFA of the FY 2021-22 has been considered as opening GFA of the FY 2022- 23. Further, depreciation for each year has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year.

Based on the methodology given in JERC MYT Regulations, 2021, depreciation for the 3rd MYT Control Period is submitted as under:

Table 76: Depreciation submitted by the Petitioner for FY 2022-23 (INR Cr)

No.	Particulars	FY 2022-23
1	Opening Gross Fixed Assets (excluding Grants/ consumers Contribution and 90% depreciated assets, etc.)	479.22
2	Add: Addition During the Year	64.48
3	Less: Decapitalisation	-
4	Closing Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)	543.69
5	Average Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)	511.45
6	Weighted Average Rate of Depreciation (%)	3.52%
7	**Depreciation for the year**	**18.02**

Commission's analysis

Regulation 31 of the JERC MYT Regulations, 2021 stipulates the following:

"31.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided also that the no depreciation shall be allowed on the assets financed through consumer contribution, deposit work, capital subsidy or grant.

31.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

Provided further that the salvage value of Information Technology equipment and computer software shall be considered at zero (0) per cent of the allowable capital cost.

31.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets.

31.4 In case of existing assets, the balance depreciable value as on April 1, 2022, shall be worked out by *deducting the cumulative depreciation as admitted by the Commission up to March 31, 2021, from the gross depreciable value of the assets.*

31.5 The depreciation shall be chargeable from the first Year of commercial operations. In case of projected commercial operation of the assets during the Year, depreciation shall be computed based on the average of opening and closing value of assets:

Provided that depreciation shall be re-calculated during truing-up for assets capitalised at the time of truing up of each Year of the Control Period, based on documentary evidence of asset capitalised by the Applicant, subject to the prudence check of the Commission.

31.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

31.7 The depreciation for a Distribution Licensee shall be calculated annually, based on the Straight Line Method, over the Useful Life of the asset at rates specified in Appendix I of these Regulations.

31.8 In addition to allowable depreciation, the Distribution Licensee shall be entitled to advance against depreciation (AAD), computed in the manner given hereunder:

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure,

subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations:

Provided that advance against depreciation shall be permitted only if the cumulative repayment upto a particular Year exceeds the cumulative depreciation upto that Year:

Provided further that advance against depreciation in a Year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation upto that Year.

31.9 The Distribution Licensee shall provide the list of assets added during each Year of Control Period and list of assets completing 90% of depreciation in the Year along with Petition for annual performance review, true-up and tariff determination for ensuing Year.

31.10 The remaining depreciable value for a Distribution Licensee shall be spread over the balance useful life of the asset, on repayment of the entire loan."

The Commission has derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in JERC MYT Regulations, 2021, provided in the following table:

Table 77: Asset-wise depreciation rate considered by the Commission for weighted average rate for FY 2022-23 (%)

Description of Assets	Rate of Depreciation
Land & Land Rights	0.00%
Buildings	1.80%
Plant & Machinery	3.60%
Transformer	3.60%
Lines & Cables (HT & LT)	3.60%
Vehicles	18.00%
Furniture & Fixtures	6.00%
Office Equipment	6.00%
IT Equipment	15.00%
Testing & Measuring Equipment	6.00%
SCADA P&M	6.00%

The Commission has considered the closing GFA of FY 2020-21 as approved in the True-up of FY 2020-21, addition during the year of FY 2021-22 and assets depreciated upto 90% as submitted by the Petitioner to arrive at the closing GFA of FY 2021-22. This closing GFA of the FY 2021-22 has been considered as opening GFA of the FY 2022-23. Further, depreciation for each year has been computed on average Gross Fixed Assets (GFA) after considering the net addition approved during the year. The GFA of assets that have completed 90% depreciation but still included in the GFA have been excluded for the computation of Depreciation. Accordingly, the Commission shall consider the actual values during the True-up of the FY 2022-23.

The following table provides the depreciation as approved in the Tariff Order for FY 2022-23, Petitioner's submission and now approved by the Commission:

Table 78: Depreciation considered by the Commission for FY 2022-23 (INR Cr.)

Particular	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission
Opening Gross Fixed Assets	346.49	479.22	479.22
Addition During the FY	73.64	64.48	64.48
Adjustment/Retirement during the FY	-	-	200.03
Closing Gross Fixed Assets	420.13	543.69	343.67
Average Gross Fixed Assets	383.31	511.45	311.43
Weighted Avg. rate of Depreciation (%)	3.45%	3.52%	3.51%
Depreciation	**13.24**	**18.02**	**10.94**

The Commission approves a depreciation of INR 10.94 Cr. for the FY 2022-23.

5.13. *Interest on Loan*

Petitioner's Submission

Petitioner has considered the opening normative loans same as the closing normative loans for FY 2021-22 as submitted in True-Up for FY 2021-22. Further, addition to normative loans during the year has been kept 70% of proposed capitalisation for FY 2022-23. Repayment of the normative loans is kept in line with the JERC MYT Regulations and equivalent to the depreciation during the year. Interest rate equivalent to the SBI MCLR rate applicable on April 1st, 2021 plus 100 basis points i.e. 8.00% has been considered on the average normative loans to revised the interest on normative loans for FY 2022-23.

The following table provides the normative Interest on Loan projected for the FY 2022-23 based on JERC MYT Regulations, 2021 as under.

Table 79: Interest on Normative Loan submitted by the Petitioner for the FY 2022-23 (INR Cr)

Sr. No.	Particulars	FY 2022-23
1	Opening Normative Loan	-
2	Add: Normative Loan during the Year/GFA during the year	45.13
3	Less: Normative Repayment	18.02
4	Closing Normative Loan	27.12
4	Average Normative Loan	13.56
5	Rate of Interest (@SBI 1 Year MCLR rate+100 Basis Points)	8.00%
6	**Interest on Normative Loan**	**1.08**

Commission's analysis:

Regulation 29 of the JERC MYT Regulation, 2021 states the following:

"29.1 The loans arrived at in the manner indicated in Regulation 27 on the assets put to use, shall be considered as gross normative loan for calculation of interest on the loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided further that in case of De-capitalisation or retirement or replacement of assets, the loan capital shall be reduced to the extent of outstanding loan component of the original cost of the decapitalized or retired or replaced assets, based on documentary evidence.

29.2 The normative loan outstanding as on April 1, 2022, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2021, from the gross normative loan.

29.3 Notwithstanding any moratorium period availed by the Transmission Licensee or the Distribution Licensee, as the case may be, the repayment of loan shall be considered from the first Year of commercial operation of the project and shall be equal to the annual depreciation allowed in accordance with Regulation 31.

29.4 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Transmission Licensee or the Distribution Licensee:

Provided that at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the Year applicable to the Transmission Licensee or the Distribution Licensee shall be considered as the rate of interest after prudence check:

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered:

Provided further that if the Transmission Licensee or the Distribution Licensee does not have actual loan, then one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.

29.5 The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest:

Provided that at the time of truing up, the normative average loan of the Year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the Year.

29.6 For new loans proposed for each Financial Year of the Control Period, interest rate shall be considered as lower of (i) one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points, and (ii) weighted average rate of interest proposed by the Distribution Licensee.

29.7 The above interest computation shall exclude the interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, deposit work, capital subsidy or grant, carried out by Transmission Licensee or Distribution Licensee.

29.8 The finance charges incurred for obtaining loans from financial institutions for any Year shall be allowed by the Commission at the time of Truing-up, subject to prudence check.

29.9 The excess interest during construction on account of time and/or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Transmission or Distribution Licensee, any liquidated damages *recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:*

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

29.10 The Transmission Licensee or the Distribution Licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the equally between the beneficiaries; i.e., the Transmission Licensee and the Distribution Licensee or the Distribution Licensee and the Consumers of Distribution Licensee."

As the Petitioner only has normative loan and no actual loan i.e., no fixed assets in operation which are funded through loans, the Commission has considered the SBI 1 Year MCLR rate as on 1st April 2022, plus 100 basis points as Rate of Interest, in accordance with the JERC MYT Regulations, 2021.

The Interest on Loan has been calculated on the average loan during the year with the closing loan of the FY 2021-22 considered as opening loan of the FY 2022-23. The closing of FY 2021-22 has been considered based on the closing of FY 2020-21 as approved by the Commission in the True-up and addition during the year and normative repayment (which is depreciation) as submitted by the Petitioner and it works out to be Nil. Further, the normative loan addition during FY 2022-23 has been considered as per the capital structure approved in section 5.11 of this Order.

Repayment of the loan has been considered equivalent to the depreciation for the year as determined by the Commission in line with the JERC MYT Regulations, 2021.

The following table provides the Interest on Loan approved by the Commission for FY 2022-23.

Table 80: Interest and Finance Charges considered by the Commission for FY 2022-23 (INR Cr.)

Particular	FY 2022-23
Opening Normative Loan	-
Add: Normative Loan During the year	45.13
Less: Normative Repayment= Depreciation	10.94
Closing Normative Loan	34.19
Average Normative Loan	17.10
Rate of Interest (%)	8.00%
Interest and Finance Charges	**1.37**

The Commission approves Interest and Finance Charges as INR 1.37 Cr. for the FY 2022-23.

5.14. Return on Equity (RoE)

Petitioner's Submission

The Petitioner has considered the opening equity for FY 2022-23 equivalent to the closing equity of FY 2021-22. Further, 30% of proposed capitalisation during FY 2022-23 has been considered as equity addition during the year.

Table 81: Return on Equity submitted by the Petitioner for the FY 2022-23 (INR Cr)

S. No	Particulars	FY 2022-23
1	Opening Balance of Equity	137.81
2	Equity Addition during year (30% of Capitalization)	19.34
3	Closing Balance of Equity	157.15

S. No	Particulars	FY 2022-23
4	Average Equity Amount	147.48
5	Average Equity-Wires Business (90%)	132.73
6	Average Equity -Retail Supply Business (10%)	14.75
7	Return on Equity for Wires Business (%)	15.50%
8	Return on Equity for Retail Supply Business (%)	16.00%
9	**Return on Equity for Wires Business**	**20.57**
10	**Return on Equity for Retail Supply Business**	**2.36**
11	**Total Return on Equity**	**22.93**

Commission's analysis:

Regulation 28 of the JERC MYT Regulation, 2021 states the following:

"28.1 Return on equity shall be computed on the paid up equity capital determined in accordance with Regulation 27 for the assets put to use for the Transmission Licensee and shall be allowed in accordance with the prevalent CERC Tariff Regulations for transmission system.

28.2 The return on equity for the Distribution Wires Business shall be allowed on the equity capital determined in accordance with Regulation 27 for the assets put to use at post-tax rate of return on equity specified in the prevalent CERC Tariff Regulations for transmission system.

28.3 The return on equity for the Retail Supply Business shall be allowed on the equity capital determined in accordance with Regulation 27 for the assets put to use, at the rate of sixteen (16) per cent per annum.

28.4 The return on equity shall be computed on average of equity capital at the beginning and end of Year."

The closing equity of the FY 2021-22 is considered as opening equity of the FY 2022- 23. The closing of FY 2021-22 has been considered based on the closing of FY 2020-21 as approved by the Commission in the True-up and addition during the year as submitted by the Petitioner and it works out to be INR 137.82 Cr. The Commission has segregated the approved average equity (average of opening and closing equity) into average equity for Distribution Wires Business and Retail Supply Business based on the Allocation Statement provided in the JERC MYT Regulations, 2021 i.e., 90% allocation for the Distribution Wires Business and 10% allocation for the Retail Supply Business.

The Commission has considered a post-tax rate of 15.50% for the Distribution Wires Business and a post-tax rate of 16% for the Retail Supply Business. The equity component has been determined in accordance with the capital structure as discussed in section 5.11 of this Order. The rate of return on equity for the Distribution Wires Business shall be trued up based on the prevalent Regulations during the True-up. The following table provides the total return on equity approved for the FY 2022-23.

Table 82: Return on Equity considered by the Commission for FY 2022-23 (INR Cr.)

S. No	Particular	FY 2022-23
1	Opening Equity Amount	137.82
2	Equity Addition during year	19.34
3	Closing Equity Amount	157.16
4	Average Equity Amount	147.49
5	Average Equity (Wires Business)	132.74
6	Average Equity (Retail Supply Business)	14.75
7	Return on Equity for Wires Business (%)	15.50%
8	Return on Equity for Retail Supply Business (%)	16.00%
9	**Return on Equity for Wires Business**	**20.57**
10	**Return on Equity for Retail Supply Business**	**2.36**
11	**Total Return on Equity**	**22.93**

The Commission approves Return on Equity of INR 22.93 Cr. for the FY 2022-23.

5.15. Interest on Security Deposits

Petitioner's Submission

The opening security deposit is considered from the closing balance of deposit arrived for FY 2021-22. Addition of consumer security deposit projected as per new consumer expected to connect. The interest rate considered is 4.25% based on the RBI Bank rate applicable on the 1st April of the financial year in which tariff Petition is being filed.

Table 83: Interest on Security Deposit submitted by the Petitioner for the FY 2022-23 (INR Cr)

No.	Particulars	FY 2022-23
1	Opening Security Deposit	173.23
2	Add: Deposits during the Year	1.69
3	Less: Deposits refunded	-
4	Closing Security Deposit	174.91
5	Average Security Deposit	174.07
6	Rate of Interest (%)	4.25%
7	**Interest on Security Deposit**	**7.40**

Commission's analysis:

Regulation 29 of the JERC MYT Regulation, 2021 states the following:

"29.11 Interest shall be allowed on the amount held as security deposit held in cash from Retail Consumers at the Bank Rate as on 1st April of the Financial Year in which the Petition is filed:

Provided that at the time of truing-up, the interest on the amount of security deposit for the Year shall be considered on the basis of the actual interest paid by the Licensee during the Year, subject to prudence check by the Commission."

The Interest on security deposits has been calculated in accordance with the JERC MYT Regulations 2021, based on the average of the opening and closing consumer security deposits during the year. The closing Security Deposit of the FY 2021-22 is considered as opening Security Deposit of the FY 2022- 23. The closing of FY 2021-22 has been considered based on the closing of FY 2020-21 as approved by the Commission in the True-up and addition during the year as submitted by the Petitioner and it works out to be INR 173.23 Cr. The rate of interest has been considered equivalent to the prevailing RBI Bank rate. Net additions during the year have been considered for each year of the Control Period based on that considered by the Petitioner.

The following table provides the calculation of interest on consumer security deposits approved for FY 2022-23:

Table 84: Interest on Consumer security considered by the Commission for FY 2022-23 (INR Cr.)

No.	Particulars	FY 2022-23
1	Opening Security Deposit	173.23
2	Add: Deposits during the Year	1.69
3	Less: Deposits refunded	-
4	Closing Security Deposit	174.92

No.	Particulars	FY 2022-23
5	Average Security Deposit	174.07
6	Rate of Interest (%)	4.25%
7	**Interest on Security Deposit**	**7.40**

The Commission approves Interest on Security Deposit as INR 7.40 Cr. for the FY 2022-23.

5.16. Interest on Working Capital

Petitioner's Submission

The interest on working capital has been calculated based on the normative principles outlined in the JERC MYT Regulations, 2021.

The working capital requirement for the Control Period has been computed considering the following

- Receivable of two months of billing
- O&M Expenses of one month
- Maintenance Spares at 40% of repair and maintenance expenses for one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

The interest on working capital considered is the MCLR plus 200 basis points for SBI on 1st April 2022 plus 200 basis points i.e., 9.00% has been considered for computation of interest on working capital. The following table provides the Interest on working Capital proposed for FY 2022-23.

Table 85: Interest on Working Capital submitted by the Petitioner for the FY 2022-23 (In INR Cr)

Sr. No.	Particulars	FY 2022-23
1	O&M Expenses for 1 month	156.25
2	Maintenance Spares (@ 40% of R&M Expenses for one (1) month)	9.64
3	Receivables equivalent to two (2) months	0.54
4	Less: Amount, if any, held as security deposits	174.07
5	Less: Power Purchase cost for one (1) month	72.87
6	**Total Working Capital**	**(80.50)**
7	Rate of Interest	9.00%
8	**Interest on Working Capital**	**0.00**

Commission's analysis:

Regulation 64 of the JERC MYT Regulation, 2021 states the following:

"64.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Retail Supply Business for the Financial Year, computed as follows:

a) O&M Expenses for one (1) month; plus

b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus *c) Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff;*

Less

d) Power Purchase cost for one (1) month; plus

e) Amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from Consumers except the security deposits held in the form of Bank Guarantees:

Provided that at the time of truing up for any Year, the working capital requirement shall be recalculated on the basis of the values of components of working capital approved by the Commission in the truing up."

The Commission has computed the Interest on Working Capital for FY 2022-23 in accordance with the JERC MYT Regulations, 2021. The interest rate has been considered as 9.00% (1 year MCLR as on 1st April 2022 i.e., 7.00% + 200 basis points). The computation of interest on working capital is shown in the following table:

The following table provides the Interest on working Capital considered for each year of the FY 2022-23.

Table 86: Interest on working capital considered by the Commission for FY 2022-23 (INR Cr.)

Particulars	FY 2022-23
O&M Expense for 1 month	9.64
Maintenance spares at 40% of R&M expenses for one (1) month;	0.54
Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff	155.79
Less: Amount held as security deposits	174.07
Less: Power Purchase cost for one (1) month	66.18
Net Working Capital	**(74.27)**
Rate of Interest (%)	9.00%
Interest on Working Capital	**0.00**

The Commission approves Interest on Working Capital as NIL for the FY 2022-23.

5.17. Income Tax

Petitioner's Submission

The Petitioner has not made any submission in this regard.

Commission's analysis:

Regulation 33 of JERC MYT Regulations, 2021 stipulates the following:

"33. Tax on Income

33.1 The treatment of tax on income for a Transmission Licensee shall be in accordance with the prevalent CERC Tariff Regulations.

33.2 The Commission in its MYT Order shall provisionally approve Income Tax payable for each Year of the Control Period, if any, based on the actual income tax paid, including cess and surcharge on the same, if any, as per latest audited accounts available for the Distribution Licensee, subject to prudence check.

33.3 Variation between Income Tax actually paid, including cess and surcharge on the same, if any, and approved, if any, on the income stream of the Licensed business of the Distribution Licensees shall be reimbursed to/recovered from the Distribution Licensees, based on the documentary evidence submitted at the time of truing up of each Year of the Control Period, subject to prudence check.

33.4 Under-recovery or over-recovery of any amount from the Consumers on account of such tax having been passed on to them shall be adjusted every Year on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors. The Distribution Licensee may include this variation in its truing up Petition:

Provided that tax on any income stream other than the core business shall not be a pass-through component in tariff and tax on such other income shall be borne by the Distribution Licensee."

Since the Petitioner has paid no Income tax in the previous years, no income tax liability is computed for the FY 2022-23 and the same shall be Trued-up based on the actual income tax paid by the Petitioner.

5.18. Provision for Bad & Doubtful Debts

Petitioner's Submission

The Petitioner has submitted that the Bad and doubtful debts for FY 2022-23 are claimed as per Regulation 63 of the JERC MYT Regulations, 2021. Revised estimates are kept equivalent to 1% of the revised Aggregate Revenue Requirement for FY 2022-23 and claimed as INR 9.38 Cr.

Commission's analysis

Regulation 63 of the JERC MYT Regulation, 2021 states the following:

"63.1 The Commission may allow bad debts written off as a pass through in the Aggregate Revenue Requirement, based on the trend of bad debts written off in the previous years, subject to prudence check:

Provided that the Commission shall true up the bad debts written off in the Aggregate Revenue Requirement, based on the actual write off of bad debts excluding delayed payment charges waived off, if any, during the year, subject to prudence check:

Provided also that the provision for bad and doubtful debts shall be limited to 1% of the annual Revenue Requirement of the Distribution Licensee:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realized from such bad debt, the same shall be included as an uncontrollable item under the Non-Tariff Income of the year in which such revenue is realised."

The Commission also has not considered any Provision for Bad & Doubtful Debts for the FY 2022-23. The same shall be accounted for as per actuals during the True-up.

5.19. Non-Tariff Income (NTI)

Petitioner's Submission

The NTI proposed for each year of the FY 2022-23 has been shown in the following table:

Table 87: Non-Tariff Income claimed by the Petitioner for the FY 2022-23 (INR Cr)

Particulars	FY 2022-23
Miscellaneous Charges	9.09
Miscellaneous Receipts	6.62
Sale of Surplus Power (PX & UI)	115.91
Rebate on timely payment of bills	4.74
Total Non-tariff income	**136.36**

Commission's analysis:

Regulation 65 of the JERC MYT Regulations, 2021 stipulates the following:

"65. Non-Tariff Income

65.1 The amount of Non-Tariff Income relating to the retail supply of electricity as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in calculating the tariff for retail supply of electricity by the Distribution Licensee:

Provided that the Distribution Licensee shall submit full details of its forecast of Non-Tariff Income to the Commission along with its application for determination of tariff.

65.2 The Non-Tariff Income shall inter-alia include:
(a) Income from rent of land or buildings;
(b) Income from sale of scrap;
(c) Income from statutory investments;
(d) Interest on advances to suppliers/contractors;
(e) Rental from staff quarters;
(f) Rental from contractors;
(g) Income from hire charges from contactors and others;
(h) Income from advertisements, etc.;
(i) Meter/metering equipment/service line rentals;
(j) Service charges;
(k) Consumer charges;
(l) Recovery for theft and pilferage of energy;
(m) Rebate availed on account of timely payment of bills;
(n) Miscellaneous receipts;
(o) Deferred Income from grant, subsidy, etc., as per Annual Accounts;
(p) Prior period income, etc.:

Provided that the interest/dividend earned from investments made out of Return on Equity corresponding to the Retail Supply Business of the Distribution Licensee shall not be included in Non-Tariff Income:

Provided further that any income earned by a Distribution Licensee by sale of power to other Distribution Licensees or to Consumers as per Section 49 of the Act using the existing power purchase agreements or bulk supply capacity allocated to the Distribution Licensee's Area of Supply shall be reduced from the Aggregate Revenue Requirement of the Distribution Licensee for the purpose of determination of tariff. Such reduction shall be carried out in accordance with Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017, as amended from time to time."

The Commission considers the same NTI as approved by the Commission in the Tariff Order for FY 2022-23. The same shall be Trued-up on actual basis. The NTI approved for FY 2022-23 has been shown in the following table:

Table 88: Non-Tariff Income considered by the Commission for FY 2022-23 (INR Cr.)

Particulars	MYT order dated 11th July 2022	Petitioner's submission	Approved now
Non-Tariff Income	**17.66**	**136.36**	**17.66**

5.20. Aggregate Revenue Requirement (ARR)

Petitioner's Submission

Based on the expenses as detailed above, the Petitioner submitted the net aggregate revenue requirement for FY 2022-23 is shown in the following table:

Table 89: ARR submitted by the Petitioner for FY 2022-23 (INR Cr.)

S. No.	Particulars	FY 2022-23
1	Power Purchase Cost	874.41
2	Operation & Maintenance Expenses	140.67
3	Depreciation	18.02
4	Interest and Finance charges	1.08
5	Interest on Working Capital	-
6	Interest on Security Deposit	7.40
7	Return on Equity	22.93
8	Provision for Bad Debt	9.38
9	Income Tax	-
10	**Total Revenue Requirement**	**1,073.89**
11	Less: Non-Tariff Income	136.36
12	**Net Revenue Requirement**	**937.53**

Commission's Analysis

On the basis of the detailed analysis of the cost parameters of the ARR the net revenue requirement for FY 2022-23 is approved as provided in the following table:

Table 90: ARR approved by the Commission for the FY 2022-23 (INR Cr.)

Particulars	FY 2022-23		
	Approved in Tariff Order for FY 2022-23	Claimed by the Petitioner	Approved in APR
Power Purchase Cost	649.94	874.41	794.10
Operation & Maintenance Expenses	115.08	140.67	115.68
Depreciation	13.24	18.02	10.94
Interest and Finance charges	1.53	1.08	1.37
Interest on Working Capital	-	-	-
Interest on Security Deposit	8.89	7.40	7.40
Return on Equity	22.79	22.93	22.93
Provision for Bad Debt	-	9.38	-
Income Tax	-	-	-

Particulars	FY 2022-23		
	Approved in Tariff Order for FY 2022-23	Claimed by the Petitioner	Approved in APR
Total Revenue Requirement	**811.47**	**1,073.89**	**952.43**
Less: Non-Tariff Income	17.66	136.36	17.66
Net Revenue Requirement	**793.81**	**937.53**	**934.77**

The Commission approves the net ARR of INR 934.77 Cr in the APR of the FY 2022-23.

5.21. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has calculated the revenue from sale of power at existing tariff on the basis of energy sales in the territory for the FY 2022-23. Besides no FPPCA has been billed during the FY 2022-23 as per Commission's order dated 30th March 2021 wherein the Commission has ruled that no FPPCA shall be recovered from the consumers from 1st April 2021 onwards till further orders of the Commission. Further, the Commission had discontinued the Regulatory Surcharge from the FY 2019-20. EWEDC in line with the order of Commission is not billing any Regulatory Surcharge for FY 2022-23.

The Petitioner has submitted the following provisional revenue of during FY 2022-23.

Table 91: Revenue at existing tariff as submitted by the Petitioner (In INR Cr)

Sr. No.	Category of Consumers	Approved in T.O. dated 11th July, 2022	FY 2021-22 (Estimated)
A	Domestic – LT	351.46	349.57
B	Domestic – HT	13.84	10.30
C	Commercial – LT	117.77	142.69
D	Commercial – HT	126.73	131.27
E	Large Supply	68.39	71.85
F	Medium Supply	57.76	60.08
G	Small Power	7.92	8.79
H	Agriculture	0.39	0.39
I	Public Lighting	7.64	8.77
J	Bulk Supply	40.54	42.51
K	Others Temporary Supply	2.88	3.03
	Total	**795.34**	**829.26**

Commission's analysis

The category wise/ sub-category wise and slab-wise revenue at existing retail tariff is calculated as per the tariff rates applicable for FY 2022-23. The revenue from demand charges and the energy charges have been projected for each category/ sub-category and slab. The Commission has considered suitable assumptions wherever necessary. The Commission directs the Petitioner to submit slab-wise revenue with bifurcation of fixed and variable along with the next tariff petition. The revenue from category/ sub-category/ slab-wise revenue as computed by the Commission for FY 2022-23 has been shown in the following table:

Table 92: Revenue at existing tariff computed by Commission for FY2022-23 (In INR Cr)

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)
1	**DOMESTIC SUPPLY (DS)**	**796.50**	**16.74**	**347.90**	**364.65**	**4.58**

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)
A	LT Domestic					
1	0-150 units	63.64	4.30	17.50	21.80	3.43
2	151-400 units	232.50	5.77	98.81	104.59	4.50
3	401 and above units	469.52	6.04	218.32	224.37	4.78
B	HT Domestic	30.84	0.62	13.26	13.88	4.50
2	**COMMERCIAL / NON RESIDENTIAL (NRS)**	**486.80**	**54.06**	**229.65**	**283.70**	**5.83**
A	LT Commercial					
1	0-150 units (Single Phase)	6.12	0.66	2.75	3.42	5.59
2	151-400 units (Single Phase)	13.55	0.30	6.37	6.67	4.92
3	401 and above units (Single Phase)	23.08	0.15	11.54	11.69	5.07
1	0-150 units (Three Phase)	0.04	3.48	0.02	3.50	924.09
2	151-400 units (Three Phase)	6.49	3.21	3.05	6.26	9.64
3	401 and above units (Three Phase)	180.64	16.25	90.32	106.57	5.90
B	HT Commercial	256.88	30.01	115.60	145.60	5.67
3	**INDUSTRY**	**248.17**	**29.08**	**108.21**	**137.29**	**5.53**
1	Large Industrial Power Supply (LS)	126.45	14.16	56.90	71.06	5.62
2	Medium Industrial Power Supply (MS)	103.30	14.12	43.39	57.51	5.57
3	Small Industrial Power Supply (SP)	18.42	0.80	7.92	8.72	4.73
4	**AGRICULTURAL PUMPING SUPPLY(AR)**	**1.57**	**0.00**	**0.41**	**0.41**	**2.60**
1	Agricultural Pumping Supply	1.57	0.00	0.41	0.41	2.60
5	**PUBLIC LIGHTING (PL)**	**15.22**	**0.54**	**7.31**	**7.85**	**5.16**
6	**Bulk Supply (BS)**	**84.71**	**7.43**	**35.58**	**43.01**	**5.08**
1	Bulk Supply	84.71	7.43	35.58	43.01	5.08
7	**Temporary Supply**	**3.57**	**0.00**	**2.89**	**2.89**	**8.09**
1	Temporary Supply	3.57	0.00	2.89	2.89	8.09
8	**Electric Vehicle Charging Station**	**0.68**	**0.00**	**0.24**	**0.24**	**3.60**
1	Electric Vehicle Charging Station	0.68	0.00	0.24	0.24	3.60
	TOTAL	**1637.23**	**107.86**	**732.19**	**840.05**	**5.13**

The Commission has determined revenue from sale of power at existing tariff as INR 840.05 Cr in the APR of the FY 2022-23.

5.22. Standalone Revenue Gap/ (Surplus)

Petitioner's submission

Based on the ARR and the revenue from retail tariff, the standalone revenue gap of INR 108.27 Cr is arrived at in the APR for the FY 2022-23.

Commission analysis

The Standalone Revenue Gap/Surplus is arrived at and approved as follows:

Table 93: Standalone Revenue Gap/ (Surplus) at existing tariff (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission
1	Annual Revenue Requirement	793.81	937.53	934.77
2	Revenue from sale of power at existing tariff	796.44	829.26	840.05
3	FPPCA	-	-	-
4	Regulatory Surcharge	-	-	-
	Revenue Gap/(Surplus)	**(2.63)**	**108.27**	**94.72**

The standalone gap at existing retail tariff is INR 94.72 Cr in the APR of the FY 2022-23. The estimated gap is carried over to the next year and has been considered while determining the tariff for the FY 2023-24.

6. Chapter 6: Annual Revenue Requirement for the FY 2023-24

6.1. Background

The ARR for FY 2023-24 was approved in the MYT Order issued for the 3rd Control Period (FY 2022-23 to FY 2024-25). In this Chapter, the Commission determines the Aggregate Revenue Requirement (ARR) for the FY 2023-24 based on the actual information made available for the previous years and the various norms defined in the MYT Order. The determination of Aggregate Revenue Requirement has been done in accordance with the JERC MYT Regulations, 2021.

6.2. Approach for determination of ARR for the FY 2023-24

The Commission has computed the individual elements constituting the Aggregate Revenue Requirement for FY 2023-24 based on figures approved in the Business Plan and MYT Order, the actual information available of various parameters for the FY 2020-21 as per the audited accounts and the provisional information available for the FY 2021-22. The ARR and revenue at existing tariff has been determined for FY 2023-24 to arrive at the revenue gap/surplus for the FY 2023-24.

6.3. Projection of Number of consumers, Connected Load and Energy Sales

Petitioner's Submission

The Petitioner has submitted that the energy sales for FY 2023-24 are projected by the considering the energy sales mix of the normal years, excluding the energy sales data of those financial years who were affected largely by COVID-19 Pandemic. In FY 2021-22 & FY 2020-21, the economic activities were affected largely due to COVID-19 Pandemic, hence both the years are excluded for projection of energy sales for FY 2023-24. The revised projection of energy sales for FY 2023-24 are estimated by applying the CAGR of two/three/four/five/seven year on the revised energy sales figures of FY 2022-23. However, where the negative trend has been observed, the actual figures of FY 2022-23 with nil growth rate has been considered for projection purpose.

Table 94: Category-wise Energy Sales (MU) proposed by the Petitioner for FY 2023-24

Category	2022-23	CAGR		2023-24
	Estimated	Basis	Rate	Projected
Domestic (LT+HT)	787.30	3 Year	1.70%	800.71
Commercial (LT+HT)	474.93	4 Year	1.12%	480.26
Large Supply	122.43	2 Year	1.62%	124.41
Medium Supply	103.54	3 Year	0.00%	103.54
Small Power	18.59	4 Year	0.00%	18.59
Agriculture	1.49	3 Year	2.73%	1.53
Public Lighting	14.69	5 Year	0.00%	14.69
Bulk Supply	83.53	4 Year	1.80%	85.03
Others Temporary Supply	3.92	2 Year	0.00%	3.92
Total	**1,610.42**			**1,632.68**

The revised number of consumers and connected load for FY 2023-24 are projected based on the actual figures for FY 2021-22 as per the provisional accounts and year-over-year implementation of CAGR of two/three/four-year determined as per the actual figure of the period FY 2017-18 to FY 2020-21. However, where the negative trend has been observed, the actual figures of FY 2022-23 with nil growth rate has been considered for projection purpose. Further, to rationalise of erratic variations in the growth trend, manual growth rate instead of CAGR has been considered.

Table 95: Category-wise connected load (kW) proposed by the Petitioner for FY 2023-24

Category	2021-22	CAGR		2023-24
	Actual (Unaudited)	Basis	Rate (YOY Basis)	Projected
Domestic- LT	8,88,134	2 Year	1.12%	9,08,162
Domestic- HT	32,635	2 Year	0.00%	32,635
Domestic (LT+HT)	**9,20,770**			**9,40,797**
Commercial-LT	2,25,961	2 Year	2.00%	2,35,081
Commercial-HT	2,51,140	3 Year	0.88%	2,55,564
Commercial (LT+HT)	**4,77,101**			**4,90,644**
Large Supply	69,425	2 Year	0.57%	70,220
Medium Supply	69,138	2 Year	0.00%	69,138
Small Power	21,909	2 Year	1.26%	22,464
Agriculture	1,179	Manual	0.05%	1,180
Public Lighting	4,538	2 Year	0.00%	4,538
Bulk Supply	41,291	2 Year	0.00%	41,291
Temp. Supply	1,502	4 Year	0.00%	1,502
Total	**16,06,853**			**16,41,774**

Table 96: Category-wise number of consumers proposed by the Petitioner for FY 2023-24

Category	FY 2021-22	CAGR		FY 2023-24
	Actual (unaudited)	Basis	Rate (YOY basis)	Revised Estimated
Domestic- LT	2,00,874	2 Year	0.85%	2,04,286
Domestic- HT	65	4 Year	2.02%	68
Domestic (LT+HT)	**2,00,939**			**2,04,354**
Commercial-LT	26,144	2 Year	1.55%	26,962
Commercial-HT	440	2 Year	1.87%	457
Commercial (LT+HT)	**26,584**			**27,418**
Large Supply	**96**	2 Year	0.00%	**96**
Medium Supply	**1,248**	2 Year	0.00%	**1,248**
Small Power	**1,337**	2 Year	0.99%	**1,364**
Agriculture	**289**	Manual	0.05%	**289**
Public Lighting	**1,514**	2 Year	7.59%	**1,752**
Bulk Supply	**519**	2 Year	0.00%	**519**

Category	FY 2021-22	CAGR		FY 2023-24
	Actual (unaudited)	Basis	Rate (YOY basis)	Revised Estimated
Temp. Supply	**458**	2 Year	5.31%	**508**
Total	**2,32,984**			**2,37,548**

Commission's analysis

The Commission in the Business Plan Order dated 11th July 2022 had estimated the category wise energy sales, number of consumers and connected load based on historical trends. The detailed methodology has been discussed in the Business Plan Order for the 3rd MYT Control Period. The Commission has revised the energy sales, connected load and number of consumers as approved in the Business Plan as per the revisions of base year.

Table 97: Category-wise number of consumers approved by the Commission for FY 2023-24

Category	2022-23	CAGR		2023-24
	Estimated	Basis	Rate	Projected Now
Domestic (LT+HT)	203,350	4 year	1.20%	205,790
Commercial (LT+HT)	27,418	3 year	3.14%	28,279
Large Supply	96	2 year	0.51%	97
Medium Supply	1,254	4 year	0.30%	1,258
Small Power	1,348	4 year	0.82%	1,359
Agriculture	289	5 year	0.16%	290
Public Lighting	1,627	1 year	7.48%	1,749
Bulk Supply	522	Subjective	0.00%	522
Others Temporary Supply	477	Subjective	0.00%	477
Electric Vehicle Charging Station	1	Subjective	0.00%	1
Total	**236,383**			**239,821**

Table 98: Category-wise connected load (kW) approved by the Commission for FY 2023-24

Category	2022-23	CAGR		2023-24
	Estimated	Basis	Rate	Projected Now
Domestic (LT+HT)	939,553	3 year	2.04%	958,720
Commercial (LT+HT)	483,660	3 year	2.19%	494,252
Large Supply	69,425	Subjective	0.00%	69,425
Medium Supply	69,213	Subjective	0.00%	69,213
Small Power	22,455	4 year	2.49%	23,014
Agriculture	1,215	5 year	2.92%	1,251
Public Lighting	4,538	Subjective	0.00%	4,538
Bulk Supply	41,300	Subjective	0.00%	41,300
Others Temporary Supply	1,668	Subjective	0.00%	1,668
Electric Vehicle Charging Station	3,806	Subjective	0.00%	3,806

Total	**1,636,833.29**			**1,667,186.94**

Table 99: Category-wise energy sales (MU) approved by the Commission for FY 2023-24

Category	2022-23	CAGR		2023-24
	Estimated	Basis	Rate	Projected Now
Domestic (LT+HT)	796.50	4 year	3.62%	825.34
Commercial (LT+HT)	486.80	4 year	1.12%	492.25
Large Supply	126.45	5 year	1.10%	127.84
Medium Supply	103.30	Subjective	0.00%	103.30
Small Power	18.42	Subjective	0.00%	18.42
Agriculture	1.57	3 year	2.85%	1.62
Public Lighting	15.22	Subjective	0.00%	15.22
Bulk Supply	84.71	2 year	1.40%	85.90
Others Temporary Supply	3.57	Subjective	0.00%	3.57
Electric Vehicle Charging Station	0.68	Subjective	0.00%	0.68
Total	**1,610.42**			**1,674.13**

6.4. *Inter-State Transmission Loss*

Petitioner's submission

The Petitioner has considered the Inter-State Transmission Loss of 4.03%, as approved in Tariff Order dated 11th July 2022.

Commission's analysis

The Commission in the ARR of FY 2023-24 considers the Inter-State transmission losses in line with those approved in the Tariff Order dated 11th July 2022. The same shall be revised based on actuals during the True-up exercise.

The following table provides the Inter-State Transmission Loss approved by the Commission in the Tariff Order for FY 2022-23, the Petitioner's submission and Loss level now approved by the Commission.

Table 100: Inter-State Transmission Loss (%) approved by the Commission for the FY 2023-24

S. No	Particulars	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission
1	Inter-State Transmission Losses	4.03%	4.03%	4.03%

The Commission approves Inter-State Transmission Loss of 4.03% for the ARR of the FY 2023-24.

6.5. *Intra-State Distribution Loss*

Petitioner's submission

The Petitioner submitted that as per the Tariff Order dated 11th July, 2022, the Commission has approved the T&D loss target for FY 2023-24 as 8.40%. EWEDC submits that it is making concerted efforts toward reduction the T&D losses. However, it is pertinent to note here that UT of Chandigarh is a land locked territory and due to limitation in geographical expansion there is very little possibility in increase of energy sales as well as drastic reduction in overall T&D losses.

EWEDC also submits that a major portion of energy sales ~60% is contributed by the LT consumer categories. Due to limitation of geographical expansion of UT of Chandigarh, the electrical network of the EWEDC got inherited with consumers having higher T&D losses for electricity supply. Also, the absence of interconnection point within the UT boundary has caused higher T&D losses. The input energy for EWEDC is being metered at 400 kV Nalagarh, 220 kV Mohali and 220 kV Dhoolkot (BBMB), which is causing additional burden ~4% of interstate circuit losses to EWEDC

The Petitioner has further submitted that as per the Abraham Committee recommendations given on fixation of loss reduction targets for Distribution Utilities at time of the roll out of the APDRP Scheme, the Committee has suggested that distribution utilities having losses more than 40% shall be given loss reduction targets of 4% per year; utilities having losses between 30%-40% shall be given reduction target of 3% per years; utilities having losses between 20%-30% shall be given reduction target of 2% per year and utilities having losses below 20% shall be given reduction target of 1% per year. Hence, the Petitioner has requested the Commission that in consideration to the above submission, the targets for T&D losses may kindly be realigned in a pragmatic manner. Further, the T&D losses in last ten years has reduced from 20.20% to 12.88% from FY 2011-12 to FY 2021-22, which evidently depicts that annual loss reduction ~0.70% can be achieved under the business-as-usual scenario. However, drastic reduction in losses to achieve the T&D loss target of 8.40% approved by the Commission in the Tariff Order Dated 11th July, 2017, would not be possible with any capital intervention. Accordingly, the Petitioner has proposed a T&D loss target of 11.88% for FY 2023-24.

Commission's analysis

The Commission in the Business Plan of 3rd MYT Control Period in Order dated 11th July 2022 had discussed in detail the approach and the basis of setting the Intra-State Distribution Loss trajectory for the MYT Period from FY 2022-23 to FY 2024-25 and retained the same in MYT Order. The Commission decides to retain the same T&D loss as approved earlier.

The following table provides the Intra-State Distribution Loss approved in the Tariff Order for FY 2022-23, the Petitioner's submission and now approved by the Commission.

Table 101: Intra-State Distribution Loss (%) approved by the Commission for the FY 2023-24

S. No	Particulars	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission
1	Intra-State Distribution Loss	8.40%	11.88%	8.40%

The Commission approves Intra-State Distribution Loss of 8.40% in the ARR of the FY 2023-24.

6.6. *Power Purchase Quantum & Cost*

Petitioner's submission:

The Petitioner has submitted that it does not have any generation capacity and relies entirely on the allocation of power from the Central Generating Stations like NTPC, NHPC, BBMB, NPCIL, SJVNL, APCPL, MUNPL etc. The firm and average power allocation from the unallocated power pool of the Central Generating Stations & Other Power Plants have been considered to project the energy availability for FY 2023-24.

The Energy availability for FY 2023-24 from various generating stations is projected based on the following methodology:

a. The firm and unallocated power allocation from the various Central Generating Stations and Share Power Projects have been considered to project the energy availability for FY 2023-24.

b. The average allocation from the unallocated share of power from central generation stations, as per the allocation statements issued by the Northern Region Power Committee (NRPC) against the Ministry of Power letter No NRPC/OPR/103/02/2022 dated on 16.10.2022 and 23.03.2022 have been considered to project power availability.

c. Average energy scheduled from the each generating stations in the last two previous years i.e. FY 2021-22 and FY 2019-20 has been considered to determine the plant load factor for FY 2023-24. Energy scheduled during the FY 2020-21 has not considered, as the same was affected largely by the COVID-19 Pandemic.

d. Energy availability from BBMB plant has been projected by considering 1LU/Day and 10LU/Day of firm commitment and apportioning the balance generation among the generating stations as per their availability recorded in the REA accounts.

Shortfall of power from the allocated source, if any, based on the revised estimates of energy sales and T&D losses for FY 2023-24 has been considered to be sourced from short term sources i.e. power exchange, UI & other trading sources.

For purpose of revised power purchase cost projection for FY 2023-24, the capacity charges and energy charges are calculated by considering the following approach:

- Capacity charges for FY 2021-22 are escalated by 3% on year over year basis;
- Rebate and Late Payment Surcharge are not accounted as part of capacity charges;
- Energy charges realised from the energy bills of the first half of FY 2022-23 are escalate by 2.5% on YOY basis;
- Surplus energy is sold at average variable power purchase cost, since the capacity charges are unavoidable in nature;
- Revenue from sales of surplus power is treated as Non-Tariff Income

Further, the Petitioner has submitted the revised estimated power purchase cost for FY 2023-24 as presented in the following table:

Table 102: Power Purchase quantum (MU) and cost (In INR Cr) submitted by the Petitioner

Sr. No.	Sources	Generating Stations	Approved				Revised Estimates			
			Qty	Capacity Charges	Energy Charges	Total	Qty	Capacity Charges	Energy Charges	Total
			MU	INR Cr	INR Cr	INR Cr	MU	INR Cr	INR Cr	INR Cr
1	NHPC	DULHASTI	47.81	11.90	13.85	25.75	38.06	15.85	9.38	25.23
2		PARBATI-III	14.69	6.51	2.49	9.00	12.86	6.59	2.08	8.67
3		URI II	39.27	5.43	8.88	14.31	25.11	8.18	5.62	13.80
4		SEWA II	12.84	0.23	3.75	3.98	7.16	0.91	1.99	2.90
5		CHAMERA III	23.25	5.41	5.05	10.46	20.45	5.49	4.23	9.72
6		TANAKPUR	6.35	1.15	1.13	2.28	4.81	1.21	0.83	2.04
7		DHAULIGANGA	29.60	4.03	3.96	7.99	25.98	5.71	3.36	9.08
8		CHAMERA I	84.06	7.60	10.57	18.17	77.17	8.58	9.25	17.83
9		CHAMERA II	36.04	4.12	3.99	8.11	29.77	4.34	3.14	7.48
10		URI	18.45	1.74	1.67	3.42	16.82	2.84	1.45	4.30

Sr. No.	Sources	Generating Stations	Approved				Revised Estimates			
			Qty	Capacity Charges	Energy Charges	Total	Qty	Capacity Charges	Energy Charge s	Total
			MU	INR Cr	INR Cr	INR Cr	MU	INR Cr	INR Cr	INR Cr
11		SALAL	9.50	0.74	0.65	1.39	8.42	1.81	0.54	2.35
11		Kishan Ganga	26.00	4.93	5.64	10.57	16.73	5.37	3.46	8.83
12		**Total (A)**	**347.86**	**53.79**	**61.63**	**115.43**	**283.34**	**66.88**	**45.36**	**112.23**
13	**THDC**	TEHRI	168.13	34.80	37.01	71.81	150.15	37.67	32.81	70.48
14		KOTESHWA R	17.85	3.71	4.53	8.24	14.11	4.56	3.43	7.99
15		**Total (B)**	**185.98**	**38.51**	**41.54**	**80.05**	**164.27**	**42.23**	**36.25**	**78.47**
16	**SJVNL**	RAMPUR	21.56	4.87	5.08	9.95	17.53	5.71	3.72	9.43
17		NATHPA JHAKRI	119.48	14.39	15.12	29.51	103.25	14.57	11.96	26.53
18		**Total (C)**	**141.04**	**19.26**	**20.20**	**39.46**	**120.78**	**20.28**	**15.67**	**35.95**
19	**BBMB**	BBMB 1 LU	-	-	-	-	38.03	-	15.38	15.38
20		BBMB 10 LU	-	-	-	-	380.33	-	153.84	153.84
21		Bhakhra	523.12	-	-	-	233.49	6.73	-	6.73
22		Dehar	80.97	-	14.87	14.87	35.84	5.05	-	5.05
23		Pong	14.63	-	148.69	148.69	7.12	2.02	-	2.02
24		**Total (D)**	**618.72**	**-**	**163.56**	**163.56**	**694.81**	**13.79**	**169.22**	**183.01**
25	**NTPC**	DADRI II	8.53	1.83	3.09	4.93	4.83	2.11	2.49	4.60
26		UNCHAHAR I	9.77	1.72	3.56	5.28	10.92	2.09	5.13	7.22
27		UNCHAHAR II	18.00	2.74	6.69	9.43	16.37	3.83	7.73	11.56
28		UNCHAHAR III	7.53	1.34	2.77	4.11	8.04	1.61	3.77	5.38
29		UNCHAHAR IV	27.38	5.81	9.41	15.22	25.00	6.04	10.96	17.00
30		KAHALGAO N II	18.03	2.37	4.43	6.81	21.36	2.52	7.56	10.08
31		SINGRAULI	30.23	1.47	5.08	6.55	11.04	1.93	1.72	3.65
32		RIHAND III	59.80	7.75	9.19	16.94	40.08	7.55	6.43	13.98
33		RIHAND I	81.24	6.92	12.71	19.63	55.01	7.84	8.40	16.23
34		RIHAND II	69.99	4.72	10.98	15.70	48.68	4.91	7.27	12.18
35		Tanda II	21.25	6.57	6.44	13.01	24.53	6.81	7.05	13.86
36		KOLDAM HYDRO	50.50	13.85	13.65	27.50	43.70	14.19	11.26	25.45
37		SINGRAULI HYDRO	1.22	-	0.68	0.68	0.27	0.00	0.14	0.14
38		DADRI	18.63	7.44	6.68	14.12	16.52	10.15	5.56	15.71
39		AURIYA	12.11	7.10	5.50	12.61	5.66	6.68	2.45	9.13
40		ANTA	7.43	6.01	2.03	8.04	2.18	6.35	0.56	6.92
41		**Total (E)**	**441.64**	**77.64**	**102.89**	**180.56**	**334.19**	**84.60**	**88.50**	**173.10**

Sr. No.	Sources	Generating Stations	Approved				Revised Estimates			
			Qty	Capacity Charges	Energy Charges	Total	Qty	Capacity Charges	Energy Charges	Total
			MU	INR Cr	INR Cr	INR Cr	MU	INR Cr	INR Cr	INR Cr
42	APCPL	JAJJAR	40.43	13.41	15.65	29.06	44.66	14.88	22.31	37.18
43		**Total (F)**	**40.43**	**13.41**	**15.65**	**29.06**	**44.66**	**14.88**	**22.31**	**37.18**
44	MUNPL	MEJA I	54.26	17.48	14.49	31.97	62.09	18.69	15.69	34.37
45		**Total (G)**	**54.26**	**17.48**	**14.49**	**31.97**	**62.09**	**18.69**	**15.69**	**34.37**
46	NPCIL	RAPP (5 & 6)	108.64	-	44.68	44.68	92.35	1.25	36.26	37.51
47		RAPP (3 & 4)	19.84	-	6.92	6.92	18.45	0.47	6.14	6.62
48		NAPS	88.14	-	28.87	28.87	85.90	0.52	26.82	27.34
49		**Total (H)**	**216.62**	**-**	**80.47**	**80.47**	**196.70**	**2.24**	**69.22**	**71.46**
50	SECI	Tranche-VI	120.66	-	34.43	34.43	151.48	0.15	43.93	44.08
51		**Total (I)**	**120.66**	**-**	**34.43**	**34.43**	**151.48**	**0.15**	**43.93**	**44.08**
52	Intra Solar	Crest	11.03		8.37	8.37	15.82	-	10.00	10.00
53		Pvt. Solar					1.31	-	1.19	1.19
54		Net Solar					0.90	-	0.33	0.33
55		**Total (I)**	**11.03**	**-**	**8.37**	**8.37**	**18.03**	**-**	**11.52**	**11.52**
56		**Total-1**	**2,178.24**	**220.10**	**543.24**	**763.34**	**2,070.36**	**263.73**	**517.66**	**781.39**
57	Trans. Charges	PGCIL	-	107.91	-	107.91	-	116.72	-	116.72
		UPPTCL					-	0.74	-	0.74
		ULDC					-	0.09	-	0.09
		NRLDC					-	0.32	-	0.32
58		**Total (J)**	**-**	**107.91**	**-**	**107.91**	**-**	**117.87**	**-**	**117.87**
59	Short-Term	Short Term & UI	(461.93)	-	(184.76)	(184.76)	(140.86)	-	-	-
60		**Total (K)**	**(461.93)**	**-**	**(184.76)**	**(184.76)**	**(140.86)**	**-**	**-**	**-**
61		**Total-2**	**(461.93)**	**107.91**	**(184.76)**	**(76.85)**	**(140.86)**	**117.87**	**-**	**117.87**
	Grand Total- (1+2)		**1,716.30**	**328.00**	**358.48**	**686.48**	**1,929.49**	**381.60**	**517.66**	**899.26**

Commission's Analysis:

The Commission while estimating the power purchase quantum and cost for FY 2023-24 has considered the actual quantum and cost of power as submitted by the Petitioner for FY 2020-21, FY 2021-22 and estimates of FY 2022-23.

The methodology followed for projecting the quantum and cost for the remaining months of FY 2023-24 has been discussed as follows:

6.6.1. Availability of power

Availability of energy from Central Generating Stations:

- The energy availability from NTPC, NHPC, NPCIL, SJVNL, BBMB, THDC, APCPL, MUNPL are considered based on average of actual quantum of power as submitted by the Petitioner for FY 2020-21, FY 2021-22 and estimates of FY 2022-23.

Availability of power from CREST and other Renewable Energy Sources

- The energy availability from CREST and other Renewable Energy are considered as submitted by the Petitioner vide replies to 1st Deficiency Note.

Availability of power from the Open Market, Unscheduled Interchange and Banking

- The quantum of purchase/sale has been considered as estimated in the energy balance, discussed in the subsequent section.
- No quantum of energy under banking has been considered for FY 2023-24.
- No quantum under UI has been considered for the FY 2023-24.

6.6.2. *Power Purchase Cost*

Variable Charges:

- The variable charges for various power stations have been considered as per actuals submitted by the Petitioner for 9 months of FY 2022-23.
- For few thermal power stations viz. Dadri-II, Unchahar-I, Unchahar-II, Unchahar-III, Unchahar-IV, Kahalgaon-II, Jhajjar and Tanda-II, the variable charges for FY 2021-22 have been considered and escalated by 10% for each year.
- For purchase/sale of power from the Open Market, the Average Power Purchase Cost (APPC) for the FY 2023-24 has been considered.

Fixed Charges:

- Actual Fixed Costs have been considered for all stations for first 9 months of FY 2022-23 and the remaining 3 months have been pro-rated.

Other Charges:

- Other charges have not been considered for FY 2023-24. The same shall be considered as per actuals during the true-up of FY 2023-24.

6.6.3. *Transmission Charges*

The Transmission Charges have been considered as submitted by the Petitioner.

6.6.4. *Total power purchase quantum and cost*

The following table provides the quantum of energy availability and the power purchase cost approved by the Commission for the FY 2023-24:

Table 103: Power Purchase Quantum (MU) and cost (INR Cr) approved by the Commission for the FY 2023-24

Sr. No.	Details of the stations	Units Purchased (MU)	Fixed Charges (INR. Cr.)	Variable Charges (INR. Cr.)	Total Charges (INR. Cr.)
A	**Central Sector Power Stations (HYDRO)**				
I	**NTPC (HYDRO)**				
1	*KOLDAM*	49.12	13.84	12.05	25.89
2	*SINGRAULI HYDRO*	0.34	-	0.17	0.17

	Subtotal	**49.46**	**13.84**	**12.22**	**26.06**
II	**NHPC**				
3	*DHULSATI*	42.29	10.42	9.88	20.30
4	*PARBATI-III*	14.05	6.31	2.16	8.47
5	*URI-II*	20.91	6.18	4.44	10.62
6	*SEWA-II*	6.91	3.81	1.83	5.65
7	*CHAMERA-III*	22.53	4.31	4.70	9.01
8	*TANAKPUR*	5.26	1.36	0.87	2.22
9	*DHAULIGANGA GANGA*	29.02	4.24	3.58	7.82
10	*CHAMERA-I*	69.73	8.19	7.95	16.14
11	*CHAMERA-II*	22.81	4.31	2.29	6.61
12	*URI*	16.88	1.69	1.39	3.08
13	*SALAL*	8.54	0.77	0.53	1.30
14	*KISHAN GANGA*	21.88	5.88	4.31	10.19
	Subtotal	**280.81**	**57.47**	**43.92**	**101.39**
III	**THDC**				
15	*TEHRI*	152.21	33.69	31.64	65.33
16	*KOTESHWAR*	15.04	3.99	3.61	7.60
	Subtotal	**167.25**	**37.68**	**35.25**	**72.93**
IV	**SJVNL**				
17	*RAMPUR*	19.21	5.02	3.89	8.91
18	*NATHPA JHAKRI*	102.09	15.94	11.36	27.30
	Subtotal	**121.31**	**20.97**	**15.25**	**36.21**
V	**BBMB**				
19	*BHAKRA*	490.32	-	-	-
20	*DEHAR*	80.68	-	11.54	11.54
21	*PONG*	19.58	-	130.50	130.50
	Subtotal	**590.58**	**-**	**142.04**	**142.04**
B	**Central Sector Power Stations (THERMAL/GAS/NUCLEAR)**				
VI	**APCPL THERMAL**				
22	*JHAJJAR*	**28.57**	**14.05**	**12.14**	**26.19**
VII	**NTPC (THERMAL)**				
23	*DADRI-II*	6.29	2.09	2.50	4.59
24	*UNCHAHAR-I*	7.46	1.68	2.98	4.67
25	*UNCHAHAR-II*	14.51	2.91	5.92	8.83
26	*UNCHAHAR-III*	7.77	1.32	3.13	4.45
27	*UNCHAHAR-IV*	20.55	6.18	7.75	13.93

28	*KAHALGAON-II*	19.69	2.28	5.80	8.08
29	*SINGRAULI*	14.67	1.79	2.19	3.98
30	*RIHAND-III*	41.76	7.83	6.33	14.15
31	*RIHAND-I*	54.76	6.65	8.07	14.72
32	*RIHAND-II*	51.64	5.40	7.48	12.88
33	*Tanda-II*	24.97	7.45	8.27	15.72
	Subtotal	**264.07**	**45.58**	**60.43**	**106.01**
VIII	**MUNPL**				
34	*MEJA-I*	**47.34**	**15.40**	**14.47**	**29.88**
IX	**NTPC (GAS)**				
35	*DADRI G*	9.38	6.42	0.19	6.60
36	*AURIYA G*	3.57	7.06	-	7.06
37	*ANTA G*	2.66	5.73	5.41	11.15
	Subtotal	**15.61**	**19.21**	**5.60**	**24.81**
X	**NPCIL**				
38	*RAPS 5 & 6*	77.03	-	3.76	3.76
39	*RAPS 3 & 4*	14.98	-	4.66	4.66
40	*NAPS*	70.26	-	3.95	3.95
	Subtotal	**162.27**	**-**	**12.37**	**12.37**
C	**RPO Obligation**				
XI	**SECI (WIND)**				
41	*Tranche-VI*	**151.48**	**0.14**	**43.78**	**43.92**
XII	**Intra-Solar**				
42	*Crest, Pvt.solar & Net Solar*	**18.03**	**-**	**11.49**	**11.49**
D	**SUB TOTAL**	**1,896.79**	**224.35**	**423.03**	**647.38**
E	**IEX Purchase/Sale**	**(69.13)**	**-**	**(22.74)**	**(22.74)**
F	**OTHER CHARGES**				
	PGCIL Charges and NRLDC Charges	**-**	**117.87**	**-**	**117.87**
-	-				
G	**Total Power Purchase Cost**	**1,827.66**	**342.22**	**400.30**	**742.52**

The Commission approves the revised quantum of power purchase as 1,827.66 MU at the UT Periphery with total cost of INR 742.52 Cr in the ARR of the FY 2023-24 which includes certain quantum based on T&D losses of 8.40% for FY 2023-24 as given in the Energy Balance section which is sold at the APPC of INR 3.29/kWh.

6.6.5. Net Power Purchase Cost

The generating companies and transmission licensees provides 1.5% rebate on the bills on payment within 5 days from the production of such bills and 1% rebate on payment within 30 days from production of such bills. Since adequate interest for working capital is provided in the ARR, the Petitioner shall take every effort to make payment of the bills of Gencos and Transcos at atleast within one month from production of such bills so as to avail this opportunity and reduce their power purchase costs. Accordingly, the Commission approved power purchase cost (net of rebate) in line with the APTEL's order dated 30th July 2010 in Appeal No. 153 of 2009 as detailed below:

Table 104: Net Power Purchase Cost approved by the Commission for FY 2023-24

Particular	FY 2023-24
Total Power Purchase Cost including transmission charges (INR Cr)	742.52
Less: Rebate @1% (INR Cr)	7.43
Net Power Purchase Cost (INR Cr)	**735.09**

The Average Power Purchase Cost (APPC) for the FY 2023-24 has been determined as provided in the table below. The APPC has been computed at the UT Periphery excluding the transmission charges and cost of purchase of renewable energy. The Petitioner shall use the same for the purpose of compensation/ payment of surplus power at the end of each settlement period in case of Solar Net-metering consumers.

Table 105: Average Power Purchase Cost (APPC) for the FY 2023-24

Particular	FY 2023-24
Total Power Purchase Cost (INR Cr)	742.52
Less: Transmission charges and Power Purchase cost from renewable energy sources (INR Cr)	173.28
Net Power Purchase Cost (INR Cr) (A)	569.24
Total Power Purchase quantum (MU)	1896.64
Less: Quantum from renewable energy sources (MU)	165.96
Quantum of energy at State Periphery excluding quantum from renewable energy sources (MU) (B)	1730.68
APPC (INR/kWh) (A/B)	**3.29**

The Commission approves the Average Power Purchase Cost (APPC) as INR 3.29/ kWh for the FY 2023-24 for the purpose of compensation/payment for excess generation for prosumers.

6.7. Renewable Purchase Obligation (RPO)

Petitioner's submission:

EWEDC has made adequate tie ups for compliance of RPO target for FY 2023-24. The solar power is procured from solar plants installed under gross metering and net metering, and non-solar power is sourced from wind generating plants through SECI.

As per the JERC (Procurement of Renewable Energy) Regulations, 2010 read with Fourth Amendment Regulations, 2022, the Commission has specified Renewable Purchase Obligation (RPO) targets for all Distribution Licensees/ obligated entities for FY 2022-23 to FY 2026-27. As per the aforesaid amendment, the Petitioner has to purchase 19.91% of total energy purchase from renewable sources for the FY 2023-24 consisting of 10.00% from Solar, 9.25% from Non-Solar and 0.66% from Large Hydro Plants.

The RPO requirement for FY 2023-24 and the compliance status as submitted by the Petitioner has been provided in the following table:

Table 106: Effective Energy Sales (Excluding Hydro) as submitted by Petitioner

S. No.	Particular	Formula	FY 2023-24
1	Energy Sales within UT (In MUs)	a	1,632.68
2	Hydro Power Purchase (In MUs)	b	1,307.17
3	Inter-State Loss	c	4.03%
4	Inter-State Loss (In MUs)	d=b*c	52.68
5	Intra-State Loss	e	11.88%
6	Intra-State Loss (In MUs)	f=e*(b-d)	149.09
7	Hydro Power Consumed (In MUs)	g=b-d-f	1,105.40
8	**Conventional Power Consumed (In MUs)**	**h=a-g**	**527.28**

Table 107: RPO Requirement (Solar and Non-Solar) as submitted by Petitioner

Particulars	RPO %	Conventional Power Consumed (MU)	RPO Target (MU)	RE Generation 2023-24 (MU)	RPO to be procured (MU)
Solar	10.00%	527.28	52.73	18.03	34.70
Non-Solar	9.25%	527.28	48.77	151.75	-
Total	**19.25%**		**101.50**	**169.78**	**34.70**

EWEDC has submitted that solar generation from net and gross metering plants reconciled at the end of the financial year. As perceived in previous years the total generation from solar plants installed under net metering arrangements will be sufficient to meet the RPO targets, hence no cost corresponding to RPO target has been envisaged in the power purchase cost.

In compliance to the JERC (Procurement of Renewable Energy) (Fourth Amendment) Regulations, 2022 dated March 24, 2022, the HPO Target for FY 2023-24 are as follow:

Table 108: HPO Compliance for FY 2023-24 as submitted by Petitioner

Particular	Units	Quantity
Sales within State	**MU**	**1,632.68**
HPO obligation	%	0.66%
HPO obligation for the year	MU	10.78
Energy from LHP (COD after 8th March, 2019)	MU	-
HPO Shortfall	**MU**	**10.78**

EWEDC has submitted that the best efforts are being made to allocate a hydro generating source to meet the HPO compliance. However, this process may take some time to get finalize, hence, for the interim measure, adjustment of excess achieved solar and non-solar RPO targets may kindly be allowed to meet the HPO targets. Similar, provision was once allowed by the Commission in the Tariff Order dated 20th May, 2019 for meeting the non-solar RPO targets with the excess achieved solar RPO compliance. The Petitioner has requested to the Commission that in view of the same, the excess achieved solar and non-solar RPO targets may be allowed to comply the HPO targets for FY 2023-24.

Commission's analysis:

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

"Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year."

The Commission has approved the Renewable Purchase Obligation (RPO) and Hydro Purchase Obligation (HPO) for the 3rd MYT Control Period considering the JERC (Procurement of Renewable Energy), (Fourth Amendment) Regulations, 2022 notified on 24th March 2022 wherein the revised RPO targets and the HPO targets for the 3rd Control Period were approved.

Accordingly, the RPO and HPO approved by the Commission for FY 2023-24 is as follows:

Table 109: Renewable Purchase Obligation (RPO) approved by the Commission for FY 2023-24

Particulars	FY 2023-24
Sales within State (MU) (A)	1674.13
Hydro Power available at Generator Periphery (MU) (B)	1,259.84
Transmission Loss (%) (C)	4.03%
Transmission Loss (MU) (D= B*C)	50.77
T&D Loss (%) (E)	8.40%
T&D Loss (MU) [F = E * (B-D)]	101.56
Hydro Power Consumed (G = B - D - F)	1107.51
Conventional Power Consumed (H = A - G)	**566.63**
RPO obligation (%)	**19.25%**
Solar (H)	10.00%
Non-Solar (I)	9.25%
RPO obligation for the year (MU)	**109.08**
Solar (G * H)	56.66
Non-Solar (G * I)	52.41
Backlog upto previous FY	**37.46**
Solar	37.46
Non-Solar	0.00
Total RPO to be fulfilled for the year (MU)	**146.54**
Solar	94.12
Non-Solar	52.41
RPO Compliance from Physical Power (MU)	**169.82**
Solar	18.03
Non-Solar	151.79
Standalone RPO Compliance Backlog (MU)	**38.63**
Solar	38.63
Non-Solar	-
Cumulative RPO Compliance Backlog (MU)	**76.09**
Solar	76.09
Non-Solar	-

Table 110: Hydro Purchase Obligation (HPO) approved by the Commission for FY 2023-24

Particulars	FY 2023-24
Sales within State (MU) (A)	1674.13
HPO obligation (%)	0.66%
HPO obligation for the year (MU)	**11.05**

The Commission has observed that the Licensee has projected under-achievement of Solar RPO. The actual compliance in respect of the pending RPO would be reviewed at the time of true-up along with the submission of supporting details such as purchase of RECs, bills from Solar/Non-Solar plants for the year. The Commission observes that all the Hydro Power procured by EWEDC is from large hydropower projects commissioned before

08.03.2019**. In order to fulfil the HPO, the Petitioner is directed to procure power from large hydropower projects commissioned on and after 08.03.2019 and upto 31.03.2030.**

The Commission has continuously directed the Petitioner to complete the RPO obligation on priority, but there has been no improvement therefore the Commission directs the Petitioner to procure the shortfall for the FY 2023-24 through REC. The Commission accordingly has allowed the REC cost based on the average per kWh price from December 2022 to February 2023. The cost approved is as follows:

Table 111: REC cost approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Average per kWh price from December 2022 to February 2023 (INR/kWh)	Standalone Shortfall (MU)	Now Approved by Commission
1	REC cost	1.00	38.63	**3.86**

6.8. *Energy Balance*

Petitioner's submission

The energy requirement as submitted by the Petitioner has been shown in the following table:

Table 112: Energy Requirement of the System (MU)

Particular	Approved in MYT Order	Projected
Energy Procured (MU)	2,178.24	2,052.33
Less: Outside Sale – Trading (MU)	(461.93)	(140.86)
Energy Available (MU)	2,640.17	1,911.46
Inter-State Transmission Loss (%)		4.03%
Transmission Loss (MU)		76.60
Net Energy Available at UT Periphery (MU)	**2,640.17**	**1,834.86**
Power from Gross & NET Metering Mode (MU)		18.03
Total Energy Available (MU)	**2,640.17**	**1,852.89**
Actual Energy Sales (MU)	1,572.14	1,632.68
T&D Loss (%)	8.40%	11.88%
T&D Loss (in MU)	144.16	220.21
Energy Required at UT Periphery (MU)	**1,716.30**	**1,852.89**
Demand Supply (Gap) / Surplus (MU)	**0.00**	**0.00**

Commission's analysis

Based on the revised estimates of energy sales and power purchase quantum, the Commission approves the following energy balance:

Table 113: Energy Balance approved by the Commission for the FY 2023-24 (MU)

Particulars	Now Approved by Commission
Energy Required	
Energy sales within the State (A)	1,674.13
T&D Loss (%) (B)	8.40%
Energy required at State Periphery (C = A/(1-B))	**1,827.66**
Within State Generation (Co-Gen) (D)	-
Net energy required at State Periphery (E = C – D)	**1,827.66**
Energy Available	
Central Generating Stations including UI over/under drawl (F)	1,727.27
Renewable Power (G)	169.51
Energy available at State Periphery (H = F + G)	**1,896.79**
(Sale)/ Purchase in Open Market (I = E - H)	(69.13)
Net energy available at State Periphery (J = H + I)	**1,827.66**

The Commission has estimated a surplus of 69.13 MU. The revenue from sale of surplus power has been adjusted by the Commission in power procurement cost approved in the earlier section. Further, the Commission has approved higher energy procurement due to high T&D losses and the same is not considered while calculating the APPC.

6.9. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 61 of the JERC MYT Regulation, 2021 states the following:

"61.1 The Operation and Maintenance Expenses for the Retail Supply Business shall be computed in accordance with this Regulation.

61.2 O&M Expenses shall comprise of the following:

a) Employee expenses - salaries, wages, pension contribution and other employee costs;

b) Administrative and General expenses including insurance charges if any; and

c) Repairs and Maintenance expenses.

61.3 The Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the Distribution Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

61.4 O&M expenses for the nth Year of the Control Period shall be approved based on the formula given below:

O&Mn = (R&Mn + EMPn + A&Gn) x (1 - Xn) + Terminal Liabilities

Where,

R&Mn = K x GFAn-1 x (1+WPIinflation)

EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)

A&Gn = (A&Gn-1) x (1+CPIinflation)

'K' is a constant (expressed in %). Value of K for each Year of the Control Period shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking of repair and

maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPIinflation – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3) Years before the base Year;

WPIinflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three (3) Years before the base Year;

EMPn – Employee expenses of the Distribution Licensee for the nth Year;

A&Gn – Administrative and General expenses of the Distribution Licensee for the nth Year;

R&Mn – Repair and Maintenance expenses of the Distribution Licensee for the nth Year;

GFAn-1 – Gross Fixed Asset of the Distribution Licensee for the n-1th Year;

Xn is an efficiency factor for nth Year. Value of Xn shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;

Gn is a growth factor for the nth Year. Value of Gn shall be determined by the Commission for each Year in the Multi Year Tariff Order for meeting the additional manpower requirement based on Licensee's filings, benchmarking, approved cost by the Commission in past and any other factor that the Commission feels appropriate:

Provided that in case the Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, the O&M Expenses shall be determined on a case to case basis.

61.5 Terminal liabilities of employees of Licensee including pension expenses etc. shall be approved as per actuals submitted by the Licensee, subject to prudence check or be established through actuarial studies. Additionally, any variation due to changes recommended by the pay commission shall be allowed separately by the Commission, subject to prudence check.

61.6 For the purpose of estimation, the same value of factors – CPIinflation and WPIinflation shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors – CPIinflation and WPIinflation during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation.

Provided that at the time of truing up, the variation in the normative and actual O&M expenses shall be dealt in accordance with Regulation 15."

6.9.1. Employee Expenses

Petitioner's submission

The Petitioner has claimed the Employee Expenses for FY 2023-24 have been revised by considering the employee expenses proposed in APR for FY 2022-23, Growth Rate (Gn) approved for FY 2023-24 in Tariff Order dated 11th July, 2022 and inflation calculated based on the average increase in consumer price index in previous three financial years. The Petitioner has claimed following Employee Expenses.

Table 114: Employee expenses submitted by the Petitioner for FY 2023-24

Particulars	Unit	Approved in MYT order	Projected
Employee Expenses for Previous Year	Rs Cr	**92.92**	**92.82**
Growth Factor (Gn) approved in MYT Order	%	-4.70%	-4.70%
CPI Inflation (previous three years)	%	6.00%	5.89%
Employee Expenses	**Rs Cr**	**93.87**	**93.67**

Commission's analysis

In accordance with the JERC MYT Regulations, 2021, the Commission has determined the Employee expenses for each year of the MYT Control Period. The Regulation 6 of the JERC MYT Regulations, 2021 stipulates the following:

"6. Values for Base Year

6.1 The values for the Base Year of the Control Period shall be determined on the basis of the audited accounts or provisional accounts of last three (3) Years, and other factors considered relevant by the Commission:

Provided that, in absence of availability of audited accounts or provisional accounts of last three (3) Years, the Commission may benchmark the parameters with other similar utilities to establish the values for Base Year:

Provided further that the Commission may change the values for Base Year and consequently the trajectory of parameters for Control Period, considering the actual figures from audited accounts."

The resultant employee expenses of the FY2022-23 as approved by the Commission in APR of FY 2022-23 have been escalated by Growth Rate determined based on the manpower plan submitted by the Petitioner and the average CPI Inflation of the last three years to arrive upon the employee expenses of FY 2023-24. The CPI inflation has been computed as follows:

Table 115: CPI inflation computed for FY 2023-24

FY	Average of (April – March)	Increase in CPI Index	Average increase In CPI indices over 3 year
FY 2019-20	322.50	7.53%	5.89%
FY 2020-21	338.68	5.02%	
FY 2021-22	356.06	5.13%	

Further, the Commission has considered the Growth factor as submitted by the Petitioner in its 1st Deficiency reply.

Table 116: Growth factor considered by the Commission for FY 2023-24

Sl. No.	Particulars	FY 2023-24
1	Number of employees as on 1st April	1,086
2	Recruitment	151
3	Number of employees retired/ retiring during the year	66
4	Number of employees at the end of the year (1+2-3)	1,171
5	**Gn (Growth factor)**	**-4.70%**

Accordingly, the employee expenses approved by the Commission in the MYT Control Period have been provided in the following table:

Table 117: Employee Expense approved by the Commission for 2023-24

Particular	FY 2022-23	FY 2023-24
Gn (Growth factor as per the Manpower Plan approved in the Business Plan Order)		-4.70%
CPI (3 previous year avg.) (in %)		5.89%
Employee Expenses (INR Cr)	**92.82**	**93.68**

The Commission approves Employee Expenses of INR 93.68 Cr. for the FY 2023-24, However, as the base expenses have been computed on the basis of provisional annual accounts, the trajectory may be revised again for the 3rd MYT Control Period after the availability of audited annual accounts for FY 2021-22.

6.9.2. *Administrative and General (A&G) Expenses*

Petitioner's submission

The Petitioner has claimed A&G expenses of INR 7.04 Cr against the INR 7.05 Cr as approved by the Commission in Tariff Order dated 11th July, 2022.

Commission's analysis

Similar to the methodology followed while estimating the employee expenses, the Commission has determined the A&G expenses for the FY 2023-24 using the CPI Inflation for preceding three years.

The A&G expenses approved by the Commission in FY 2023-24 have been provided in the following table:

Table 118: A&G Expenses approved by the Commission for the FY 2023-24 (In INR Cr)

Particulars	Units	FY 2022-23	FY 2023-24
A&G Expenses (A)	INR Cr		
CPI Inflation (B)	%		5.89%
A&G Expenses C= A*(1+B)	INR Cr	**6.65**	**7.04**

The Commission approves the Administrative & General (A&G) expenses of INR 7.04 Cr for FY 2023-24. However, as the base expenses have been computed on the basis of provisional annual accounts, the trajectory may be revised again for the 3rd MYT Control Period after the availability of audited annual accounts for FY 2021-22.

6.9.3. *Repair & Maintenance Expenses (R&M)*

Petitioner's submission

The Petitioner has claimed R&M expenses of INR 18.38 Cr against the INR 17.94 Cr as approved by the Commission in Tariff Order dated 11th July, 2022.

Commission's analysis

In accordance with the JERC MYT Regulations, 2021, the 'K' factor has been considered same as approved in the MYT Order. The 'K' factor is then multiplied with the opening GFA approved for (n-1)th year. The resultant amount is then escalated by latest WPI Inflation to arrive upon the R&M Expenses for FY 2023-24.

The WPI Inflation has been computed as follows:

Table 119: WPI inflation computed for FY 2023-24

FY	Average of (April – March)	Increase in WPI Index	Average increase In WPI indices over 3 years
FY 2018-19	119.79	4.28%	
FY 2019-20	121.80	1.68%	**5.32%**
FY 2020-21	123.38	1.29%	

FY 2020-21	139.41	13.00%	

The R&M expenses approved by the Commission in FY 2022-23 have been provided in the following table:

Table 120: R&M Expenses approved by the Commission for the FY 2023-24 (In INR Cr)

S. No	Particulars	FY 2023-24
1	Opening GFA (GFA_{n-1})	543.70
2	K factor approved (K) in MYT Order	3.21%
3	WPI Inflation (Average of preceding three years)	5.32%
4	**R&M Expenses = (K x (GFA_{n-1}) x (1+$WPI_{inflation}$)**	**18.40**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 18.40 Cr for FY 2023-24.

6.9.4. Total Operation and Maintenance Expenses (O&M)

The following table provides the O&M expenses, approved by the Commission in the MYT Order, Petitioner's submission and O&M expenses now approved by the Commission.

Table 121: O&M Expenses approved by the Commission for the FY 2023-24 (In INR Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	93.87	93.67	93.68
2	Administrative & General Expenses (A&G)	7.05	7.04	7.04
3	Repair & Maintenance Expenses	17.94	18.38	18.40
	Total Operation & Maintenance Expenses	**118.85**	**119.09**	**119.11**

The Commission approves the Operation & Maintenance (O&M) expenses of INR 119.11 Cr in the ARR of the FY 2023-24.

6.10. Capital Expenditure and Capitalisation

Petitioner's submission

The following table provides the capital expenditure and capitalisation proposed during FY 2023-24 by the Petitioner.

Table 122: Capitalisation for FY 2023-24 as submitted by the Petitioner (In INR Cr)

Sr. No.	Particulars	FY 2023-24
1	Capital Expenditure	50.94
2	Capitalisation	47.39

Commission's analysis

The Commission with regard to the capital expenditure and capitalisation proposed to be undertaken during the year directed the Petitioner to submit the details of the schemes to be undertaken during the year along with the supporting documents.

The Commission approves the capital expenditure and capitalisation for the year as shown in the following table:

Table 123: Capitalisation approved by the Commission for the FY 2023-24 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission
1	Capital Expenditure	50.94	50.94	50.94
2	Capitalisation	79.66	47.39	47.39

The Commission approves capital expenditure of INR 50.94 Cr and capitalisation of INR 47.39 Cr in the ARR of the FY 2023-24.

6.11. Capital Structure

Petitioner's Submission

The Petitioner has proposed that the entire capitalisation for FY 2023-24 shall be through deployment of capital equity.

Commission's analysis

Regulation 27 of the JERC MYT Regulations, 2021 specifies the following:

"27.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2022 shall be considered:

Provided that in case of retirement or replacement or De-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or De-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

27.2 For New Projects, the debt-equity ratio as on the Date of Commercial Operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 24, after prudence check for determination of tariff:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of tariff:

Provided also that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan for the Licensee for determination of tariff:

Provided also that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Provided further that the premium, if any, raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the scheme,

shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the transmission system or the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

27.3 Any expenditure incurred or projected to be incurred on or after April 1, 2022, as may be admitted by the Commission, as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in these Regulations"

In accordance with above, since the Petitioner has submitted that the entire capitalisation is funded through equity, equity higher than 30% of capitalisation has been considered as normative loan.

Therefore, in accordance with the JERC MYT Regulations, 2021, the Commission has determined the Capital Structure for FY 2023-24 as follows:

Table 124: Capital Structure considered by the Commission (INR Cr.)

S. No.	Particulars	FY 2023-24
1	Total Capitalisation	47.39
2	Less: Grant	0.00
3	**Net Capitalisation excluding grant**	**47.39**
4	Debt (%)	70%
5	Equity (%)	30%
6	**Normative Loan**	**33.18**
7	**Normative Equity**	**14.22**

6.12. Depreciation

Petitioner's submission

The closing GFA of the FY 2022-23 has been considered as opening GFA of the FY 2023- 24. Further, depreciation for each year has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year.

Based on the methodology given in JERC MYT Regulations, 2021, depreciation for the FY 2023-24 is submitted as under:

Table 125: Depreciation submitted by the Petitioner for FY 2023-24 (INR Cr)

No.	Particulars	FY 2023-24
1	Opening Gross Fixed Assets (excluding Grants/ consumers Contribution and 90% depreciated assets, etc.)	543.69
2	Add: Addition During the Year	47.39
3	Less: Decapitalisation	-
4	Closing Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)	591.09
5	Average Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)	567.39
6	Weighted Average Rate of Depreciation (%)	3.53%
7	**Depreciation for the year**	**20.05**

Commission's analysis

Regulation 31 of the JERC MYT Regulations, 2021 stipulates the following:

"31.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided also that the no depreciation shall be allowed on the assets financed through consumer contribution, *deposit work, capital subsidy or grant.*

31.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

Provided further that the salvage value of Information Technology equipment and computer software shall be considered at zero (0) per cent of the allowable capital cost.

31.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets.

31.4 In case of existing assets, the balance depreciable value as on April 1, 2022, shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to March 31, 2021, from the gross depreciable value of the assets.

31.5 The depreciation shall be chargeable from the first Year of commercial operations. In case of projected commercial operation of the assets during the Year, depreciation shall be computed based on the average of opening and closing value of assets:

Provided that depreciation shall be re-calculated during truing-up for assets capitalised at the time of truing up of each Year of the Control Period, based on documentary evidence of asset capitalised by the Applicant, subject to the prudence check of the Commission.

31.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

31.7 The depreciation for a Distribution Licensee shall be calculated annually, based on the Straight Line Method, over the Useful Life of the asset at rates specified in Appendix I of these Regulations.

31.8 In addition to allowable depreciation, the Distribution Licensee shall be entitled to advance against depreciation (AAD), computed in the manner given hereunder:

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure,

subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations:

Provided that advance against depreciation shall be permitted only if the cumulative repayment upto a particular Year exceeds the cumulative depreciation upto that Year:

Provided further that advance against depreciation in a Year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation upto that Year.

31.9 The Distribution Licensee shall provide the list of assets added during each Year of Control Period and list of assets completing 90% of depreciation in the Year along with Petition for annual performance review, true-up and tariff determination for ensuing Year.

31.10 The remaining depreciable value for a Distribution Licensee shall be spread over the balance useful life of the asset, on repayment of the entire loan."

The Commission has derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in JERC MYT Regulations, 2021, provided in the following table:

Table 126: Asset-wise depreciation rate considered by the Commission for weighted average rate for FY 2023-24 (%)

Description of Assets	Rate of Depreciation
Land & Land Rights	0.00%
Buildings	1.80%
Plant & Machinery	3.60%
Transformer	3.60%
Lines & Cables (HT & LT)	3.60%
Vehicles	18.00%
Furniture & Fixtures	6.00%

Description of Assets	Rate of Depreciation
Office Equipment	6.00%
IT Equipment	15.00%
Testing & Measuring Equipment	6.00%
SCADA P&M	6.00%

The closing GFA of the FY 2022-23 has been considered as opening GFA of the FY 2023-24. Further, depreciation for each year has been computed on average Gross Fixed Assets (GFA) after considering the net addition approved during each year. The GFA of assets that have completed 90% depreciation but still included in the GFA have been excluded for the computation of Depreciation. Accordingly, the Commission shall consider the actual values during the True-up of the FY 2023-24.

The following table provides the depreciation as approved in the Tariff Order for FY 2023-24, Petitioner's submission and now approved by the Commission:

Table 127: Depreciation considered by the Commission for FY 2023- 24 (INR Cr.)

Particular	Approved in Tariff Order for FY 2022-23	Petitioner's Submission	Now Approved by Commission
Opening Gross Fixed Assets	420.13	543.69	543.70
Addition During the FY	71.09	47.39	47.39
Adjustment/Retirement during the FY	-	-	200.03
Closing Gross Fixed Assets	491.22	591.09	391.07
Average Gross Fixed Assets	455.67	567.39	367.37
Weighted Avg. rate of Depreciation (%)	3.45%	3.53%	3.51%
Depreciation	**15.73**	**20.05**	**12.91**

The Commission approves a depreciation of INR 12.91 Cr. for the FY 2023-24.

6.13. Interest on Loan

Petitioner's Submission

Petitioner has considered One Year State Bank of India (SBI) MCLR rate prevailing on 1st April 2022 plus 100 basis points for calculating the interest rate, normative debt equivalent to 70% of capitalisation during the year and repayment of loans equivalent to the depreciation during the year for projecting the interest and finance charged for FY 2023-24.

The following table provides the normative Interest on Loan projected for the FY 2023-24 based on JERC MYT regulations, 2021 as under.

Table 128: Interest on Normative Loan submitted by the Petitioner for the FY 2023-24 (INR Cr)

Sr. No.	Particulars	FY 2023-24
1	Opening Normative Loan	27.12
2	Add: Normative Loan during the Year/GFA during the year	33.18
3	Less: Normative Repayment	20.05
4	Closing Normative Loan	40.24
4	Average Normative Loan	33.68
5	Rate of Interest (@SBI 1 Year MCLR rate+100 Basis Points)	8.00%
6	**Interest on Normative Loan**	**2.69**

Commission's analysis:

Regulation 29 of the JERC MYT Regulation, 2021 states the following:

"29.1 The loans arrived at in the manner indicated in Regulation 27 on the assets put to use, shall be considered as gross normative loan for calculation of interest on the loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided further that in case of De-capitalisation or retirement or replacement of assets, the loan capital shall be reduced to the extent of outstanding loan component of the original cost of the decapitalized or retired or replaced assets, based on documentary evidence.

29.2 The normative loan outstanding as on April 1, 2022, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2021, from the gross normative loan.

29.3 Notwithstanding any moratorium period availed by the Transmission Licensee or the Distribution Licensee, as the case may be, the repayment of loan shall be considered from the first Year of commercial operation of the project and shall be equal to the annual depreciation allowed in accordance with Regulation 31.

29.4 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Transmission Licensee or the Distribution Licensee:

Provided that at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the Year applicable to the Transmission Licensee or the Distribution Licensee shall be considered as the rate of interest after prudence check:

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered:

Provided further that if the Transmission Licensee or the Distribution Licensee does not have actual loan, then one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.

29.5 The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest:

Provided that at the time of truing up, the normative average loan of the Year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the Year.

29.6 For new loans proposed for each Financial Year of the Control Period, interest rate shall be considered as lower of (i) one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points, and (ii) weighted average rate of interest proposed by the Distribution Licensee.

29.7 The above interest computation shall exclude the interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, deposit work, capital subsidy or grant, carried out by Transmission Licensee or Distribution Licensee.

29.8 The finance charges incurred for obtaining loans from financial institutions for any Year shall be allowed by the Commission at the time of Truing-up, subject to prudence check.

29.9 The excess interest during construction on account of time and/or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Transmission or Distribution Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

29.10 The Transmission Licensee or the Distribution Licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the equally between the beneficiaries; i.e., the Transmission Licensee and the Distribution Licensee or the Distribution Licensee and the Consumers of Distribution Licensee."

As the Petitioner only has normative loan and no actual loan i.e., no fixed assets in operation which are funded through loans, the Commission has considered the SBI 1 Year MCLR rate as on 1st April 2022 (7.00%), plus 100 basis points as Rate of Interest, in accordance with the JERC MYT Regulations, 2021.

The Interest on Loan has been calculated on the average loan during the year with the closing loan of the FY 2022-23 considered as opening loan of the FY 2023-24. Further, the normative loan addition during each year of the control period has been considered as per the capital structure approved in section 6.11 of this Order.

Repayment of the loan has been considered equivalent to the depreciation for the year as determined by the Commission in line with the JERC MYT Regulations, 2021.

The following table provides the Interest on Loan approved by the Commission for the FY 2023-24.

Table 129: Interest on Loan considered by the Commission for FY 2023-24 (INR Cr.)

Particular	FY 2023-24
Opening Normative Loan	34.19
Add: Normative Loan During the year	33.18
Less: Normative Repayment= Depreciation	12.91
Closing Normative Loan	54.46
Average Normative Loan	44.32
Rate of Interest (%)	8.00%
Interest on Loan	**3.55**

The Commission approves Interest on Loan as INR 3.55 Cr. for the FY 2023-24.

6.14. Return on Equity (RoE)

Petitioner's Submission

The Petitioner has considered the opening equity for FY 2023-24 equivalent to the closing equity of FY 2022-23. Further, 30% of proposed capitalisation during FY 2023-24 has been considered as equity addition during the year.

Table 130: Return on Equity submitted by the Petitioner for the FY 2023-24 (INR Cr)

S. No	Particulars	FY 2023-24
1	Opening Balance of Equity	157.16
2	Equity Addition during year (30% of Capitalization)	14.22
3	Closing Balance of Equity	171.38
4	Average Equity Amount	164.27
5	Average Equity-Wires Business (90%)	147.84
6	Average Equity -Retail Supply Business (10%)	16.43
7	Return on Equity for Wires Business (%)	15.50%
8	Return on Equity for Retail Supply Business (%)	16.00%
9	**Return on Equity for Wires Business**	**22.92**
10	**Return on Equity for Retail Supply Business**	**2.63**
11	**Total Return on Equity**	**25.54**

Commission's analysis:

Regulation 28 of the JERC MYT Regulation, 2021 states the following:

"28.1 Return on equity shall be computed on the paid up equity capital determined in accordance with Regulation 27 for the assets put to use for the Transmission Licensee and shall be allowed in accordance with the prevalent CERC Tariff Regulations for transmission system.

28.2 The return on equity for the Distribution Wires Business shall be allowed on the equity capital determined in accordance with Regulation 27 for the assets put to use at post-tax rate of return on equity specified in the prevalent CERC Tariff Regulations for transmission system.

28.3 The return on equity for the Retail Supply Business shall be allowed on the equity capital determined in accordance with Regulation 27 for the assets put to use, at the rate of sixteen (16) per cent per annum.

28.4 The return on equity shall be computed on average of equity capital at the beginning and end of Year."

The closing equity of the FY 2022-23 is considered as opening equity of the FY 2023-24. The Commission has segregated the approved average equity (average of opening and closing equity) into average equity for Distribution Wires Business and Retail Supply Business based on the Allocation Statement provided in the JERC MYT Regulations, 2021 i.e., 90% allocation for the Distribution Wires Business and 10% allocation for the Retail Supply Business.

The Commission has considered a post-tax rate of 15.50% for the Distribution Wires Business and a post-tax rate of 16% for the Retail Supply Business. The equity component has been determined in accordance with the capital structure as discussed in section 6.11 of this Order. The rate of return on equity for the Distribution Wires Business shall be trued up based on the prevalent Regulations during the True-up. The following table provides the total return on equity approved for the FY 2023-24.

Table 131: Return on Equity considered by the Commission for FY 2023-24 (INR Cr.)

S. No	Particular	FY 2023-24
1	Opening Equity Amount	157.16
2	Equity Addition during year	14.22
3	Closing Equity Amount	171.38
4	Average Equity Amount	164.27
5	Average Equity (Wires Business)	147.84
6	Average Equity (Retail Supply Business)	16.43
7	Return on Equity for Wires Business (%)	15.50%
8	Return on Equity for Retail Supply Business (%)	16.00%
9	**Return on Equity for Wires Business**	**22.92**

S. No	Particular	FY 2023-24
10	**Return on Equity for Retail Supply Business**	**2.63**
11	**Total Return on Equity**	**25.54**

The Commission approves Return on Equity of INR 25.54 Cr for the FY 2023-24.

6.15. Interest on Security Deposits

Petitioner's Submission

The Petitioner has considered the closing balance of the security deposits in APR for FY 2022-23 as opening amount for FY 2023-24. The percentage increase in number of consumers for FY 2023-24 has been considered to determine the addition in consumer security deposits during the year. Further, the RBI Bank rate applicable on 1st April of 2022 has been applied on the average amount of security deposits to calculate the interest on consumer security deposits for FY 2023-24.

Table 132: Interest on Security Deposit submitted by the Petitioner for the FY 2023-24 (INR Cr)

No.	Particulars	FY 2023-24
1	Opening Security Deposit	174.91
2	Add: Deposits during the Year	1.71
3	Less: Deposits refunded	-
4	Closing Security Deposit	176.62
5	Average Security Deposit	175.77
6	Rate of Interest (%)	4.25%
7	**Interest on Security Deposit**	**7.47**

Commission's analysis:

Regulation 29 of the JERC MYT Regulation, 2021 states the following:

"29.11 Interest shall be allowed on the amount held as security deposit held in cash from Retail Consumers at the Bank Rate as on 1st April of the Financial Year in which the Petition is filed:

Provided that at the time of truing-up, the interest on the amount of security deposit for the Year shall be considered on the basis of the actual interest paid by the Licensee during the Year, subject to prudence check by the Commission."

The Interest on security deposits has been calculated in accordance with the JERC MYT Regulations 2021, based on the average of the opening and closing consumer security deposits during the year. The closing Security Deposit of the FY 2022-23 is considered as opening Security Deposit of the FY 2023-24. The rate of interest has been considered equivalent to the prevailing RBI Bank rate. Net additions during the year have been considered for each year of the Control Period based on that considered by the Petitioner.

The following table provides the calculation of interest on consumer security deposits approved for FY 2023-24:

Table 133: Interest on Consumer security considered by the Commission for FY 2023-24 (INR Cr.)

No.	Particulars	FY 2023-24
1	Opening Security Deposit	174.92

No.	Particulars	FY 2023-24
2	Add: Deposits during the Year	1.71
3	Less: Deposits refunded	-
4	Closing Security Deposit	176.63
5	Average Security Deposit	175.77
6	Rate of Interest (%)	4.25%
7	**Interest on Security Deposit**	**7.47**

The Commission approves Interest on Security Deposit as INR 7.47 Cr. for the FY 2023-24.

6.16. Interest on Working Capital

Petitioner's Submission

The interest on working capital has been calculated based on the normative principles outlined in the JERC MYT Regulations, 2021.

The working capital requirement for the Control Period has been computed considering the following

- Receivable of two months of billing
- O&M Expenses of one month
- Maintenance Spares at 40% of repair and maintenance expenses for one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

The interest on working capital considered is the MCLR plus 200 basis points for SBI on 1st April 2022 plus 200 basis points i.e., 9.00% has been considered for computation of interest on working capital. The following table provides the Interest on working Capital proposed for FY 2023-24.

Table 134: Interest on Working Capital submitted by the Petitioner for the FY 2023-24 (In INR Cr)

Sr. No.	Particulars	FY 2023-24
1	O&M Expenses for 1 month	9.92
2	Maintenance Spares (@ 40% of R&M Expenses for one (1) month)	0.61
3	Receivables equivalent to two (2) months	140.02
4	Less: Amount, if any, held as security deposits	175.77
5	Less: Power Purchase cost for one (1) month	74.94
6	**Total Working Capital**	(100.15)
7	Rate of Interest	9.00%
8	**Interest on Working Capital**	-

Commission's analysis:

Regulation 64 of the JERC MYT Regulation, 2021 states the following:

"64.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Retail Supply Business for the Financial Year, computed as follows:

a) O&M Expenses for one (1) month; plus

b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus

c) Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff;

Less

d) Power Purchase cost for one (1) month; plus

e) Amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from Consumers except the security deposits held in the form of Bank Guarantees:

Provided that at the time of truing up for any Year, the working capital requirement shall be recalculated on the basis of the values of components of working capital approved by the Commission in the truing up."

The Commission has computed the Interest on Working Capital for FY 2023-24 in accordance with the JERC MYT Regulations, 2021. The interest rate has been considered as 9.00% (1 year MCLR as on 1st April 2022 i.e., 7.00% + 200 basis points). The computation of interest on working capital is shown in the following table:

The following table provides the Interest on working Capital considered for each year of the FY 2023-24.

Table 135: Interest on working capital considered by the Commission for FY 2023-24 (INR Cr.)

Particulars	FY 2023-24
O&M Expense for 1 month	9.93
Maintenance spares at 40% of R&M expenses for one (1) month;	0.61
Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff	148.31
Less: Amount held as security deposits	175.77
Less: Power Purchase cost for one (1) month	62.20
Net Working Capital	**(79.12)**
Rate of Interest (%)	9.00%
Interest on Working Capital	**-**

The Commission approves Interest on Working Capital as NIL for the FY 2023-24.

6.17. Income Tax

Petitioner's Submission

The Petitioner has not made any submission in this regard.

Commission's analysis:

Regulation 33 of JERC MYT Regulations, 2021 stipulates the following:

"33. Tax on Income

33.1 The treatment of tax on income for a Transmission Licensee shall be in accordance with the prevalent CERC Tariff Regulations.

33.2 The Commission in its MYT Order shall provisionally approve Income Tax payable for each Year of the Control Period, if any, based on the actual income tax paid, including cess and surcharge on the same, if any, as per latest audited accounts available for the Distribution Licensee, subject to prudence check.

33.3 Variation between Income Tax actually paid, including cess and surcharge on the same, if any, and approved, if any, on the income stream of the Licensed business of the Distribution Licensees shall be reimbursed to/recovered from the Distribution Licensees, based on the documentary evidence submitted at the time of truing up of each Year of the Control Period, subject to prudence check.

33.4 Under-recovery or over-recovery of any amount from the Consumers on account of such tax having been passed on to them shall be adjusted every Year on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors. The Distribution Licensee may include this variation in its truing up Petition:

Provided that tax on any income stream other than the core business shall not be a pass-through component in tariff and tax on such other income shall be borne by the Distribution Licensee."

Since the Petitioner has paid no Income tax in the previous years, no income tax liability is projected for the FY 2023-24 and the same shall be Trued-up based on the actual income tax paid by the Petitioner.

6.18. Provision for Bad & Doubtful Debts

Petitioner's Submission

The Petitioner has submitted that the Bad and doubtful debts for FY 2023-24 are claimed as per Regulation 63 of the JERC MYT Regulations, 2021. Revised estimates are kept equivalent to 1% of the revised Aggregate Revenue Requirement for FY 2023-24 and claimed as INR 10.32 Cr.

Commission's analysis

Regulation 63 of the JERC MYT Regulation, 2021 states the following:

"63.1 The Commission may allow bad debts written off as a pass through in the Aggregate Revenue Requirement, based on the trend of bad debts written off in the previous years, subject to prudence check:

Provided that the Commission shall true up the bad debts written off in the Aggregate Revenue Requirement, based on the actual write off of bad debts excluding delayed payment charges waived off, if any, during the year, subject to prudence check:

Provided also that the provision for bad and doubtful debts shall be limited to 1% of the annual Revenue Requirement of the Distribution Licensee:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realized from such bad debt, the same shall be included as an uncontrollable item under the Non-Tariff Income of the year in which such revenue is realised."

The Commission also has not considered any Provision for Bad & Doubtful Debts for the FY 2023-24. The same shall be accounted for as per actuals during the True-up.

6.19. Non-Tariff Income (NTI)

Petitioner's Submission

The NTI proposed for each year of the FY 2023-24 has been shown in the following table:

Table 136: Non-Tariff Income claimed by the Petitioner for the FY 2023-24 (INR Cr)

Particulars	FY 2023-24
Miscellaneous Charges	9.09
Miscellaneous Receipts	6.62
Sale of Surplus Power (PX & UI)	36.57
Total Non-tariff income	**52.28**

Commission's analysis:

Regulation 65 of the JERC MYT Regulations, 2021 stipulates the following:

"65. Non-Tariff Income

65.1 The amount of Non-Tariff Income relating to the retail supply of electricity as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in calculating the tariff for retail supply of electricity by the Distribution Licensee:

Provided that the Distribution Licensee shall submit full details of its forecast of Non-Tariff Income to the Commission along with its application for determination of tariff.

65.2 The Non-Tariff Income shall inter-alia include:
(a) Income from rent of land or buildings;
(b) Income from sale of scrap;
(c) Income from statutory investments;
(d) Interest on advances to suppliers/contractors;
(e) Rental from staff quarters;
(f) Rental from contractors;
(g) Income from hire charges from contactors and others;
(h) Income from advertisements, etc.;
(i) Meter/metering equipment/service line rentals;
(j) Service charges;
(k) Consumer charges;
(l) Recovery for theft and pilferage of energy;
(m) Rebate availed on account of timely payment of bills;
(n) Miscellaneous receipts;
(o) Deferred Income from grant, subsidy, etc., as per Annual Accounts;
(p) Prior period income, etc.:

Provided that the interest/dividend earned from investments made out of Return on Equity corresponding to the Retail Supply Business of the Distribution Licensee shall not be included in Non-Tariff Income:

Provided further that any income earned by a Distribution Licensee by sale of power to other Distribution Licensees or to Consumers as per Section 49 of the Act using the existing power purchase agreements or bulk supply capacity allocated to the Distribution Licensee's Area of Supply shall be reduced from the Aggregate Revenue Requirement of the Distribution Licensee for the purpose of determination of tariff. Such reduction shall be carried out in accordance with Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017, as amended from time to time."

The Commission considers the same NTI as approved by the Commission in the MYT Order for FY 2022-23. Further, the Commission considers rebate availed on account of timely payment of bills amounting to 1% of the

Power purchase cost allowed for FY 2023-24. The same shall be Trued-up on actual basis. The NTI approved for FY 2023-24 has been shown in the following table:

Table 137: Non-Tariff Income considered by the Commission for FY 2023-24 (INR Cr.)

Particulars	FY 2023-24
NTI as approved by the Commission in the Tariff Order for FY 2022-23	**17.66**
Rebate on account of timely payment of bills (1% of Power Purchase cost)	**7.43**
Non-Tariff Income	**25.09**

The Commission approves Non-Tariff Income as INR 25.09 Cr. for the FY 2023-24.

6.20. Aggregate Revenue Requirement (ARR)

Petitioner's Submission

Based on the expenses as detailed above, the Petitioner submitted the net aggregate revenue requirement for FY 2023-24 is shown in the following table:

Table 138: ARR submitted by the Petitioner for FY 2023-24 (INR Cr.)

S. No.	Particulars	FY 2023-24
1	Power Purchase Cost	899.26
2	Operation & Maintenance Expenses	119.09
3	Depreciation	20.05
4	Interest and Finance charges	2.69
5	Interest on Working Capital	-
6	Interest on Security Deposit	7.47
7	Return on Equity	25.54
8	Provision for Bad Debt	10.32
9	Income Tax	-
10	**Total Revenue Requirement**	**1,084.43**
11	Less: Non-Tariff Income	52.28
12	**Net Revenue Requirement**	**1,032.15**

Commission's Analysis

On the basis of the detailed analysis of the cost parameters of the ARR the net revenue requirement for FY 2023-24 is approved as provided in the following table:

Table 139: ARR approved by the Commission for the FY 2023-24 (INR Cr.)

Particulars	FY 2023-24		
	Approved in Tariff Order for FY 2022-23	Claimed by the Petitioner	Approved in ARR
Power Purchase Cost	686.48	899.26	746.38
REC Cost	-	-	
Operation & Maintenance Expenses	118.85	119.09	119.11
Depreciation	15.73	20.05	12.91

Particulars	FY 2023-24		
	Approved in Tariff Order for FY 2022-23	Claimed by the Petitioner	Approved in ARR
Interest and Finance charges	4.43	2.69	3.55
Interest on Working Capital	-	-	-
Interest on Security Deposit	9.05	7.47	7.47
Return on Equity	26.17	25.54	25.54
Provision for Bad Debt	-	10.32	-
Income Tax	-	-	-
Total Revenue Requirement	**860.72**	**1,084.43**	**914.96**
Less: Non-Tariff Income	17.66	52.28	25.09
Net Revenue Requirement	**843.06**	**1,032.15**	**889.88**

The Commission approves the net ARR of INR 889.88 Cr in the ARR of the FY 2023-24.

6.21. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has calculated the revenue from sale of power at existing tariff on the basis of energy sales in the territory for the FY 2023-24.

The Petitioner has submitted the following provisional revenue of during FY 2023-24.

Table 140: Revenue at existing tariff as submitted by the Petitioner (In INR Cr)

Sr. No.	Category of Consumers	FY 2023-24 (Estimated)
A	Domestic – LT	343.30
B	Domestic – HT	10.12
C	Commercial – LT	146.67
D	Commercial – HT	135.07
E	Large Supply	73.45
F	Medium Supply	59.89
G	Small Power	8.67
H	Agriculture	0.38
I	Public Lighting	8.20
J	Bulk Supply	42.80
K	Others Temporary Supply	3.17
	Total	**831.72**

Commission's analysis

The category wise/ sub-category wise and slab-wise revenue at existing retail tariff is calculated as per the tariff rates applicable for FY 2023-24. The revenue from demand charges and the energy charges have been projected for each category/ sub-category and slab. The Commission has considered suitable assumptions wherever necessary. The Commission directs the Petitioner to submit slab-wise revenue with bifurcation of fixed and variable along with the next tariff petition. The revenue from category/ sub-category/ slab-wise revenue as computed by the Commission for FY 2023-24 has been shown in the following table:

Table 141: Revenue at existing tariff computed by Commission (In INR Cr)

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)
1	**DOMESTIC SUPPLY (DS)**	**825.34**	**16.99**	**360.50**	**377.48**	**4.57**
A	LT Domestic					
1	0-150 units	65.94	4.19	18.13	22.32	3.39
2	151-400 units	240.92	6.03	102.39	108.42	4.50
3	401 and above units	486.51	6.20	226.23	232.43	4.78
B	HT Domestic	31.96	0.56	13.74	14.30	4.48
2	**COMMERCIAL / NON RESIDENTIAL (NRS)**	**492.25**	**50.64**	**232.22**	**282.86**	**5.75**
A	LT Commercial					
1	0-150 units (Single Phase)	6.19	0.68	2.78	3.46	5.60
2	151-400 units (Single Phase)	13.71	0.31	6.44	6.75	4.93
3	401 and above units (Single Phase)	23.33	0.16	11.67	11.82	5.07
1	0-150 units (Three Phase)	0.04	3.56	0.02	3.57	933.82
2	151-400 units (Three Phase)	6.56	3.28	3.08	6.36	9.70
3	401 and above units (Three Phase)	182.66	16.60	91.33	107.93	5.91
B	HT Commercial	259.76	26.06	116.89	142.95	5.50
3	**INDUSTRY**	**249.56**	**29.10**	**108.83**	**137.93**	**5.53**
1	Large Industrial Power Supply (LS)	127.84	14.16	57.53	71.69	5.61
2	Medium Industrial Power Supply (MS)	103.30	14.12	43.39	57.51	5.57
3	Small Industrial Power Supply (SP)	18.42	0.82	7.92	8.74	4.74
4	**AGRICULTURAL PUMPING SUPPLY(AR)**	**1.62**	**0.00**	**0.42**	**0.42**	**2.60**
1	Agricultural Pumping Supply	1.62	0.00	0.42	0.42	2.60
5	**PUBLIC LIGHTING (PL)**	**15.22**	**0.54**	**7.31**	**7.85**	**5.16**
6	**Bulk Supply (BS)**	**85.90**	**7.43**	**36.08**	**43.51**	**5.07**
1	Bulk Supply	85.90	7.43	36.08	43.51	5.07
7	**Temporary Supply**	**3.57**	**0.00**	**2.89**	**2.89**	**8.09**
1	Temporary Supply	3.57	0.00	2.89	2.89	8.09
8	**Electric Vehicle Charging Station**	**0.68**	**0.00**	**0.24**	**0.24**	**3.60**
1	Electric Vehicle Charging Station	0.68	0.00	0.24	0.24	3.60
	TOTAL	**1674.13**	**104.71**	**748.49**	**853.19**	**5.10**

The Commission has determined revenue from sale of power at existing tariff as INR 853.19 Cr in the ARR of the FY 2023-24.

6.22. Standalone Revenue Gap/ (Surplus)

Petitioner's submission

Based on the ARR and the revenue from retail tariff, the standalone revenue gap of INR 192.01 Cr is arrived at in the ARR for the FY 2023-24.

Commission analysis

The Standalone Revenue Gap/Surplus is arrived at and approved as follows:

Table 142: Standalone Revenue Gap/ (Surplus) at existing tariff (In INR Cr)

S. No	Particulars	Now Approved by Commission
1	Annual Revenue Requirement	889.88
2	Revenue from sale of power at existing tariff	853.19
3	FPPCA	-
4	Regulatory Surcharge	-
	Revenue Gap/(Surplus)	**36.68**

The standalone gap at existing retail tariff is INR 36.68 Cr in the ARR of the FY 2023-24. The estimated gap has been considered while determining the tariff for the FY 2023-24.

7. Chapter 7: Tariff Principles and Design

7.1. Overall Approach

The Commission while designing retail tariffs for the FY 2023-24 has kept in view the principles of determination of tariff as set out in the Electricity Act, 2003 (EA 2003), Tariff Policy, 2016 and the JERC MYT Regulations, 2021.

The provision of supply of electricity to all the people is an essential driver for development, and also influences social and economic change. In this Tariff Order, the Commission has continued with its endeavor to meet the objectives of the EA 2003, as set out in its Preamble, including the protection of the interest of consumers, the supply of electricity to all areas and the rationalisation of tariffs. The EA, 2003 also mandates the Commission to strike a fine balance between the interests of various stakeholders including Utilities and consumers. The Commission has also taken into consideration the Petitioner's submissions as well as the public responses in these proceedings.

7.2. Applicable Regulations

Regulation 20 of the JERC MYT Regulations, 2021 states the following:

"***20. Annual determination of tariff***

20.1 The Commission shall determine the tariff of a Generating Company, Transmission Licensee and Distribution Licensee covered under a Multi Year Tariff framework for each Year during the Control Period, in accordance with timelines specified in Regulation 18, having regard to the following:

a) The approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges of the Generating Company, Transmission Licensee and Distribution Licensee for such Financial Year, including modifications approved at the time of Mid-term Review, if any; and

b) Approved gains and losses, including the incentive available, to be passed through in tariff, following the truing up of previous Year."

Further, Regulation 68 of the JERC MYT Regulations, 2021 states the following:

"68. Determination of Tariff

68.1 The Commission may categorize Consumers on the basis of their load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required and any other factor as considered appropriate by the Commission.

68.2 The Commission shall endeavour to determine cost of supply for each category/ sub-category of Consumers.

68.3 The Commission shall endeavour to reduce gradually the cross-subsidy between Consumer categories with respect to the cost of supply in accordance with the provisions of the Act.

68.4 The tariff proposal by Licensee and the tariff determination by the Commission shall be based on the following principles:

(a) The tariff for all categories shall preferably be two part, consisting of fixed and variable charges.

(b) The fixed charges in tariff shall progressively reflect actual fixed cost incurred by Distribution Licensee;

(c) The overall retail supply tariff for different Consumer categories shall progressively reflect the cost of supply for respective categories of Consumers;

(d) The tariff for residential Consumers shall be set considering the affordability of tariff for various class of Consumers;

(e) The tariff shall be set in such a manner that it may not present a tariff shock to any category of Consumers."

7.3. Standalone and Consolidated Revenue Gap/ Surplus at existing tariff

Petitioner's Submission

The Petitioner has proposed a standalone revenue gap and consolidated revenue surplus at existing tariff for FY 2022-23 as shown in the table below:

Table 143: Standalone Revenue Gap/ (Surplus) submitted by Petitioner for FY 2023-24 (In INR Cr)

Particulars	FY 2023-24
Net Revenue Requirement	890.77
Revenue from Retail Sales at Existing Tariff	835.29
Standalone Gap /(Surplus) for the year	**55.48**

Table 144: Cumulative Revenue Gap/ (Surplus) submitted by Petitioner for FY 2023-24 (In INR Cr)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Opening (Gap)/Surplus for the Year	151.62	160.97	32.48	(77.74)
Addition during the Year	**(3.61)**	**(136.50)**	**(108.27)**	**(192.01)**
Closing cumulative Revenue (Gap)/Surplus	148.01	24.46	(75.79)	(269.75)
Interest on Working Capital	**8.65%**	**8.65%**	**9.00%**	**9.30%**
Average of Revenue (Gap)/Surplus	149.81	92.71	(21.66)	(173.75)
Add: Interest on (Gap)/Surplus of Previous Year	12.96	8.02	(1.95)	(16.16)
Closing (Gap)/Surplus for the Year	**160.97**	**32.48**	**(77.74)**	**(285.91)**

Commission's analysis

Regulation 12.5 of the JERC MYT Regulation, 2021 states the following:

"12. Annual Performance Review, Truing-up and tariff determination during the Control Period

12.5

... (c) Carrying Cost shall be allowed for a Generating Company, Transmission Licensee or Distribution Licensee on the amount of revenue gap for the period from the date on which such gap has become due, i.e., from the end of the Year for which true-up has been done, till the end of the Year in which it is addressed, on the basis of actual rate of loan taken by the Licensee to fund the deficit in revenue:

Provided that Carrying Cost on the amount of revenue gap shall be allowed subject to prudence check and submission of documentary evidence for having incurred the carrying cost in the years prior to the year in which the revenue gap is addressed:

Provided also that if no loan has been taken to fund revenue deficit, the Commission shall allow Carrying Cost on simple interest basis at one (1) Year State Bank of India (SBI) MCLR /any replacement thereof as notified *by RBI for the time being in effect applicable for 1 Year period, as may be, applicable as on 1st April of the relevant Year plus 100 basis points;*

Provided further that in case of revenue surplus, the Commission shall charge the Licensee a Carrying Cost from the date on which such surplus has become due, i.e., from the end of the Year for which true-up has been done, till the end of the Year in which it is addressed on simple interest basis at one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for 1 Year period, as may be, applicable as on 1st April of the relevant Year plus 100 basis points."

Since the Petitioner has not borrowed any loan therefore the Commission allows Carrying Cost on simple interest basis at one (1) Year State Bank of India (SBI) MCLR for FY 2021-22, FY 2022-23 and FY 2023-24.

Since the Commission has decided not to take up True-up for FY 2021-22 in the current Order due to non-availability of audited accounts, the standalone revenue gap/(surplus) as approved in the APR of FY 2021-22 vide Order dated 11th July 2022 has been considered by the Commission.

Accordingly, the Commission determines the standalone revenue gap/surplus for each year and likewise taking into account the previous year's gap/surplus, determines the cumulative revenue gap/ surplus at the end of FY 2023-24 as shown in the table as follows:

Table 145: Standalone Revenue Gap/ (Surplus) determined by Commission at existing tariff (In INR Cr)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Net Revenue Requirement	612.01	775.60	934.77	889.88
Revenue from Retail Sales at Existing Tariff	701.38	784.13	840.05	853.19
Regulatory Surcharge %	0.01	0.000	0.00	0.00
FPPCA Charges	0.65	0.000	0.00	0.00
Total Revenue	702.04	784.13	840.05	853.19
Standalone Gap /(Surplus) for the year	**(90.03)**	**(8.53)**	**94.72**	**36.68**

Table 146: Cumulative Revenue Gap/ (Surplus) determined by Commission at existing tariff (In INR Cr)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Opening Gap/(Surplus)	(151.62)	(258.85)	(288.43)	(213.00)
Addition Gap/(Surplus) due to standalone year	**(90.03)**	**(8.53)**	**94.72**	**36.68**
Closing Gap/(Surplus)	(241.65)	(267.38)	(193.71)	(176.31)
Average Gap/(Surplus)	(196.63)	(263.12)	(241.07)	(194.65)
Rate of Interest	8.75%	8.00%	8.00%	8.00%
Carrying cost	(17.21)	(21.05)	(19.29)	(15.57)
Closing Gap/ (Surplus)	**(258.85)**	**(288.43)**	**(213.00)**	**(191.89)**

The Commission determines a cumulative revenue surplus of INR 191.89 Cr till the FY 2023-24 at existing tariff.

7.4. Treatment of the Revenue Gap/ Surplus and Tariff Design

As derived from above, the resultant cumulative revenue surplus is INR 191.89 Cr. In view of revenue surplus of the department, the Commission has decided to make no modifications in the existing tariff schedule.

7.4.1. Tariff Design

Petitioner's Submission

The Petitioner has submitted that the revision in exiting retail supply tariff has been proposed based on the provisions of Tariff Design specified in the National Tariff Policy, 2016, and net revenue requirement proposed for FY 2023-24. The Clause 8.3.1 of National Tariff Policy, 2016, and Section 61(g) of Electricity Act, 2003 states that tariff shall reflect the efficient and prudence cost of supply to the consumer. Besides the Tariff should be brought within the range of + 20% of the average cost of supply, to achieve the above objective. EWEDC submits that to avoid tariff shock to the consumers, average increase ~10.25% in existing retail supply tariff has been proposed to meet the net revenue gap requirement for FY 2023-24.

The Petitioner has requested to approve the balance unfunded revenue gap as regulatory asset and amortised the same appropriately within the ongoing control period.

The Petitioner has proposed the tariff schedule as follows:

Table 147: Tariff Schedule proposed by the Petitioner for FY 2023-24

S. No	Consumer Category	Proposed Tariff	
		Fixed Charge INR/kW/month	Energy Charge INR/kWh
1.	**DOMESTIC SUPPLY (DS)**		
I.	**LT Domestic**		
a.	0-150 kWh per month	25.00	3.00
b.	151-400 kWh per month		4.50
c.	Above 400 kWh per month		5.00
II.	**HT Domestic**	25.00	4.80
2.	**COMMERCIAL/ NON RESIDENTIAL (NRS)**		
I.	**LT Commercial**		
a.	0-150 kWh per month	INR. 40/kW/Month for Single Phase INR. 120/kW/Month for Three Phase	4.75
b.	151-400 kWh per month		5.00
c.	Above 400 kWh per month		5.50
II.	**HT Commercial**	120.00	4.75
3.	**INDUSTRY**		
I	Large Industrial Power Supply (LS)	220	4.60
II	Medium Industrial Power Supply (MS)	220	4.40
III	Small Industrial Power Supply (SP)	50	4.50
4.	**AGRICULTURAL PUMPING SUPPLY (AR)**	-	2.80

S. No	Consumer Category			Proposed Tariff	
				Fixed Charge INR/kW/month	Energy Charge INR/kWh
5.	**PUBLIC LIGHTING (PL)**				
I	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external agency			120	5.00
II	Advertisement/ Neon-sign Boards Advertisement boards, billboards (apart from advertisement boards installed on commercial establishments and charged under commercial tariff)			120	6.60
6.	**BULK SUPPLY (BS)**			220	4.60
7.	**TEMPORARY SUPPLY**			Tariff shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both. For multi activity pursuit, applicable Tariff for temporary connection shall be with reference to that of commercial category for permanent supply.	
8.	**ELECTRIC VEHICLE CHARGING STATION**			-	3.80

Commission's analysis

The Commission has determined the retail tariff for the FY 2023-24 in accordance with the principles stated in the Electricity Act, 2003 Tariff Policy, 2016, and the JERC MYT Regulations, 2021. The Tariff design in general is guided by the following principles:

1. Cost reflective: The tariffs determined should efficiently reflect the cost of supply for each consumer category.
2. Progressive tariffs: Ensuring progressivity among tariffs by having telescopic tariff slabs which encourages efficient consumption and at the same time allows intra-category cross-subsidy by way of charging higher tariff for higher consumption to subsidise the lower consumption consumers
3. Revenue neutrality: There should be no impact on the utility's yearly revenue due to rationalization of tariffs i.e. the overall status quo should be maintained.
4. Affordability: Assessing affordability of electricity for Domestic and Commercial consumers for defining slab ranges and setting tariffs
5. Revenue stability: Tariff should ensure adequate fixed cost recovery for utilities from fixed/demand charges
6. Avoiding tariff shocks: Tariff shocks should be avoided, and stakeholders should be able to predict the future trends in tariffs
7. Demand management and grid stability: Demand management and grid stability should be ensured with demand-based tariffs

8. Simplified tariff structure: Tariff structure should be simplified to make it easily administrable by the utility and easy to understand for the consumer.

9. Smart tariff design: Tariff rate design should take into consideration trends in electric power such as small-scale renewable generation by consumers, energy efficiency, electric vehicle charging, etc.

While all the above parameters contribute significantly to developing a sustainable tariff framework, there are certain parameters namely Cost of Supply and Tariff Affordability which are of importance and constitute the building blocks in achieving the overall objective. The context and the approach for these parameters have been discussed as follows:

1. Cost of Supply

a) Context

Due to electricity being a crucial utility item for all consumers, over the period of time, various socio-economic issues have been factored in to determine the end user's tariffs. This has unfortunately led to severe imbalance between the tariffs levied vis-a-vis the cost of supply of the electricity, causing distress to the Discom. For example, in order to ensure that tariffs are kept in check for residential consumers, while still allowing cost recovery for Discoms, cross subsidy is built in between categories. The tariffs so determined, are skewed, with tariff for industrial and commercial consumers being higher and for other categories being lower than their respective costs of supply. The implications of this imbalance in tariffs is twofold – uncompetitive industries owing to higher input costs and inability of Discoms to recover sufficient tariffs from domestic consumers, resulting in financial distress. The issue is more pronounced for rural supply where tariffs are highly subsidized, actual cost of supply is higher and revenue recovery is poor.

It is thus essential that tariffs reflect the true cost to service a category of consumer. As a crucial first step towards cost-reflective tariffs, it is important for distribution utilities to determine the costs of supply (which cascade from generation to transmission and finally to distribution and retail supply of power) that should be prudently recovered from each consumer category. These costs should correspond to the actual costs being imposed by each consumer category on the Discom. By determining consumer category wise costs of supply, the Discom would be in a better position to allocate costs where relevant and determine how tariffs can be levied fairly on each category.

b) Approach:

The overall approach that can be followed for accurately determining the Cost of Supply has been discussed as follows:

Presently, the most commonly used approach for determining the cost of supply of electricity for tariff determination is the Average Cost of Supply (ACoS) method. The ACoS is computed by dividing the Annual Revenue Requirement (ARR) determined by the Commission for recovery through tariffs by the total energy sales for the year. However, this methodology doesn't indicate the costs incurred by consumers at different voltage levels using different assets of the network. Therefore, it doesn't help in determining accurate tariffs for particular consumers, eventually resulting in insufficient cost coverage.

As a next logical step, the Voltage wise cost of supply (VCoS) method provides a better reflection of cost to supply to consumers at different voltage levels. A simplified version of the same was suggested by Hon'ble ATE in 2010, to determine VCoS in the absence of all necessary data. In this method, the power purchase costs and other costs (such as network costs, wheeling costs etc.) are allocated to various consumer categories based on energy input or energy sales (as considered appropriate by the State Commission). This approach factors in the voltage level differentiation based on losses, however, it does not factor in asset utilization at different voltage levels.

A more refined version of determination of VCoS uses three parameters for allocating various costs to voltage levels – energy input at each voltage level, energy sales and asset allocation to voltage levels. The losses segregated voltage wise (as percentage of input energy) are to be allocated to different voltage levels based on energy input to each voltage level (as explained in subsequent sections). Subsequently, the cost elements such as power procurement costs, employee expenses, administrative and general expenses and income tax can be allocated to each voltage levels based on total sales at each voltage level. The cost elements, which are dependent on assets such as depreciation, interest costs, return allowed to utility etc. are allocated in ratio of assets allocated to each voltage level. The sum of all the cost components at each voltage level is the cost to supply the particular voltage (EHT/HT/LT).

The Commission is of the opinion that while VCoS differentiates cost allocation based on voltage levels, it does not factor in consumer category level differentiation. For instance, at the same LT level, cost of supplying electricity to a Commercial consumer may be different from that of a Residential consumer. Thus, it believes that the most progressive way forward for EWEDC is to accurately determine the cost of supply is to attempt to determine Cost of Supply at various category level. The Commission notes that States like Andhra Pradesh and Telangana have determined Category wise Cost of Supply albeit with several assumptions and EWEDC must also attempt to determine the same.

The Commission is of the opinion that for determination of the Category wise Cost of Supply, the embedded cost methodology is an appropriate starting point.

The Commission strongly believes that determination of Category wise Cost of Supply is essential to ensure cost reflectivity in tariffs fixed for different categories. However, the Commission feels that to carry out this exercise a lot of field level information would be required such as Category wise co-incident and non- co-incident demand, Voltage wise value of assets (Voltage wise asset ratio), Voltage wise losses, Category wise break-up of costs related to Metering, Billing and Collection etc. which currently the Petitioner doesn't maintain. Therefore, in absence of the same, the Commission is unable to determine the Category wise Cost of Supply in this Order but directs the Petitioner to start maintaining this data and submit the same in the tariff proceedings of next year. In absence of the requisite data for determination of voltage-wise/category-wise cost of supply as mentioned above, the Commission as part of this Tariff Order has determined the tariff according to the Average Cost of Supply (ACoS).

2. *Tariff Affordability*

a) Context

The Commission understands that the consumer base of Distribution Licensee is varied and covers a wide spectrum of socio-economic backgrounds, specially the domestic category consumers. It is also aware that most low-income households spend a substantial share of their income on utility services such as electricity, heating and water. However, any envisaged tariff reforms are often objected to avoid further burdening of these consumers. But to improve the quality of service of electricity, the Distribution Licensee has to undertake significant capital expenditure which eventually deteriorates the affordability of tariffs. Thus, to tackle this problem and in the spirit of economic wellbeing of all consumer classes, the concept of cross-subsidies has been built into the current tariff structure.

However, the Commission believes that a more scientific and logical approach can be adopted to identify the right categories of consumers and the right cross-subsidy/subsidy requirement that will benefit the end consumers at the same time. Hence, the Commission believes that there is a strong need to develop a scientific methodology to assess the social impact of electricity tariffs.

The overall approach that can be followed for determining the tariff affordability has been discussed as follows.

b) Approach

On reviewing methodologies adopted globally for social impact assessment of electricity tariffs by studying international research reports and studying model practices internationally, the Commission found that Tariff Affordability Ratio (TAR) is a reliable parameter to measure affordability of electricity in households.

TAR is defined by obtaining the burden incurred by a household for electricity as compared to the overall household expenditure. The rationale behind this concept is that the electricity is basic utility and is unavoidable in today's scenario, however, this does not ensure that the expenditure level is in line with the overall household expenditure. Hence, this concept helps to understand the affordability level of electricity on households with different economic levels.

The electricity expenditure can be determined initially for domestic consumers by computing the average consumption levels across each slab and the household expenditure can be estimated from national surveys of household expenditure across economic levels conducted by organizations like NSSO. Thereafter the distribution of consumers of the Distribution Licensee across tariff slabs can be mapped across the established economic levels to develop the final affordability ratio matrix for the Distribution Licensee's domestic consumer base.

Following the identification of the current ratio of Tariff Affordability, the Commission in consultation with the stakeholders will develop benchmarks for acceptable affordability levels by studying trends across countries with a demography and energy scenario similar to that of India and propose appropriate tariffs. The final output shall help understand the Commission to modify tariffs in cases where there is more room for tariff increase or a need to correct tariffs. The exercise would also help the Commission in setting tariff slabs as per the paying capacity of the consumers which would be beneficial especially for Domestic category consumers. Additionally, this shall also help the Government to formulate better schemes to effectively channelize its intended benefits.

The Commission in these tariff proceedings is not carrying out this exercise due to unavailability of accurate data. The Petitioner is directed to ensure the sanctity of the data maintained pertaining to various categories.

Based on the discussions above, the Commission is continuing with its existing approach of determination of tariff for various consumer categories based on the Average Cost of Supply (ACoS) and reduction of Cross Subsidy amongst various consumer categories, ensuring consumer tariffs progressively moving towards the cost.

Cross Subsidy

As per Section 61 (g) of the Electricity Act 2003

*"(g) that the **tariff progressively reflects the cost of supply** of electricity and also, **reduces and eliminates cross-subsidies** within the period to be specified by the Appropriate Commission;"*

For reduction of cross subsidies, the Tariff Policy 2016 in Section 8.3 stipulates as below:

*"For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought **within ±20% of the average cost of supply**. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy."*

In order to achieve the objectives of the Tariff Policy 2016 of bringing down the cross-subsidy levels amongst various consumer categories within ±20% of the average cost of supply, the Commission has tried to rationalize the tariff applicable to various consumer categories.

The limit of cross subsidy, as envisaged in the Tariff Policy 2016, can't be achieved by rationalizing the tariff in a single year, as this may lead to tariff shock to the cross subsidized consumers. In this Tariff Order, the Commission has continued its approach of rationalization of the tariff for various consumer categories and reducing the cross subsidy.

Accordingly, in this Tariff Order, the Commission has designed tariff for various consumer categories considering the Average Cost of supply in line with the provisions of the Tariff Policy, 2016. While designing the tariff for FY 2023-24, the Commission has reduced the cross-subsidy levels with an endeavor to bring the same within range specified in Tariff Policy 2016.

7.4.2. Approved Final Tariff Schedule

The existing retail tariff and tariff now approved by the Commission for each consumer category has been shown in the table below:

Table 148: Existing and approved tariff

S. No	Consumer Category	Existing Tariff		Approved Tariff	
		Fixed Charge INR/kW/month	Energy Charge INR/kWh	Fixed Charge INR/kW/month or part thereof	Energy Charge INR/kWh
1.	**DOMESTIC SUPPLY (DS)**				
I.	**LT Domestic**				
a.	0-150 kWh per month	15.00	2.75	15.00	2.75
b.	151-400 kWh per month		4.25		4.25
c.	Above 400 kWh per month		4.65		4.65
II.	**HT Domestic**	15.00	4.30	15.00	4.30
2.	**COMMERCIAL/ NON RESIDENTIAL (NRS)**				
I.	**LT Commercial**				
a.	0-150 kWh per month	INR. 25/kW/Month for Single Phase INR. 100/kW/Month for Three Phase	4.50	INR. 25/kW/Month or part thereof for Single Phase INR. 100/kW/Month or part thereof for Three Phase	4.50
b.	151-400 kWh per month		4.70		4.70
c.	Above 400 kWh per month		5.00		5.00
II.	**HT Commercial**	100.00	4.50	100.00	4.50
3.	**INDUSTRY**				
I	Large Industrial Power Supply (LS)	200.00	4.50	200.00	4.50
II	Medium Industrial Power Supply (MS)	200.00	4.20	200.00	4.20
III	Small Industrial Power Supply (SP)	30.00	4.30	30.00	4.30
4.	**AGRICULTURAL PUMPING SUPPLY (AR)**	-	2.60	-	2.60

S. No	Consumer Category	Existing Tariff		Approved Tariff	
		Fixed Charge INR/kW/month	Energy Charge INR/kWh	Fixed Charge INR/kW/month or part thereof	Energy Charge INR/kWh
5.	**PUBLIC LIGHTING (PL)**				
I	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external agency	100.00	4.80	100.00	4.80
II	Advertisement/ Neon-sign Boards Advertisement boards, billboards (apart from advertisement boards installed on commercial establishments and charged under commercial tariff)	100.00	6.40	100.00	6.40
6.	**BULK SUPPLY (BS)**	150.00	4.20	150.00	4.20
7.	**TEMPORARY SUPPLY**	Tariff shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both. For multi activity pursuit, applicable Tariff for temporary connection shall be with reference to that of commercial category for permanent supply.		Tariff shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both. For multi activity pursuit, applicable Tariff for temporary connection shall be with reference to that of commercial category for permanent supply.	
8.	**ELECTRIC VEHICLE CHARGING STATION**	-	3.60	-	3.60*

** This tariff is applicable only for supply at HT. In case of LT supply, tariff will be INR 0.20/kWh higher than the above tariff*

7.4.3. Revenue from Approved Retail Tariff for FY 2023-24

Based on the retail tariff approved above, the Revenue from approved tariff is shown in the following table. The Commission has not estimated any revenue for Electric Vehicle Charging Station, Residential Complexes and Industrial Complexes categories as no sales have been booked under the respective categories. the Commission as of now approves the k factor for the category as shown in the table, however, directs the Petitioner to submit the requisite data for energy sales, no. of consumers and connected load in case any consumers are identified under these categories. Accordingly, the revenue from approved retail tariff is determined as follows:

Table 149: Revenue from approved retail tariff determined by Commission (In INR Cr)

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)	K factor
1	**DOMESTIC SUPPLY (DS)**	**825.34**	**16.99**	**360.50**	**377.48**	**4.57**	**0.90**
A	LT Domestic						

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)	K factor
1	0-150 units	65.94	4.19	18.13	22.32	3.39	0.66
2	151-400 units	240.92	6.03	102.39	108.42	4.50	0.88
3	401 and above units	486.51	6.20	226.23	232.43	4.78	0.94
B	HT Domestic	31.96	0.56	13.74	14.30	4.48	0.88
2	**COMMERCIAL / NON RESIDENTIAL (NRS)**	**492.25**	**50.64**	**232.22**	**282.86**	**5.75**	**189.36**
A	LT Commercial						
1	0-150 units (Single Phase)	6.19	0.68	2.78	3.46	5.60	1.10
2	151-400 units (Single Phase)	13.71	0.31	6.44	6.75	4.93	0.97
3	401 and above units (Single Phase)	23.33	0.16	11.67	11.82	5.07	0.99
1	0-150 units (Three Phase)	0.04	3.56	0.02	3.57	933.82	183.23
2	151-400 units (Three Phase)	6.56	3.28	3.08	6.36	9.70	1.90
3	401 and above units (Three Phase)	182.66	16.60	91.33	107.93	5.91	1.16
B	HT Commercial	259.76	26.06	116.89	142.95	5.50	1.08
3	**INDUSTRY**	**249.56**	**29.10**	**108.83**	**137.93**	**5.53**	**1.08**
1	Large Industrial Power Supply (LS)	127.84	14.16	57.53	71.69	5.61	1.10
2	Medium Industrial Power Supply (MS)	103.30	14.12	43.39	57.51	5.57	1.09
3	Small Industrial Power Supply (SP)	18.42	0.82	7.92	8.74	4.74	0.93
4	**AGRICULTURAL PUMPING SUPPLY(AR)**	**1.62**	**0.00**	**0.42**	**0.42**	**2.60**	**0.51**
1	Agricultural Pumping Supply	1.62	0.00	0.42	0.42	2.60	0.51
5	**PUBLIC LIGHTING (PL)**	**15.22**	**0.54**	**7.31**	**7.85**	**5.16**	**1.01**
6	**Bulk Supply (BS)**	**85.90**	**7.43**	**36.08**	**43.51**	**5.07**	**0.99**
1	Bulk Supply	85.90	7.43	36.08	43.51	5.07	0.99
7	**Temporary Supply**	**3.57**	**0.00**	**2.89**	**2.89**	**8.09**	**1.59**
1	Temporary Supply	3.57	0.00	2.89	2.89	8.09	1.59
							0.00
8	**Electric Vehicle Charging Station**	**0.68**	**0.00**	**0.24**	**0.24**	**3.60**	**0.71**
1	Electric Vehicle Charging Station	0.68	0.00	0.24	0.24	3.60	0.71
	TOTAL	**1674.13**	**104.71**	**748.49**	**853.19**	**5.10**	**1.00**

The Commission approves revenue from approved Retail Tariff of INR 853.19 Cr. for the FY 2023-24.

7.4.4. *Cumulative Revenue Gap/ (Surplus) at Approved Tariff*

Accordingly, the resultant cumulative Revenue Gap/Surplus has been shown in the following table:

Table 150: Cumulative Revenue Gap/ (Surplus) approved by Commission for FY 2023-24 (In INR Cr)

Particulars	**FY 2020-21**	**FY 2021-22**	**FY 2022-23**	**FY 2023-24**
Opening Gap/(Surplus)	(151.62)	(258.85)	(288.43)	(213.00)
Addition Gap/(Surplus) due to standalone year	**(90.03)**	**(8.53)**	**94.72**	**36.68**
Closing Gap/(Surplus)	(241.65)	(267.38)	(193.71)	(176.31)
Average Gap/(Surplus)	(196.63)	(263.12)	(241.07)	(194.65)
Rate of Interest	8.75%	8.00%	8.00%	8.00%
Carrying cost	(17.21)	(21.05)	(19.29)	(15.57)
Closing Gap/ (Surplus)	**(258.85)**	**(288.43)**	**(213.00)**	**(191.89)**

The Commission approves a cumulative revenue surplus of INR 191.89 Cr till FY 2023-24.

7.4.5. *Highlights of the Tariff Structure*

The highlights of the tariff structure approved by the Commission for FY 2023-24 are as follows:

1. The Commission observed that the Petitioner had a standalone revenue surplus in each year from FY 2016-17 to FY 2020-21. Further, it is observed that the projected standalone gap for FY 2023-24 and cumulative revenue surplus at the end of FY 2023-24 at existing tariff is expected to be INR 36.68 Cr and INR 191.89 Cr respectively. Although the Petitioner is revenue deficit on standalone basis for FY 2023-24, it is revenue surplus at the end of FY 2023-24 of INR 191.89 Cr due to accumulated revenue surplus in previous years. Hence, the Commission has retained retail supply tariff for all consumer categories.

2. The Commission has approved the Average Billing Rate (ABR) of INR 5.10/kWh against the approved Average Cost of Supply (ACoS) of INR 5.32/kWh.

3. On account of cumulative revenue surplus in FY 2023-24, the Petitioner is hereby directed to not recover FPPCA from all consumer categories starting from 1st April 2022 onwards till further directions of the Commission. The Petitioner is, however, directed to timely submit the quarterly FPPCA calculation to the Commission for review.

8. Chapter 8: Open Access Charges for the FY 2023-24

8.1. Wheeling Charges

8.1.1. Allocation Matrix - Allocation of ARR into Wheeling and Retail Supply of Electricity

Petitioner's Submission:

The Petitioner has submitted the bifurcation of all expenses of FY 2023-24 between the functions of wheeling business (wire business) and retail supply business based on the Regulation 49 of the JERC MYT Regulations, 2021. The summary of the allocation statement and the segregation of ARR into wheeling and retail supply business for FY 2023-24 is given in the table below:

Table 151: Allocation matrix as submitted by the Petitioner

Particulars	ARR Projected for FY 2023-24 (INR Cr)	Allocation %		ARR Allocation for FY 2023-24 (INR Cr)	
		Wire Business	Retail Supply	Wire Business	Retail Supply
Power Purchase Expense	899.26	0%	100%	0.00	899.26
Employee Cost	93.67	40%	60%	37.47	56.20
A&G Expenses	7.04	50%	50%	3.52	3.52
R&M Expenses	18.38	90%	10%	16.54	1.84
Depreciation	20.05	90%	10%	18.04	2.00
Interest on Loan	2.69	90%	10%	2.42	0.27
Interest on Working Capital	0.00	10%	90%	0.00	0.00
Interest on Consumer Security Deposit	7.47	10%	90%	0.75	6.72
Return on Equity	25.54	90%	10%	22.99	2.55
Bad and Doubtful Debt	10.32	0%	100%	0.00	10.32
Income Tax	0.00	90%	10%	0.00	0.00
Annual Revenue Requirement	**1084.44**			**101.74**	**982.70**
Less: Non-Tariff Income	52.28	10%	5.23	47.06	47.06
Aggregate Revenue Requirement	**1032.15**			**96.51**	**935.64**

The Petitioner has further submitted that it has computed the wheeling charges based on the following methodology:

a) O&M Expenses consisting of Employee, A&G and R&M expenses have been allocated to each voltage level on the basis of number of consumers.

b) All the expenses other than the O&M expenses have been allocated to each voltage level on the basis of voltage wise asset allocation.

c) The resultant cost at HT/EHT voltage level is divided among LT and HT/EHT voltage levels on the basis of energy sales at respective voltage levels as the HT/EHT network is used by consumers at all voltage levels.

d) The loss level of HT/EHT voltage has been considered as 4.03%, same as that approved in the MYT Order.

Accordingly, the computation of Wheeling charges as submitted by the Petition has been shown in the following table:

Table 152: Wheeling Charge calculation as submitted by Petitioner

Category	O&M expenses (INR Cr.)	Other Expenses (INR Cr.)	Total Expenses (INR Cr.)	Sales (MU)	Wheeling Charges (INR/kWh)
Low Tension (LT) Level	57.39	34.10	91.49	1122.17	0.82
High Tension (HT)/ Extra High Tension (EHT)Level	0.14	4.87	5.02	510.51	0.10
Total	**57.53**	**38.98**	**96.51**	**1632.68**	**0.59**

Commission's analysis:

The allocation between wheeling and retail supply business for the FY 2023-24 as per the ARR approved in this Order is provided in the table below:

Table 153: Allocation matrix approved by Commission

Particulars	Allocation (%)		FY 2023-24		
	Wires Business (%)	Retail Supply Business (%)	Wires Business (Rs Cr)	Retail Supply Business (Rs Cr)	Total ARR (Rs Cr)
Power purchase expenses inclusive of Inter-State Transmission expenses	0%	100%	0.00	746.38	746.38
Employee costs	40%	60%	37.47	56.21	93.68
Administration and General Expenses	50%	50%	3.52	3.52	7.04
Repair and Maintenance Expenses	90%	10%	16.56	1.84	18.40
Depreciation	90%	10%	11.62	1.29	12.91
Interest on Loan	90%	10%	3.19	0.35	3.55
Interest on Working Capital	10%	90%	-	-	-
Interest on consumer security deposit	10%	90%	0.75	6.72	7.47
Return on Equity	90%	10%	22.99	2.55	25.54
Bad & Doubtful Debt written off	0%	100%	-	-	-
Income Tax	90%	10%	-	-	-
Total Revenue Requirement			**96.09**	**818.87**	**914.96**

Particulars	Allocation (%)		FY 2023-24		
	Wires Business (%)	Retail Supply Business (%)	Wires Business (Rs Cr)	Retail Supply Business (Rs Cr)	Total ARR (Rs Cr)
Less: Non-Tariff Income	*10%*	*90%*	2.51	22.58	25.09
Net Revenue Requirement			**93.58**	**796.29**	**889.88**

To determine the wheeling charges, the wheeling costs are allocated on the basis of voltage levels. The wheeling charges are levied for the distribution network utilized by the Open Access consumers and primarily comprises of O&M Expenses and other costs as provided in the table above.

The methodology adopted for allocating the derived wheeling costs at respective voltage levels has been elaborated as follows:

- O&M Expenses consisting of Employee, A&G and R&M expenses are allocated to each voltage level on the basis of number of consumers
- All expenses other than the O&M expenses are allocated to each voltage level on the basis of voltage wise asset allocation. The Petitioner in this regard was directed to submit the voltage wise asset allocation but has failed to submit the desired information and in the absence of such information, the Commission has assumed the voltage wise asset allocation.
- The resultant cost at HT/EHT voltage level derived after performing the above steps is then divided between LT and HT/EHT voltage level on the basis of input energy at respective voltage levels, since the HT/EHT network is used by consumers of both HT/EHT and LT voltage levels.
- The energy input has been determined assuming the cumulative loss level of HT/EHT voltage as 4.03%. The Petitioner in this regard has failed to submit the voltage wise losses. The resultant losses have been loaded to the LT voltage level in order to maintain the overall Intra-State T&D loss at 8.40% as approved in the Business Plan Order dated 11th July 2022.

Table 154: Parameters assumed for voltage wise allocation of wheeling costs

Category	No. of Consumers	Asset Allocation (%)	Sales (MU)	Cumulative Voltage wise Losses (%)
Low Tension (LT) Level	238,467	60.00%	1,151.27	10.26%
High Tension (HT)/ Extra High Tension (EHT) Level	1,354	40.00%	522.86	4.03%
Total	**239,821**	**100.00%**	**1,674.13**	**8.40%**

Accordingly, the Commission approves the Wheeling Charges as shown in the table below:

Table 155: Allocation of costs based on voltage level

Category	O&M (INR Cr)	Others (INR Cr)	Total (INR Cr)	Sales (MU)
Low Tension (LT) Level	57.45	31.74	89.19	1,151.27
High Tension (HT)/ Extra High Tension (EHT) Level	0.10	4.30	4.39	522.86
Total	**57.55**	**36.04**	**93.58**	**1,674.13**

Table 156: Wheeling Charges approved by Commission

Category	O&M (INR Cr)	Others (INR Cr)	Total (INR Cr)	Sales (MU)	Wheeling Charges (INR/kWh)
Low Tension (LT) Level	57.45	31.74	89.19	1,151.27	**0.77**
High Tension (HT)/ Extra High Tension (EHT) Level	0.10	4.30	4.39	522.86	**0.08**
Total	**57.55**	**36.04**	**93.58**	**1,674.13**	

The Commission approves wheeling charge of INR 0.77/kWh at LT voltage level and INR 0.08/kWh at HT/EHT voltage level

8.2. *Additional Surcharge*

Petitioner's submission:

The Petitioner has computed the additional surcharge based on the provisions of Regulation 4.5(2) and 5.2(1)(b) of JERC (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017. The additional surcharge determined by the Petitioner for FY 2023-24 has been provided in the table as follows:

Table 157: Additional Surcharge calculation as submitted by Petitioner

Particulars	FY 2023-24
Total Power Purchase cost approved	899.26
Fixed Cost component in Power Purchase Cost (excluding Transmission Charges)	263.73
Energy Sales (MU)	1632.68
Additional Surcharge (INR/kWh)	**1.62**

Commission's analysis:

The Commission has notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017 (as amended from time to time). Regulation 4.5 (1) of the said Regulations states the following:

"An Open Access Consumer, receiving supply of electricity from a person other than the Distribution Licensee of his area of supply, shall pay to the Distribution Licensee an additional surcharge in addition to wheeling charges and cross-subsidy surcharge, to meet the fixed cost of such Distribution Licensee arising out of his obligation to supply as provided under sub-section (4) of Section 42 of the Act"

Regulation 4.5 (2) of the said Regulations stipulates:

This additional surcharge shall become applicable only if the obligation of the Licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed costs by the Licensee consequent to such a contract. However, the fixed costs related to network assets would be recovered through wheeling charges.

Further, Regulation 5.2 (1) (b) states the following:

The quantum of drawal of electricity by a partial Open Access Consumer from the Distribution Licensee during any Time Block of a Day should not exceed the "Admissible Drawl of Electricity by the Open Access Consumer" which is the difference of Contract Demand and maximum quantum of Open Access for which approval has been granted by the Nodal Agency.

[Illustration: If an Open Access Consumer with a Contract Demand of 10 MW has been given an approval for a maximum Open Access quantum of 6MW for a period of 3 Months, the Admissible Drawl of Electricity from the Distribution Licensee during any Time Block shall be 4 MW for any Day during a period of 3 Months.]"

Therefore, in accordance with the above Regulations, the Commission has determined the Additional Surcharge as per the following:

Table 158: Additional Surcharge approved by Commission

Particulars	2023-24
Total Power Purchase cost approved (including REC cost)	746.38
Fixed Cost component in Power Purchase Cost (excluding Transmission Charges)	224.35
Energy Sales (MU)	1,674.13
Additional Surcharge (INR/kWh)	**1.34**

Earlier, a consumer availing Open Access was required to pay fixed charges on contracted load even when the load was drawn partially from the Distribution Licensee. In addition, the consumer was also required to pay wheeling charges, additional surcharge and the cross-subsidy surcharge. **As per the new "Open Access Regulations, 2017" (as amended from time to time), a consumer may choose to pay fixed charges on reduced demand after adjusting for demand drawn through Open Access in accordance with the regulation.**

The Commission approves an Additional Surcharge of INR 1.34/kWh for FY 2023-24.

The Commission directs the Petitioner to submit quarterly details of the power stranded on account of consumers opting for open access along with the Additional Surcharge recovered from these consumers. The Commission will analyse the information and change the applicable Additional Surcharge, if required.

8.3. Cross-Subsidy Surcharge

Petitioner's submission:

The Petitioner has adopted the same methodology for computation of Cross-Subsidy Surcharge as approved by the Commission in the Tariff Order for FY 2022-23. The cross-subsidy surcharge determined by the Petitioner for FY 2023-24 has been provided in the table as follows:

Table 159: Cross-Subsidy Surcharge as proposed by the Petitioner

Category	VCoS (INR/kWh)	ABR (INR/kWh)	Cross- Subsidy (INR/kWh)
Low Tension (LT) Level	7.06	4.89	-
High Tension (HT)/ Extra High Tension(EHT) Level	4.69	5.71	1.02

Commission's analysis:

The Commission in this Order has calculated the cross-subsidy surcharge with respect to voltage wise cost of supply. The following approach has been adopted to determine the voltage wise cost of supply:

- Voltage Wise losses are assumed for HT/EHT voltage level. The remaining losses are adjusted in the LT voltage level in order to maintain the Intra-State T&D losses at 8.40%, as approved in the ARR for FY 2023-24. Voltage wise losses assumed at each level have been shown in the table below:

Table 160: Voltage wise losses assumed by Commission

Category	Voltage Level Loss (%)	Cumulative Losses upto that voltage level (%)
Low Tension (LT) Level	10.26%	14.29%
High Tension (HT)/ Extra High Tension (EHT) Level	4.03%	4.03%
Total	**8.40%**	**8.40%**

Using these losses, the energy input at each voltage level is determined based on the energy sales. The following table shows the energy input at each voltage level

Table 161: Energy Input at each voltage level (MU)

Category	Energy Sales (MU)	Cumulative Losses (%)	Energy Input (MU)
Low Tension (LT) Level	1151.27	14.29%	1282.84
High Tension (HT)/ Extra High Tension (EHT) Level	522.86	4.03%	544.82
Total	**1674.13**	**8.40%**	**1827.66**

Now the overall ARR approved for FY 2023-24 is divided into variable and fixed ARR with variable ARR comprising of variable component of the power purchase cost and fixed ARR comprising of all the other costs.

The fixed component comprising of fixed cost of power purchase, O&M etc. is further allocated to each voltage category as per the following principles:

- The fixed cost of power purchase is assigned to each voltage level on the basis of energy input at respective voltage levels.
- The O&M expenses are allocated to each voltage level on the basis of the number of consumers. The resultant cost allocated to HT/EHT level is then further allocated between HT/EHT and LT level on the basis of input energy, as the HT/EHT network is utilized by both LT and HT/EHT network consumers.
- The remaining fixed costs are allocated on the basis of voltage wise asset allocation assumed earlier and further allocated to respective voltage levels on the basis of input energy.

Table 162: Parameters used for allocation of fixed costs

Category	Energy Input (MU)	Voltage wise Asset Allocation (%)	Number of Consumers
Low Tension (LT) Level	1282.84	60.00%	238467
High Tension (HT)/ Extra High Tension (EHT) Level	544.82	40.00%	1354
Total	**1827.66**	**100.00%**	**239821**

The Variable component of the Power purchase cost is allocated on the basis of energy input. The Voltage wise cost of supply (VCoS) is then determined on the basis of energy sales of respective categories. Accordingly, the VCoS is determined as shown in the table below:

Table 163: Voltage Wise Cost of Supply (VCoS)

Category	Allocated Fixed Cost (INR Cr)	Allocated Variable Cost (INR Cr)	Total Cost (INR Cr)	Energy Sales (MU)	VCoS (INR/kwh)
Low Tension (LT) Level	383.30	280.97	664.27	1,151.27	5.77
High Tension (HT)/ Extra High Tension (EHT) Level	106.27	119.33	225.60	522.86	4.31
Total	**489.58**	**400.30**	**889.88**	**1,674.13**	

This, VCoS is then used to determine the Cross-Subsidy Surcharge at each voltage level.

Table 164: Cross-Subsidy Surcharge approved by Commission (INR/kWh)

Category	VCoS (INR/kWh)	ABR (INR/kWh)	Cross- Subsidy (INR/kWh)
Low Tension (LT) Level	5.77	4.91	-
High Tension (HT)/ Extra High Tension (EHT) Level	4.31	5.42	1.11

The Commission approves NIL Cross-Subsidy Surcharge at LT Voltage level and INR 1.11/kWh at HT/EHT Voltage level, in FY 2023-24.

9. Chapter 9: Fuel and Power Purchase Adjustment Mechanism

The State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry receive power from the Central Generating Stations, State Generating Stations, Independent Power Producer's (IPP's) through the long-term power purchase agreements and short-term purchases – through exchange, bilateral purchases etc. The distribution licensees procure power from various available sources and supply power to the consumers at retail tariffs determined by the Commission. Power purchase cost accounts for more than 80% of the Annual Revenue Requirements (ARR) of the distribution licensees and includes the cost paid for procurement of power, transmission charges, Deviation Settlement Mechanism (DSM) charges, State Load Despatch Center (SLDC)/ Regional Load Despatch Center (RLDC) charges and is netted off with revenue earned from the sale of surplus power.

The cost of the long-term power being procured by the distribution licensees is fixed by the Central Electricity Regulatory Commission (CERC) for plants supplying power to more than one State/UT (for example NTPC, NHPC etc.) and by the JERC for plants located within the region (for IPP's, licensees own generation and other State generating sources). Charges for the Over-drawal/Under-drawal from the Grid and the Inter-State Transmission charges, RLDC charges are fixed by the CERC, while Intra-State Transmission charges and SLDC charges are fixed by the JERC. Short-term purchase/ sale of power is done through traders, bilateral contracts, banking and power exchanges at market-determined prices.

While determining retail tariff for any year, the Commission first determines the ARR based on the projection of various cost elements including power purchase cost. Power purchase cost of the distribution licensee is derived from the power purchase quantum and per unit power purchase cost. Quantum of power purchase depends upon the energy sales to the retail consumer and distribution losses, out of which energy sales is not under the control of the distribution licensee. There is also variation in actual per unit power purchase cost vis-a-vis projected per unit power purchase cost due to change in fuel cost, change in power purchase mix i.e. thermal /hydel/renewable mix, long term/short-term power mix etc. This makes power purchase cost uncontrollable in nature.

The Commission undertakes the truing up exercise for the variation in the cost and revenue once the audited accounts of the distribution licensee are available. For example, True-up of the FY 2017-18 will be undertaken by the Commission once the audited accounts of the FY 2017-18 are available. If the audited accounts for the FY 2017-18 are prepared timely, the impact of True-up of various cost and revenue items is allowed in the tariff of the FY 2020-21, along with the carrying cost for 2 years. As the power purchase cost is the major cost element of the ARR of the distribution licensee, adjustment due to change in power purchase cost at regular intervals is important in order to avoid the burden of carrying cost on the additional power purchase cost incurred during the year.

9.1. Legal Provisions

The relevant provisions of the Electricity Act, Regulations, Policy document and the ATE judgments, which enable the Commission to devise, adopt and implement a power purchase/ fuel price adjustment mechanism are as follows:-

(a) Electricity Act, 2003- Section 62 (4)

"No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified."

(b) Tariff Policy, 2016, clause 5.11 – sub-clause (h-4)

"Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation, taxes and cess, variations in power purchase unit costs including on account of adverse natural events."

(c) Tariff Policy, 2016, clause 8.2– sub-clause 8.2.1-(1)

"8.2 Framework for revenue requirements and costs

Actual level of retail sales should be grossed up by normative level of T&D losses as indicated in MYT trajectory for allowing power purchase cost subject to justifiable power purchase mix variation (for example, more energy may be purchased from thermal generation in the event of poor rainfall) and fuel surcharge adjustment as per regulations of the SERC."

(d) Hon'ble ATE judgement in OP1 of 2011 dated 11 November 2011

The Hon'ble ATE directed the SERCs to develop a power purchase cost adjustment mechanism within six months of the date of the Order. The relevant excerpt of the Order is shown as follows:

"(vi)Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment should preferably be on monthly basis on the lines of the Central Commission's Regulations for the generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this Order must put in place such formula/mechanism."

9.2. *Formula*

The following mechanism shall be followed for calculation and adjusting variations on account of Fuel and Power Purchase Cost in the end consumer tariff, which shall come into force w.e.f. 1st April 2020 (i.e. Power Purchased by the Licensee from 1st April 2020 onwards).

1. Periodicity for recovery (Cycle)

The licensee shall compute the fuel and power procurement cost variations on a quarterly basis. The adjustment shall be made in the consumers bills starting after a month following the end of the quarter on the units billed in the months following the quarter.

For example, FPPCA for the quarter April- June shall be done in the month of July and shall be reflected in the consumer bills raised in the months of August, September and October on the units billed for the months of July, August and September respectively.

2. Chargeability

FPPCA charges shall be levied on all consumer categories excluding Below Poverty Line (BPL) and Agriculture category consumers on per unit basis on monthly/ bi-monthly consumption depending on the billing cycle.

3. Formula

The FPPCA formula shall contain the following three components:

1. Power Purchase Cost adjustments which shall contain the following elements:
    - Variation in the Power Purchased from long term/ firm sources viz. CGS, IPP's, State, Own generation etc. This may consist of fixed cost, variable costs, arrears, other charges but excluding any kind of penalties
    - Variation in Short-term power purchase cost through IEX, Bilateral etc. (shall be allowed upto a certain ceiling rate as may be fixed in the Tariff Order by the Commission).

- Variation on account of Deviation Settlement Mechanism – shall be allowed, but the incentive/penalty shall be excluded

2. Transmission cost adjustments which shall contain the following elements:
    - Variation on account of Central Transmission Charges including arrears/ revisions.
    - Variation on account of State Transmission charges including arrears/revisions

3. Other Charges which shall contain all the other elements not forming part of the above two components for example:
    - Any adjustments /reversals due to over recovery of charges
    - Any adjustments due to under recovery of charges in case the Commission decides to limit the FPPCA charges in previous quarters to avoid tariff shock or other reasons
    - Any other adjustments on account of factors not envisaged at the time of tariff fixation

4. Less any revenue from Additional Surcharge collected from Open Access consumer towards the stranded power purchase cost.

Based on the components as defined above, the new FPPCA formula can be represented as follows:

$$\boldsymbol{FPPCA}\left(\frac{\boldsymbol{INR}}{\boldsymbol{Unit}}\right)=.\left(\frac{(\boldsymbol{Pact}+\ \boldsymbol{Tact}\ +\boldsymbol{Oact}-\boldsymbol{ASact})*\boldsymbol{10}}{\{[\boldsymbol{PPOact}*\ (\boldsymbol{1}-\boldsymbol{TLapp})+\boldsymbol{PPIact}-\boldsymbol{PSOact}]*(\boldsymbol{1}-\boldsymbol{DLapp})\}-\boldsymbol{Zact}}\right)-\boldsymbol{Rapp}$$

Where:

- $Pact(in\ INR\ Cr.)$: Actual Power purchase cost inclusive of fixed cost, variable costs, arrears, and other charges excluding any kind of penalties incurred in the quarter. This shall include:
    - Cost of procurement from sources outside the State,
    - Cost of procurement from sources within the State,
    - Cost of DSM excluding any penal charges,
    - Cost of procurement from the Bilateral/ exchange etc.
    - Less: Revenue from sale of surplus power/ DSM
- $Tact\ (in\ INR\ Cr.)$: Actual Transmission cost inclusive of any kind of arrears, other charges etc. and excluding any kind of penalties incurred in the quarter. This shall include:
    - Inter-State transmission cost (PGCIL charges),
    - Intra-State transmission cost
- $Oact\ (in\ INR\ Cr.)$: Adjustments from the previous FPPCA quarter on account of over/ under recovery and any other incidental costs not accounted for at the time of retail tariff fixation
- $ASact\ (in\ INR\ Cr.)$: Revenue from Additional Surcharge collected from Open Access consumer towards the stranded power purchase cost
- $PPOact\ (in\ MU)$: Quantum of power purchased in the quarter from sources outside State/ Union Territory
- $TLapp\ (in\ \%)$: Approved Inter- State transmission losses for the year in consideration as provided in the relevant Tariff Order
- $PPIact\ \ (in\ MU)$: Quantum of power purchased in the quarter from sources within State/Union Territory, Bilateral/ Exchange and Over-drawal under the DSM
- $PSOact\ \ (in\ MU)$: Actual quantum of sale of surplus power/ under-drawal under the DSM in the quarter

- $DLapp\ (in\ \%)$: Approved T&D losses for the year in consideration as provided in the relevant Tariff Order
- $Zact\ (in\ MU)$: Actual energy sales for agriculture and BPL category consumers in the quarter

$$Rapp\ (\frac{INR}{unit}) = \left(\frac{(Papp + Tapp) * 10}{\{[PPOapp * (1 - TLapp) + PPIapp - PSOapp] * (1 - DLapp)\} - Zapp}\right)$$

- $Papp\ (in\ INR\ Cr.)$: Total power purchase cost approved in the Tariff Order for a quarter inclusive of fixed costs, variable costs etc. and containing the following elements:
  - Cost of procurement from sources outside the State,
  - Cost of procurement from sources within the State,
  - Cost of procurement from the Bilateral/ exchange etc.
  - Less: Revenue from sale of surplus power
- $Tapp\ (in\ INR\ Cr.)$: Total transmission charges approved in the Tariff Order for a quarter consisting of the following elements:
  - Inter-State transmission charges (PGCIL charges),
  - Intra-State transmission charges
- $PPOapp\ (in\ MU)$: Quantum of power to be procured from sources outside State/ Union Territory in a quarter as approved in the Tariff Order
- $TLapp\ (in\ \%)$: Approved Inter- State transmission losses for the year in consideration as provided in the relevant Tariff Order
- $PPIapp\ (in\ MU)$: Quantum of power to be procured from sources within the State, bilateral/ exchange in a quarter as approved in the Tariff Order
- $DLapp\ (in\ \%)$: Approved T&D losses for the year in consideration as provided in the Tariff Order
- $PSOapp\ (in\ MU)$: Quantum of sale of surplus power approved in the Tariff Order for a quarter
- $Zapp\ (in\ MU)$: Sales for agriculture and BPL category consumers for a quarter as approved in the relevant Tariff Order

4. Other Terms and conditions

1. For the purpose of the Fuel and Power Purchase Cost Adjustment, the Commission suggests that all the bills admitted and credits, if any, received by the distribution licensee during the period in consideration, irrespective of the period to which they pertain, may be considered.

2. The FPPCA charges determined as per the formula above may be recovered from the consumers of all categories based on their billed units excluding the BPL and the agriculture category consumers.

3. The FPPCA charges for a quarter shall be limited to ±10% of the ABR for a consumer category. The distribution licensee shall be allowed to collect the FPPCA without obtaining approval from the Commission. However, the distribution licensee shall be required to submit the FPPCA calculation to the Commission at least one week before levying the same on the consumers.

4. The per unit FPPCA so worked out is charged differentially as per the approved retail tariff of the consumers. The determination of differential per unit FPPCA is mentioned below:
   - Step 1: Determination of Value of K

$$\frac{Approved\ Retail\ Tariff\ for\ a\ category\ or\ sub\ category\ (\frac{INR}{unit})}{Weighted\ Average\ Retail\ Tariff\ (WART)(\frac{INR}{unit})}$$

The value of K for different consumer category or sub-category for the year in consideration is considered as approved in this Tariff Order.

- Step 2: Determination of proportionate FPPCA (INR /unit) consumer category/sub-category wise

$$FPPCA\left(\frac{INR}{Unit}\right) = Average\ FPPCA * K\ for\ that\ consumer\ category\ or\ sub - category$$

5. The Petitioner shall compute the fuel and power procurement cost variations, and adjustments shall be made in the consumer bills based on the FPPCA formula as approved by the Commission in this Order.

For the purpose of calculation, the approved per unit cost of power purchase ($R_{approved}$) shall be taken as INR 4.44/kWh for the FY 2023-24.

Table 165: Rapproved determined by Commission for FY 2023-24

Particulars	Formula	Amount
Total Power Purchase Cost (Rs Cr), Papp	A	624.65
Transmission Charges (Rs Cr), Tapp	B	117.87
Power Purchase Quantum from CGS Stations at Generator Periphery (NTPC, NHPC, SJVNL, BBMB, THDC, NPCIL, APCPL) excluding renewable sources and IEX/ traders (MU), PPOapp	C	1799.81
Approved Weighted Average Inter-State Transmission Loss (%), TLapp	D	4.03%
Power Purchase Quantum from sources within State/ Open Market and renewable sources, PPIapp	E	169.51
Less: Quantum of Sale of Surplus Power (MU), PSOapp	F	69.13
Approved Intra-State T&D Loss (%), DLapp	G	8.40%
Energy Sales for LIG and Agriculture consumer category (MU), Zapp (MU)	H	1.62
Rapp (Rs/kWh)	**I=[(A+B)*10]/ [{(C*(1-D)+E-F)*(1-G)}-H]**	**4.44**

10. Chapter 10: Directives

Over the years, the Commission has issued various directives to the Petitioner for necessary action at its end. It has been observed that the Petitioner is not fully complying with many of the directives issued by the Commission. In order to strengthen the effective monitoring and ensure timely implementation of all the directives in true spirit, the Commission hereby directs that the Petitioner shall now compulsorily submit:

- ***The detailed action plan for compliance of all the directives <u>within 1 month of the issuance of this Order</u>.***
- ***The quarterly progress report as per the detailed action plan for all the directives issued in the subsequent sections <u>within 10 days of the end of each quarter of the calendar year</u>.***

10.1. Directives continued in this Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it is observed that some of the directives issued in the previous Tariff Orders have not been fully complied with by the Petitioner.

The Commission is of the view that substantial time has already been given to the utility for compliance with these directions. Thus, the Commission hereby directs the utility to comply with the directions mentioned below in the given timeframe, failing which the Commission shall be constrained to take appropriate action under Section 142 of the Electricity Act 2003 and various other provisions of the Act, and Regulations framed by JERC.

10.1.1. Metering /replacement of Non-Functional or defective/ 11 kV Meters

Originally Issued in Tariff Order dated 16th July 2011 *Under Section 55 (1) of Electricity Act 2003, no licensee shall supply electricity after expiry of 2 years from the appointed date except through installation of correct meter in accordance with the regulation to be made in this behalf by the authority. Accordingly, metering is required to be done in line with CEA (installation and operation of meters) Regulations 2006 to all consumers.* *Procurement process be expedited and action plan to install these meters be given by 30.09.12.*
Commission's Latest Directive in Tariff Order Dated 11th July 2022 *The Petitioner is directed to expedite the Smart Grid Project and submit the quarterly progress report.*
Petitioner's Response in the Present Tariff Petition *The Smart Grid Project under Operation Subdivision-5 is about to get completed. So far, 24213 smart meters at consumers premises has been installed and commissioned. Also, SCADA centre for online monitoring of various activities has been established. However, replacement of 11 KV feeder meters with smart meters is yet to be done by M/s REC (implementing agency) and the same is expected to be completed within 06 months by them.* *Further, due to the privatisation award in process, the Ministry of Power, Govt. of India has dropped the Pan City Smart Grid project in the 8th Meeting of the Empowered Committee of NSGM held on 12th October, 2022. The minutes of meeting was conveyed by NSGM vide letter F.No.27/3/2016-NSGM (230074) dated 18th October, 2022.*
Commission's Response *The Petitioner is directed to expedite the Smart Grid Project and submit the quarterly progress report.*

10.1.2. Energy Audit

Originally Issued in Tariff Order dated 16th July 2011 *The ED Chandigarh is directed to get an Energy Audit conducted through an accredited agency to assess actual technical and commercial losses. Based on the studies, ED Chandigarh shall proposer education of losses in subsequent years.* *The investment required to reduce the losses be included in the investment plan for augmentation of T&D system to be submitted to the Commission. Effective technical and administrative measures shall be taken to reduce the commercial losses. The action plan for energy audit and loss reduction measures shall be furnished to the Commission by 30th September, 2012*
Commission's Latest Directive in Tariff Order Dated 11th July 2022 *The Commission has noted that Energy Audit report for FY2021-22 has not been submitted by the Petitioner. The Commission has further noted with serious concern that the Petitioner is yet to submit the Energy Audit Reports for previous years despite repeated directions. The Commission directs the Petitioner to submit quarterly report of the action plan within one month of issuance of this Order and complete the Annual Energy Audit of the UT on priority.*
Petitioner's Response in the Present Tariff Petition *The Smart Grid Project in OP Subdivision-5 is about to get completed. So far 24213 smart meters at consumer premises have been installed & commissioned. Also, SCADA Centre for online operation and monitoring of various activities has been established. However, replacement of 11 KV feeder meters with smart meters is yet to be done by M/s REC (implementing agency) and the same is expected to get completed within 06 months.* *Further, due to privatisation award in process the Smart Grid Project for Pan City has been dropped by the NSGM. However, the RFP for appointment of consultant for carrying out of energy audit of UT of Chandigarh is prepared in accordance to the guidelines and model RFP issued by the Bureau of Energy Efficiency and submitted for accord of revised principle approval from the competent authority.*
Commission's Response *The Commission has noted with serious concern that the Petitioner is yet to submit the Energy Audit Reports for previous years despite repeated directions. The Commission directs the Petitioner to submit the consultant's report as soon as its prepared and meanwhile submit quarterly report of the action plan within one month of issuance of this Order and complete the Annual Energy Audit of the UT on priority.*

10.1.3. Demand Side Management and Energy Conservation

Originally Issued in Tariff Order dated 16th July 2011 *Demand Side Management and Energy Conservation are very important areas, which should be in focus in ED Chandigarh particularly in context of Peak load. ED Chandigarh is directed to conduct a detailed study on demand side management and energy conservation through an external accredited agency for efficient use of electricity by various means.* *Petitioner is directed to inform the time bound action plan for installation of TOD meters*
Commission's Latest Directive in Tariff Order Dated 11th July 2022 *The Commission appreciates the effort undertaken by the Petitioner for compliance of this directive. The Petitioner is directed to expedite the process and submit quarterly reports to the Commission.*
Petitioner's Response in the Present Tariff Petition *Under the UJJALA Scheme, in FY 2021-22, 6554 LED bulbs, 203 LED tube lights and 233 energy efficient fans have been distributed. So far up till FY 2021-22, 604071 LED bulbs, 58750 LED tube lights & 17149 energy efficient fans have been distributed. This has led to energy saving of 75932 MWh along with cost saving of over 30 Crores on annual basis.*

However, the sale of appliances under UJALA scheme is halted presently due to MoU signed between DoP & EESL for sale of appliances has been expired and further extension is under consideration (as intimated by implementing agency).
Commission's Response *Though the efforts undertaken by the Petitioner for compliance of this directive is appreciative, however, on-submission of quarterly report is a lapse on the part of the Petitioner, and it is expected that the directives be followed in true spirit and reports to be submitted as directed. The Petitioner is directed to expedite the process and submit the progress report on quarterly basis.*

10.1.4. Segregation of T&D losses and loss reduction trajectory

Originally Issued in Tariff Order dated 7th May 2012 *The Petitioner is directed to furnish segregation of losses into transmission, distribution and commercial losses separately in their next petition along with a status report on energy accounting and T&D losses.*
Commission's Latest Directive in Tariff Order Dated 11th July 2022 *The Commission directs the Petitioner to expedite the Smart Grid project. The Commission also directs the Petitioner to submit a detailed report of voltage wise T&D losses along with the next Tariff Petition.*
Petitioner's Response in the Present Tariff Petition *The Smart Grid Project in OP Subdivision-5 is about to get completed. So far 24213 smart meters at consumer premises have been installed & commissioned. Also, SCADA Centre for online operation and monitoring of various activities has been established. However, replacement of 11 kV feeder meters with smart meters is yet to be done by M/s REC (implementing agency) and the same is expected to be completed within 06 months by them.*
Commission's Response *The Commission appreciates the effort undertaken by the Petitioner for compliance of this directive. The Petitioner is directed to ensure timely submission of the reports in prescribed formats as per orders/directions of the Commission. Accordingly, the Commission drops this directive.*

10.1.5. Assets created from consumer contribution

Originally Issued in Tariff Order dated 28th March 2018 *The Petitioner has failed to submit the details of assets created through consumer contribution, if any. The Petitioner is not entitled to get depreciation on these assets. The Commission has currently considered the entire GFA towards depreciation and will reduce the depreciation in future, once the details of the consumer contribution are made available. The Commission directs the Petitioner to submit detailed scheme wise consumer contributions, the impact of which shall be accounted by the Commission in future Tariff Orders*
Commission's Latest Directive in Tariff Order Dated 11th July 2022 *The Commission considers the delay due to pandemic and directs the Petitioner to submit the desired information positively along with the next Petition.*
Petitioner's Response in the Present Tariff Petition *The assets created by consumer contribution has already been submitted to Hon'ble Commission for consideration and same shall be updated accordingly in future.*
Commission's Response *The Commission appreciates the effort undertaken by the Petitioner for compliance of this directive. The Petitioner is directed to ensure timely submission of the reports in prescribed formats as per orders/directions of the Commission. Accordingly, the Commission drops this directive*

10.1.6. Creation of SLDC

Originally Issued in Tariff Order dated 28th March 2018
Currently the functions of scheduling of power are being performed by the CED itself. The Commission directs the Petitioner to form a separate SLDC which is ring fenced from the CED. The Petitioner is directed to deploy employees dedicated to the SLDC operations, which are independent from the CED. Till the operationalization of SLDC, the Petitioner is directed to immediately appoint an officer responsible for receipt and processing of Open Access applications.
Commission's Latest Directive in Tariff Order Dated 11th July 2022
The Commission directed the Petitioner to expedite the process of creation of SLDC.
Petitioner's Response in the Present Tariff Petition
The Ministry of Power, Govt. of India has advised in its letter dated 8th October 2020 that the operation of STU and SLDC shall remain with UT Administration. Accordingly, the proposal for creation of SLDC along with organisational structure has been proposed and is under consideration of Chandigarh Administration and as per the directions given by the competent authority the same will be created after its approval.
Commission's Response
The Commission directs the Petitioner to take up the matter with topmost priority and ensure that the process of creation of SLDC be expedited with help from Chandigarh Administration.

10.1.7. Operational safety and policy for accidents and compensation

Originally Issued in Tariff Order dated 28th March 2018
The Commission directs the Petitioner to ensure that proper safety manuals are in place and are updated on a regular basis. To check enforcement of established safety procedures, the CED is directed to ensure periodic Safety Audits through independent professional agencies and adequate training of construction supervisory staff. The Commission also directs the Petitioner to develop a compensation policy for the victims of accidents caused due to the working of the Petitioner
Commission's Latest Directive in Tariff Order Dated 11th July 2022
The Commission directs the Petitioner to secure the necessary approvals from the Chandigarh Administration and submit the training plan before the Commission within three months of issuance of the order.
Petitioner's Response in the Present Tariff Petition
The matter regarding finalization of training schedule for first batch of Lineman of Electricity Wing of Engineering Department, UT, Chandigarh (EWEDC) in the month of November, 2022 onwards, has been taken up with PSPCL Training Institute vide office memo no.1658 dated 10.10.2022. As soon as the training schedule is received, the proposal will be submitted to the competent authority for final approval.
Commission's Response
The Commission directs the Petitioner to secure the necessary approvals from the Chandigarh Administration and submit the training plan before the Commission within three months of issuance of the order.

10.1.8. Non-achievement of capitalization target

Originally Issued in Tariff Order dated 28th March 2018 *The Commission observes that the capitalisation achieved by the Petitioner in the FY 2016-17 is much lower, almost one-tenth, than approved by the Commission in the APR Order. The Petitioner has also submitted that a capitalisation of only Rs 2.40 Cr has been achieved till January 2018 in the FY 2017-18 against a total approved capitalisation of Rs 38.52 Cr as approved by the Commission in the ARR Order. Lower capitalisation signifies that not enough efforts have been undertaken in enhancing the reliability and quality of supply to the consumers. Accordingly, the Commission directs the Petitioner to increase its efforts towards undertaking capital expenditure activities necessary for improving the service quality and targeting 24x7 supply to all consumers*
Commission's Latest Directive in Tariff Order Dated 11th July 2022 *The Commission directed the Petitioner to increase its efforts towards undertaking capital expenditure activities necessary to improve the service quality and target 24x7 supply to all consumers. Further, the Petitioner is directed to ensure that the capitalisation targets approved in the complete MYT Period as a whole are achieved by the end of FY 2022-23.*
Petitioner's Response in the Present Tariff Petition *To improve the achievement of capitalisation target concerted efforts are being made. Asset capitalisation of Rs 18.08 Crore was achieved in FY 2020-21. However, due to COVID-19 Pandemic and Privatisation award in process the capitalization target approved by Hon'ble Commission could not be achieved for FY 2021-22. It is submitted that the asset capitalisation target to the larger extend would be achieved in FY 2022-23 & FY 2023-24.*
Commission's Response *The Commission directs the Petitioner to increase its efforts towards undertaking capital expenditure activities as envisaged in Business Plan Order to improve the service quality and target 24x7 supply to all consumers. Further, the Petitioner is directed to ensure that the capitalisation targets approved in the complete MYT Period as a whole are achieved by the end of FY 2022-23.*

10.1.9. Monthly Billing for Domestic and Commercial/ Non-Residential category consumers

Originally Issued in Tariff Order dated 20th May 2019 *It has been observed that despite of repeated directions of the Commission, the Petitioner has not yet moved to monthly billing from bi-monthly billing for Domestic and Commercial/ Non-Residential category consumers. The Commission takes serious note of this and directs the Petitioner to implement monthly billing for all category of consumers (except Agriculture) with immediate effect in accordance with the Supply Code Regulations, 2018 and submit the quarterly progress of the same to the Commission.*
Commission's Latest Directive in Tariff Order Dated 11th July 2022 *The Petitioner was directed to expedite the Smart Grid Pilot project and submit the progress report within one month of issuance of this order.*
Petitioner's Response in the Present Tariff Petition *The Smart Grid Project in OP Subdivision-5 is about to get completed. So far 24213 smart meters at consumer premises have been installed & commissioned. Also, SCADA Centre for online operation and monitoring of various activities has been established.* *Further, due to privatisation award in process, the Smart Grid Project for Pan City has been dropped by the NSGM. Therefore, the implementation of monthly billing for domestic and commercial category of consumers at this stage is not feasible.*

Originally Issued in Tariff Order dated 20th May 2019

It has been observed that despite of repeated directions of the Commission, the Petitioner has not yet moved to monthly billing from bi-monthly billing for Domestic and Commercial/ Non-Residential category consumers. The Commission takes serious note of this and directs the Petitioner to implement monthly billing for all category of consumers (except Agriculture) with immediate effect in accordance with the Supply Code Regulations, 2018 and submit the quarterly progress of the same to the Commission.

Commission's Response

The Smart Grid Project for Pan City has been dropped, the Petitioner is directed to explore other options to ensure the move to monthly billing from bi-monthly billing for Domestic and Commercial/ Non-Residential category consumers.

10.1.10. Determination of Category wise/ Voltage wise Cost of supply

Originally Issued in Tariff Order dated 20th May 2019

The Petitioner is hereby directed to submit a proposal for category wise cost of supply along with the Tariff Petition for the next year. The Petitioner in this regard is directed to start collecting category wise and voltage wise data on losses, connected load, asset allocation etc. for prudent determination of the cost of supply.

Commission's Latest Directive in Tariff Order Dated 11th July 2022

The Petitioner was again directed to expedite the process and ensure that the study/report for the same is submitted along with the next tariff petition.

Petitioner's Response in the Present Tariff Petition

The RFP for category wise cost of supply to start collecting category wise and voltage wise data on losses, connected load and assets allocation was submitted to the higher authorities for the accord of principal approval from the competent authority and on receipt of the approval the same will be implemented, accordingly.

Commission's Response

The Petitioner is directed to expedite the process and ensure that the study/report for the same is submitted along with the next tariff petition.

10.1.11. kVAh based tariff

Originally Issued in Tariff Order dated 20th May 2019

The Petitioner is directed to submit a proposal for implementation of kVA/kVAh tariff for HT/EHT consumers in the tariff petition for the next year. The Petitioner is also required to submit whether it possesses the requisite infrastructure to implement the same. The Commission in its efforts of making the tariff more cost reflective is looking to implement kVA/kVAh based tariff for HT/EHT consumers for all the utilities under its jurisdiction.

Commission's Latest Directive in Tariff Order Dated 11th July 2022

The Petitioner was directed to expedite the Smart Grid Pilot project and submit the progress report within one month of issuance of this order.

Petitioner's Response in the Present Tariff Petition

The Smart Grid project in S/Divn. No.5 is about to get completed. So far, 24213 smart meters at consumers premises has been installed and commissioned. Also, setting up of SCADA centre for online monitoring of various activities has been completed.

Originally Issued in Tariff Order dated 20th May 2019 *The Petitioner is directed to submit a proposal for implementation of kVA/kVAh tariff for HT/EHT consumers in the tariff petition for the next year. The Petitioner is also required to submit whether it possesses the requisite infrastructure to implement the same. The Commission in its efforts of making the tariff more cost reflective is looking to implement kVA/kVAh based tariff for HT/EHT consumers for all the utilities under its jurisdiction.*
Further, due to privatisation award in process the Smart Grid Project for Pan City has been dropped by the NSGM. Therefore, the implementation of KVAH based tariff at this stage is not feasible.
Commission's Response *The Petitioner has been evasive and unresponsive to the Commission's directions. Implementation of kVAh tariff for HT/EHT consumers is important for making the tariff more cost-reflective. The Commission is further planning to introduce kVAh tariff for LT-Commercial and LT-Industrial consumers with Connected Load above 20 kW. The Petitioner is directed to expedite the implementation of requisite infrastructure which allows introduction of kVAh tariff for HT/EHT consumers and LT-Commercial and LT-Industrial consumers with Connected Load above 20 kW by March 2024.*

10.1.12. Hydro Purchase Obligation

Originally Issued in Tariff Order dated 11th July 2022 *In order to fulfil the HPO, the Petitioner is directed to procure power from large hydropower projects commissioned on and after 08.03.2019 and upto 31.03.2030.*
Petitioner's Response in the Present Tariff Petition *It is most respectfully submitted that the best efforts are being made to allocate a hydro generating source to meet the HPO compliance. However, this process may take some time to get finalise, therefore for the interim measure, adjustment of excess achieved solar and non-solar RPO targets may be allowed to meet the HPO targets.*
Commission's Response *The Petitioner is directed to procure power from large hydropower projects commissioned on and after 08.03.2019.*

11. Chapter 11: Tariff Schedule

11.1. Tariff Schedule

Table 166: Tariff Schedule

S. No.	Consumer Category	Fixed Charge	Energy Charge INR/kWh
1.	**DOMESTIC SUPPLY (DS)**		
I.	**LT Domestic**		
a.	0-150 kWh per month	INR 15/kW/month or part thereof	2.75
b.	151-400 kWh per month		4.25
c.	Above 400 kWh per month		4.65
II.	**HT Domestic**	INR 15/kW/month or part thereof	4.30
2.	**COMMERCIAL/ NON-RESIDENTIAL (NRS)**		
I.	**LT Commercial**		
a.	0-150 kWh per month	INR 25/kW/Month or part thereof for Single Phase INR 100/kW/Month or part thereof for Three Phase	4.50
b.	151-400 kWh per month		4.70
c.	Above 400 kWh per month		5.00
II.	**HT Commercial**	INR 100/kW/month or part thereof	4.50
3.	**INDUSTRY**		
I	Large Industrial Power Supply (LS)	INR 200/kW/month or part thereof	4.50
II	Medium Industrial Power Supply (MS)	INR 200/kW/month or part thereof	4.20
III	Small Industrial Power Supply (SP)	INR 30/kW/month or part thereof	4.30
4.	**AGRICULTURAL PUMPING SUPPLY (AR)**	-	2.60
5.	**PUBLIC LIGHTING (PL)**		
I	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external agency	INR 100/kW/month or part thereof	4.80
II	Advertisement/ Neon-sign Boards Advertisement boards, billboards (apart from advertisement boards installed on commercial establishments and charged under commercial tariff)	INR 100/kW/month or part thereof	6.40
6.	**BULK SUPPLY (BS)**	INR 150/kW/month or part thereof	4.20

Secretary (I/c), JERC
(For Goa and UTs)

7.	**TEMPORARY SUPPLY**	Tariff shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both. For multi activity pursuit, applicable Tariff for temporary connection shall be with reference to that of commercial category for permanent supply.	
8.	**ELECTRIC VEHICLE CHARGING STATION**	-	3.60

11.2. Applicability

Table 167: Applicability of Tariff Schedule

Applicability	Character of service
DOMESTIC SUPPLY (DS)	
LT Domestic	
This schedule shall apply for light, fan, domestic pumping sets and household appliances in the following premises: a) Single private houses/flats. b) Government schools along with related facilities. c) Supply to hostels and /or residential quarter attached with the private educational institutions where separately metered. d) Paying Guest (PG) authorized by the Chandigarh Administration e) Administrative Training Institutes/Correctional Institutes/Training Centres exclusively run/managed by the UT/State/Central Government to undertake research, consultancy/Training and allied activities to improve management efficiency f) Government and public sports institutions/Gymnasium halls etc. banks and PCOs exclusively for the use of educational institutions. g) Religious Institutions viz. Temples, Gurudwaras, Mosques, Churches, provided that the Sub Divisional officer concerned authenticates the genuineness of the place being exclusively used for worship by the general public. h) Housing colonies and multi storied flats/buildings as defined in the Electricity Supply Code Regulations, 2018 notified by JERC and as amended from time to time. i) Dispensaries / Hospitals / Public Libraries / Schools / Colleges / Working Women's Hostels / run by the Chandigarh Administration. j) Recognized Centers/ societies for the welfare of blind, deaf and dumb, spastic children, physically handicapped persons, mentally retarded persons, as approved by the Chandigarh Administration. k) Orphanages/ Cheshire Homes/ Old age homes/ charitable homes and Gaushalas. l) Charitable Organizations viz. Schools, Hospitals, Dispensaries, Education and Research Institutes and Hostels attached to such Institutions registered with the Income Tax authorities under	AC, 50 cycles, Single phase 230 volts or three phase 400 volts. For loads up to 5 KW supply shall be connected on single phase 230 volts and above 5 KW up to 100 kVA supply shall be given on three phase 400 volts.

Secretary (I/c), JERC
(For Goa and UTs)

Applicability	Character of service
Section 80G, or 80 GGA, or 35 AC. The individual organization shall apply in writing to the Electricity Department along with a certificate from the IT Department or getting considered for the tariff in the Domestic Category m) Shelter Homes (including Night Shelters) approved by Chandigarh Administration. n) Crematoriums (including electric) and Burial Grounds. The Halls or Gardens/ Lawns or any portion of the premises listed in Para (i) above let out for consideration or used for Commercial activities at any time shall be charged at Commercial Rate of Electricity Tariff. **NOTES:** i. Where a portion of the dwelling is used for mixed load purposes the connection shall be billed for the purpose for which the tariff is higher. ii. Hostels shall be considered as one unit and billed under domestic supply tariff without compounding. iii. Private education institutions not recognized by the Chandigarh Administration shall be billed under Non Domestic Tariff. iv. STD/PCOs, shops attached to Religious Institutions will be billed under Non- Domestic Tariff. v. A room or a part of a residential house utilized by a teacher for imparting tuition work, self-occupied handicapped persons operating from their residences, cooking classes taken by house ladies, beauty parlour run by house ladies, ladies doing tailoring work etc. shall be covered under domestic tariff. vi. For cottage & commercial activities operating in residences such as repair of shoes by cobbler, dhobi, ironing of clothes, stitching/ knitting, paan-shop and bakery products etc. small shops, tea shops etc. with total load (maximum demand) of 5 kW domestic tariff shall be applicable subject to installation of MDI Meters. In cases where total load is more than 5 kW, separate metering shall be done for commercial and domestic use and consumption shall be charged according to the tariff applicable. vii. Professionals such as Doctors, Engineers, Lawyers, CAs, Journalists and Consultants practicing from their residence irrespective of location provided that such use shall not exceed 25% of the area of the premises or as specified in the rules/regulations of their respective State or Union Territory. viii. The load of common amenities for consumers of housing societies may include pumps for pumping water supply, lifts and lighting of common area. The consumption of energy for common services shall be separately metered with meters installed and sealed by the licensee and shall be billed at Domestic Tariff. The user shall inform the details of every non-domestic activity within the residential complex, such as commercial complex, industrial activity, and recreation club, along with the connected load, and shall seek a separate connection for the same under the commercial category.	
HT Domestic	

Secretary (I/c), JERC
(For Goa and UTs)

Applicability	Character of service
This schedule shall apply to all the consumer falling under the LT Domestic category above but connected at 11 kV or above voltage level	AC, 50 cycles, Three phase 11 Kilo volts. For loads above 100 KVA, supply shall be connected on 11 KV and a separate transformer of adequate capacity shall be installed at consumers cost as per Electricity Supply Code Regulations, 2018 notified by JERC and as amended from time to time. In case of consumers where the metering is being done on the low voltage side of the transformer instead of the high voltage side, the consumption should be computed by adding 3% extra on account of transformation/ losses. This arrangement shall be continued for a maximum of one year within which metering shall be shifted to HT(11KV) side of the transformers
COMMERCIAL / NON RESIDENTIAL SUPPLY (NRS)	
LT Commercial	
This schedule shall apply to all consumers, using electrical energy for light, fans appliances like pumping sets, central air conditioning plant, lift ,welding set, small lathe, electric drill, heater, battery charger, embroidery machine, printing press, ice candy, dry cleaning machines, power press, small motors in non-residential premises such as defined below: a) Hostels (other than those recognized/aided institutions of Chandigarh Administration) b) Schools and colleges (excluding Government schools and related facilities c) Coaching institutes and research institutes (Other than those recognized by the Chandigarh Administration) d) Auditoriums, Hospitals, clinics, dispensaries, nursing homes / diagnostic centers other than those run by the Chandigarh Administration. e) Railways (other than traction) f) Hotels, restaurants, guest houses, boarding / lodging houses, marriage houses g) Cinemas h) Banks i) Petrol pumps. j) Government / Public Sector offices and undertakings k) Public halls, auditoriums, exhibitions, theatres, circus, cinemas etc. l) All other establishments, i.e., shops, chemists, tailors, washing, dyeing etc. which do not come under the Factories Act.	AC, 50 cycles, single phase at 230 Volts or 3 Phase at 400 Volts For loads up to 5 KW, supply shall be connected on single phase 230 volts and above 5 KW up to 100 KVA, supply shall be given on 3 phase 400 volts.

Secretary (I/c), JERC
(For Goa and UTs)

<table>
<tr><th>Applicability</th><th>Character of service</th></tr>
<tr><td>m) Cattle farms, fisheries, piggeries, poultry farms, floriculture, horticulture, plant nursery Farm houses being used for commercial activity.
n) Ice-cream parlors, bars, coffee houses etc.
o) Any other category of commercial consumers not specified/covered in any other category in this Schedule.
NRS supply shall also be applicable to multi consumer complexes including commercial complexes as defined in the Electricity Supply Code Regulations, 2018 notified by JERC and as amended from time to time. No separate circuit/connection for power load including pumping set/central air conditioning plant, lifts etc. is permitted.</td><td></td></tr>
<tr><td>HT Commercial</td><td>AC, 50 cycles, Three phase 11 Kilo volts.</td></tr>
<tr><td>This schedule shall apply to all the consumers falling under the LT Commercial category above but connected at 11 kV or above voltage level</td><td>For loads above 100 KVA, supply shall be given on 11 KV in case of multi consumer complex including commercial complex and in other cases for load above 100 KVA the supply shall be on 11 KV. In case of consumers where metering is done on the low voltage side of the transformer instead of the high voltage side, the consumption should be computed by adding 3% extra on account of transformation losses.</td></tr>
<tr><td colspan="2">LARGE INDUSTRIAL POWER SUPPLY (LS)</td></tr>
<tr><td>The schedule shall apply for consumers having industrial connected load above 100kVA.Their contract demand shall not be less than 100 kVA. No consumers shall increase their connected load without prior approval of the Electricity department. The consumer availing supply at high tension shall indicate rated capacity of all the step down transformers installed in his premises and shall not increase the capacity of such step down transformers without prior approval of the department.
NOTE
i. The above tariff covers supply at 11 kV. Surcharge at 20% on the tariff shall be leviable for all the existing consumers which are being given supply at 400 volts. A consumer getting supply at 33 kV and above will get a rebate of 3%.
ii. Surcharge @ 17.5% on the tariff shall be leviable for all the arc furnace consumers which are being given supply at 11 kV. This surcharge at 17.5% shall also be leviable on other industrial consumers having contract demand exceeding 5000 kVA and running at 11kV.
iii. In case of steel rolling mills having supply at 400 volts, an additional surcharge of 5% shall be leviable.
iv. In case of HT consumers (11kV and above) where maximum demand and energy consumption is recorded on the lower voltage side of the</td><td>AC, 50 Cycles, 3 phase 11 kV supply for loads above 100 kVA Supply can be given at 33/66/220kV depending on quantum/type of load and contract demand and availability of bus voltage and transformer winding capacity at the feeding substation wherever possible at the discretion of supplier.
For arc furnace loads and other loads of equally violent fluctuating nature, voltage of supply will be 33kV and above depending upon availability of bus voltage and transformer winding capacity at the feeding substation wherever possible, at the discretion of supplier.</td></tr>
</table>

Secretary (I/c), JERC
(For Goa and UTs)

<table>
<tr><th>Applicability</th><th>Character of service</th></tr>
<tr><td>consumer transformer instead of the high voltage side, maximum demand and energy consumption for billing purpose should be computed by adding 3% extra on units on account of transformation/cables losses. However, this agreement shall in no case continue for more than three months and the meter shall be installed on the HT side of the transformer within the said period including such existing connection.
v. For new connections, all metering will be on HT side only.</td><td>Contract demand is the load kW, kVA or HP, as the case may be agreed to be supplied by the licenses and contracted by the consumer and specified in the agreement. If the consumer in a month exceeds the contract demand, such excess shall be charged at an additional rate of INR 250/kVA.</td></tr>
<tr><td colspan="2">MEDIUM INDUSTRIAL POWER SUPPLY (MS)</td></tr>
<tr><td>This tariff schedule shall apply to all industrial power supply consumers having connected load ranging from 21 kVA to 100 kVA</td><td>AC, 50 cycles, 3 phase, 400 volts</td></tr>
<tr><td colspan="2">SMALL INDUSTRIAL POWER SUPPLY (SP)</td></tr>
<tr><td>This schedule shall apply to small power industries with connected load not exceeding 20 KW (26BHP) in urban and rural areas</td><td>AC, 50 cycles, single phase 230 volts, or 3 phase, 400 volts.</td></tr>
<tr><td colspan="2">AGRICULTURAL PUMPING SUPPLY (AP)</td></tr>
<tr><td>This schedule shall apply to all consumers for use of electrical energy for irrigation pumping load upto 20 kW (26 BHP). Supply for loads above 26 BHP/20 KW shall be charged in accordance with the relevant industrial tariff (Govt. Tubewells meant for water supply are covered under the relevant Industrial Tariff)
NOTE
Pumping sets shall be ISI marked. The responsibility for ensuring installation of ISI marked pumping sets as well as shunt capacitors shall be that of the Junior Engineer concerned, who shall verify the same at the time of verification of test reports before the release of the connection.
Supply for agriculture/Irrigation pump sets, at one point, may also be given to a registered co-operative society or to a group of farmers recognized by the competent authority.
An agriculture consumer, if he so desires, may shift the location within his premises of his connection, with the approval of the competent authority, after payment of applicable charges.</td><td>AC, 50 Cycles, three phase, 400 volts, Single Phase at 230 volts.</td></tr>
<tr><td>PUBLIC LIGHTING (PL)</td><td></td></tr>
<tr><td>This tariff schedule shall apply for use of Public Lighting system including signaling system, road and park lighting managed by municipal corporation, panchayats, institutions(at the discretion of the supplier)etc.
The tariff schedule shall also apply for use of electricity by street lights managed/outsourced to an external agency and advertisement boards, sign boards, bill boards, signages etc., (apart from the advertisement boards installed on commercial establishments & charged under commercial tariff).</td><td>AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts.</td></tr>
<tr><td>BULK SUPPLY (BS)</td><td></td></tr>
<tr><td>This tariff schedule shall apply to general or mixed loads exceeding 10 kW to MES, Defense establishments, Railways, Central PWD, Institutions, Hospitals, Departmental Colonies and other similar</td><td>AC, 50 cycles, three phase, 400 volts or 11 kV or higher voltage</td></tr>
</table>

Secretary (I/c), JERC
(For Goa and UTs)

Applicability	Character of service
establishments where further distribution is to be done by the consumer. Above schedule shall not be applicable, if 50 % or more of the total sanctioned load is motive/ manufacturing load	at the option of the department. Loads exceeding 100 kVA shall be released on HT only.
TEMPORARY SUPPLY	
Available to any person requiring power supply for a purpose temporary in nature. The Temporary Tariff is applicable for a temporary period of supply for a period of maximum one (1) year at a time, which may be further extended, as per the provisions of Supply Code Regulations, 2018 notified by JERC and as amended from time to time.	AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts
ELECTRIC VEHICLE CHARGING STATIONS	
This tariff schedule shall apply to consumers that have set up Public Charging Stations (PCS) in accordance with the technical norms/ standards/specifications laid down by the Ministry of Power, GoI and Central Electricity Authority (CEA) from time to time. The tariff for domestic consumption shall be applicable for domestic charging (LT/HT)	AC, 50 cycles, three phase, 11 kV or higher voltage.

11.3. General Conditions of HT and LT Supply

The above mentioned LT/HT Tariffs are subjected to the following conditions, applicable to all category of consumers.

1) The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.

2) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.

3) If energy supplied for a specific purpose under a particular tariff is used for a different purpose, not contemplated in the contract for supply and / or for which higher tariff is applicable, it will be deemed as unauthorized use of electricity and shall be dealt with for assessment under the provisions of section 126 of the Electricity Act, 2003 & Supply Code Regulations, 2018 notified by JERC and as amended from time to time.

4) Fixed charges, as applicable, will be charged on pro-rata basis from the date of release of connection.

5) The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 85% of the contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulations, 2018 notified by JERC and as amended from time to time. If such over-drawl is more than 20% of the contract demand then the connection shall be disconnected immediately.

   Explanation: Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12000 kWh, then the consumption corresponding to the contract demand will be 10000 kWh (12000*100/120) and consumption corresponding to the excess demand will be 2000 kWh. This excess demand of 20 KVA and excess consumption of 2000 kWh will be billed at twice the respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected immediately.

6) **Power Factor Charges for HT and EHT**

   (a) Power factor means, the average monthly power factor and shall be the ratio expressed as percentage of total kWh to total kVAh supplied during the month. The ratio shall be rounded up to two figures.

Secretary (I/c), JERC
(For Goa and UTs)

(b) The consumer shall maintain the monthly average power factor of the supply not less than 90% (lagging). If the monthly average power factor of (a) consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 1% in power factor upto 70%(lagging).

(c) In case the monthly average power factor of the consumer is more than 95% (95% lagging), a power factor incentive @ 1% on demand and energy charges shall be given for each increase of 1% in power factor above 95% (lagging)

(d) If the average power factor falls below 70% (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.

7) Delayed payment surcharge shall be applicable to all categories of consumers. Delayed payment surcharge of 1.5% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amounts less than 50 paisa shall be ignored and amounts of 50 paisa or more shall be rounded off to the next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.

8) **Advance Payment Rebate**: If full advance payment of the current bill is made before the issue date of previous cycle bill, rebate @1% shall be given on the amount consisting of SOP plus fixed charges plus FPPCA. However, if the advance payment is not adequate as per current bill amount consisting of SOP plus Fixed Charges plus FPPCA or payment made after the issue date of previous cycle bill, such cases shall be treated for prompt payment rebate. Sample calculation for the same has been in Annexure 2 of this Order.

9) **Prompt Payment Rebate:** If payment is made at least 7-days in advance of the due date of payment of the current bill a rebate for prompt payment @ 0.25 % of the bill amount (SOP +Fixed Charges +FPPCA) amount shall be given. Those consumers having arrears shall not be entitled for such rebate. Sample calculation for the same has been in Annexure 2 of this Order.

Provided that in case the payment is made by cheque, the prompt payment discount will be applicable only if the payment by cheque is made 3 days prior to date of availing the prompt payment discount i.e. before 10 days from the due date of payment.

10) The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with the FPPCA formula specified in Chapter 8 of this Tariff Order. Such charges shall be recovered / refunded/adjusted in accordance with the terms and conditions specified in the FPPCA mechanism. However, no FPPCA shall be recovered from the consumers from 1st April 2023 onwards till further orders of the Commission.

11) The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order.

12) **Surcharge for Low Power Factor/Non Installation of Required rated LT Shunt Capacitors**

(a) Consumers with L.T connections where the meter provided by the licensee has the power factor recording feature, shall install shunt capacitors of adequate rating to ensure power factor of 85% or above failing which low power factor surcharge at the rates noted below will be levied.

Table 168: PF Range for LT consumer

S. No.	Power Factor range	Surcharge
1.	85% and above	NIL
2.	Below 85% and upto 80%	2% of billed energy charges of that month for every 1% fall in P.F from 85%
3.	Below 80% and upto 75%	2.5% of billed energy charges of the month for every 1% fall in P.F from 80%

Secretary (I/c), JERC
(For Goa and UTs)

4.	Below 75%	3% of billed energy charges of that month for every 1% fall in P.F from 75%

The conditions for disconnection of a consumer supply in case of non-achievement of minimum level of power factor as prescribed in the Supply Code Regulations, 2018 notified by JERC and as amended from time to time, shall apply.

13) **Unauthorized use of Electricity:** The unauthorized use of electricity shall be treated as specified in the Supply Code Regulations, 2018 notified by JERC and as amended from time to time. The penalty applicable shall continue unless the unauthorized use is stopped.

14) **Taxes and duties**

The tariff does not include any tax or duty etc. on electricity energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall be payable by the consumer in addition to the tariff charges.

15) **Time of Day (TOD) tariff**

a) Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.

b) The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer, as TOD metering is not yet implemented.

Table 169: Applicability of ToD Charges

Period of use	Hrs.	Demand Charges	Energy Charges
Normal period	6:00 a.m. to 6:00 p.m.	Normal Rate	Normal rate of energy charges
Evening peak load period	6:00 p.m. to 10.00 p.m.	Normal Rate	120% of Normal rate of energy charges
Off-peak load period	10:00 p.m. to 6:00 a.m.	Normal Rate	90% of Normal rate of energy charges

Applicability and Terms and Conditions of TOD tariff:

a) TOD tariff shall be **optional** unless otherwise specifically stated to the contrary in the Tariff Order.

b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power.

c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.

d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.

11.4. Schedule of Other Charges

Table 170: Schedule of Other Charges

S. No.	Description	Approved
A	**Application processing charges for new connection/ enhancement of load/ reduction of load**	
i	Domestic supply (LT)	INR 25/-
ii	Non-Domestic Supply (LT)	INR 100/-
iii	Small Power, Medium Supply and street lighting supply (LT)	INR 250/-
iv	Agriculture Power supply (LT)	INR 25/-

Secretary (I/c), JERC
(For Goa and UTs)

S. No.	Description	Approved
v	Temporary metered supply (LT)	Two times the normal rates of category of permanent supply
vi	HT/EHT Supply	As specified in Supply Code Regulations specified by JERC
B	**Charges for Re-fixing/ Changing of meter/Meter Board in the same premise on consumer request when no additional material is required. (When the cause leading to subsequent change/replacement of meter is either manufacturing defect or Department's fault then, it shall be free of cost and further, if shifting of meter is done in the interest of department work then it is free of cost.)**	
i	Single Phase Meter	INR 250/- per meter
ii	Three Phase Meter without CT	INR 500/- per meter
iii	Three Phase Meter (with CTs & PTs)	INR 1,000/- per meter
iv	Tri-vector and special type meters	INR 1,200/- per meter
v	HT/ EHV metering equipment	INR 3,000/- per meter
C	**Meter Inspection & Testing Charges**	
	(In case correctness/accuracy of a meter belonging to the Licensee is challenged by the consumer)	
i	Single phase	INR 150/- per meter
ii	3-phase whole current i.e. without C.T	INR 500/- per meter
iii	L.T. meter with CTs	INR 1,500/- per meter
iv	H.T. & E.H.F metering equipment.	INR 3,000/- per meter
	NOTE: If the challenged meter is found to be incorrect / defective, the credit of these charges will be given to the consumer, otherwise these will be forfeited.	
D	**Re-sealing charges (irrespective of the number of seals involved against each item below and where seals found to have been broken by the consumer):**	
i	Meter cupboard	INR 50/-
ii	Where cut-out is independently sealed	INR 50/-
iii	Meter cover or Meter Terminal cover (Single phase)	INR 150/-
iv	Meter cover or Meter Terminal cover (3- phase)	INR 375/-
v	Maximum Demand Indicator or C.T.s Chamber	INR 900/-
vi	Potential fuses	INR 900/-
	Note: If M&T and ME seals are found to be broken/tampered cost of meter shall be recoverable and the case shall be treated as theft case.	
E	**Reconnection Charges**	
A	Reconnecting/connecting the premises of any consumer who was previously disconnected on account of breach of his agreement with the department or of any other provisions of the Act as may be relevant.	
i	Domestic supply	INR 250/-
ii	Non-Domestic Supply	INR 500/-
iii	Small Power, Medium Supply and street lighting supply	INR 500/-
iv	Large Supply and bulk supply	INR 1000/-

Secretary (I/c), JERC
(For Goa and UTs)

S. No.	Description	Approved
v	Agriculture Power supply	INR 250/-
vi	Temporary metered supply	INR 1,500/-
F	**Testing/ Inspection of Consumer's installation**	
A	Initial Test/ Inspection	Free of Cost.
B	For subsequent test of a new installation or an extension to an existing installation if the installation is found to be defective or the wiring contractor or his representative fails to be present	
i	Single Phase	INR 150/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
ii	Three Phase	INR 200/- (Payable in advance for each subsequent visit for the purpose of testing the installation)
iii	Medium Supply/Bulk Supply loads upto 100 kVA	INR 500/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
iv	Large Supply/Bulk Supply (loads above 100 kVA)	INR 1,000/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
G	**Meter Reading Cards/ Passbook (New/ Replacement)**	
i	Provision of meter reading cards including PVC jacket	INR 5/- per card
ii	Replacement of meter card found to be missing on consumer's premises	
iii	Domestic & NRS	INR 5/- per card
iv	SP and AP	INR 10/- per card
v	MS	INR 25/- per card
vi	LS	INR 45/- per card
vii	Replacement of Passbook in case it is lost by AP Consumer	INR 60/- each
viii	Replacement of identification card missing on the premises of AP Consumer	INR 25/- each
ix	Temporary	INR 60/- per card
H	**Replacement of broken glass**	
a	Replacement of broken glass of meter cupboard (when the cause of the breakage is considered to be an act or fault of the consumer).	INR 60/- each
b	Replacement of meter glass where the same has been tampered with or broken by the consumer	
i	Single phase meter	INR 250/-
ii	Three phase meter	INR 450/-
I	**Amount of Security deposit for new/ extension of load**	**As per the procedure prescribed in clause 5.130 to clause 5.134 of**

Secretary (I/c), JERC
(For Goa and UTs)

S. No.	Description	Approved
		JERC Electricity Supply Code Regulation 2018.
J	**Charges recoverable from the consumer when the meter is found damaged / burnt owing to negligence or default on the part of consumer**	
i	Single Phase Meter	INR 700/- each
ii	Three Phase Meter	INR 1,550/- each
iii	LT CT operated Solid State Meter. (Without CTs)	INR.3,000/- each
iv	LT CTs	
	a) Upto 50/5A	INR.1,580/- each
	b) Above 50/5 A	INR. 600/- each
	c) Solid State HT TPT metering equipment (without CT/PT unit)	INR.20,000/- each
	d) H.T.C.T./P.T. Unit	INR. 40,470/-
K	**Special Meter reading charges in case of change in occupancy/ vacation of premises**	
i	Domestic	INR. 50/-
ii	Other Consumer-Single phase meter	INR 250/-
iii	Other Consumer-Three phase meter	INR 450/-
L	**Supply of duplicate copies of electricity bills**	
i	Domestic consumers	INR 5/-
ii	Non-Domestic consumers	INR 10/-
iii	Temporary consumers	INR 10/-
iv	L.T. Industrial (upto 20 kW) & AP consumer	INR 10/-
v	L.T. Industrial (above 20 kW) & Street lighting consumer	INR 15/-
vi	H.T. Industrial & bulk supply consumer	INR 20/-
M	**Review of electricity bills (If the accuracy of licensee's bill is challenged by the consumer and a review of the bills is demanded)**	
i	Single Phase Supply	INR 10/-
ii	Three Phase Supply	
	load upto 20 kW	INR 250/-
	load above 20 kW upto 60 kW	INR 450/-
	load above 60 kW upto 100 kVA	INR 750/-
iii	Large Supply (above 100 kVA)	INR 1,000/-
	NOTE: If the challenged bill is found to be incorrect, the credit of the fee will be given to the consumer, otherwise these will be forfeited.	
N	**Testing and calibration including sealing of energy meter owned /supplied by the consumer**	
i	Single Phase	INR 100/-
ii	Polyphase whole current meter	INR 500/-
iii	Polyphase meters with CTs	INR 1200/-
iv	HT and EHT metering equipment	INR 3,500/-

Secretary (I/c), JERC
(For Goa and UTs)

S. No.	Description	Approved
O	**Checking of the capacitors at the request of the consumer**	
i	Consumer receiving supply at 230/440 V	INR 250/- per visit
ii	Consumer receiving supply at Above 400 V and up to 11 KV	INR 500/- per visit
P	**Demand notice extension fee (for each period of three months)**	
i	DS and NRS	INR 50/-
ii	AP	INR 500/-
iii	SP	INR 200/-
iv	MS/LS/BS	INR 2,500/-
	Note: Demand notice shall be valid for two months initially with an extended/grace period of further three months. After the expiry of grace/extended period of three months, the application shall be deemed as cancelled. Revival fee (one time only) for cancelled application shall be twice the demand notice extension fee as prescribed above and will be done by load sanctioning authority for another three months only	

11.5. Schedule for service connection charges and service rentals

Service connection charges are provided in the schedule of general and service connection charges and are to be recovered from all prospective consumers and existing consumers seeking extension in load. These charges won't be payable by consumers who have got the works executed at their own expense. Schedule of service connection charges as applicable is given under:

A. Service connection charges for domestic supply

Table 171: Service Connection Charges

S. No	Particulars	Category	INR
1	Single Phase Fixed Per kW Charges		
A	Up to 1 kW	Domestic	250/-
		Non Residential Supply	250/-
B	Above 1 kW and up to 3 kW	Domestic	300/-
		Non Residential Supply	300/-
C	Above 3 kW and 5 kW	Domestic	500/-
		Non Residential Supply	750/-
2	Three Phase Fixed Per kW Charges		
A	Above 5 kW	Domestic	750/-
		Non Residential Supply	1,000/-

B. Variable Charges

No variable charges are leviable upto 75 meters of service line length from the point of interconnection. Beyond 75 meters for all loads variable charges @ INR 125 per meter length of service line shall be recoverable for loads in excess of 5 kW.

a) Domestic and Non-Residential consumers falling under the following categories have the option, either to pay in lump sum the service connection charge as mentioned in the preceding clause or to pay monthly service rentals at 1.6 paisa per rupee of the estimated cost of the service line beyond the cost of 30.48 meters.

(i) Members of Schedule Castes.

Secretary (I/c), JERC
(For Goa and UTs)

(ii) Religious and Charitable institutions run by recognized/ registered associations or societies registered with Register of Societies

b) All such prospective and existing consumers who will pay or have paid service connection charges in full, shall be exempted from the payment of monthly service rentals.

c) The service rentals to the consumers existing prior to 1st November 2002, if applicable already shall continue.

C. Service connection charges for industrial and bulk Supply (For new Connections):

Table 172: Service Connection Charges for Industrial and Bulk Load Supply

S. No	Load	Service Connection
1	Up to 100 kVA	INR 750/kW

Service connection charges under Para i) shall be applicable for loads upto 100 KVA where the length of new and augmented or both line(s) to be provided is up to 100 meters which will include 11kV line (whether overhead or cable LT line and service cable. Where this limit exceeds 100 meters, the applicant shall be required to pay the actual cost of @ INR 125 per meter of 11 kV line, LT line and service cable in excess of 100 meters as additional service connection charges (nonrefundable). However, no component of the distribution substation transformer to be created would be charged wherever applicable.

Extension of Load

a) **Where the consumer is either paying service rentals or had paid the service connection charges on kW basis for the original load.**

i) Extension in load bringing to be charged at INR 750/- per the total load up to 100 kVA for extension part only. However, charges for service line in excess of 100 meters shall be charged @ INR 125 per meter for length of service line (new or augmented or both) feeding such consumer. Rentals on original load, if applicable, already shall continue.

b) **Where the consumers had paid the service connection charge in full.**

i) No charges for extension shall be recoverable where the cost of service/common part of service line had been paid by the applicant at the time of release of the original connection provided. No augmentation of service/common portion of service lines had been carried out ever since the release of connection and also the additional load can be released from the existing line without augmentation and the cost deposited by the consumer at the time of release of original connection is not less than 'per kW charges' payable on the basis of total connected load (including extension in load). For calculating per kW charges, the rate as applicable at the time of release of original connection shall apply for the existing load and prevailing rates for the extension in load. Difference, if any, between the actual cost paid and the recoverable amount 'per KW charges' shall be payable by such consumers at the time of extension in load. This shall also apply to the cases fed through an independent feeder laid at the cost of the consumer. The cost of line/bay (33/66/132/220kV) paid by the consumer or at the time of clubbing/conversion paid by the consumer at the time of clubbing of supply to higher voltage shall be appropriated towards service connection charges at the time of subsequent release of extension in load, if applicable. However, for calculating total 'per kW charges' service connection charges already recovered from the consumer in respect of clubbing cases, applicable rates to different connections as existing immediately prior to clubbing are to be taken into account.

Cases involving augmentation of service/Common portion of service line or if the augmentation had taken place subsequent to release of connection shall be default with as per provisions of sub Para (a)

Secretary (I/c), JERC
(For Goa and UTs)

c) While accessing the connected load for working out service connection charges, both general and industrial loads of an individual consumer at one location shall be taken into account.

d) The "per kW", service charges for extension in load shall be as contained in above and those shall be in addition to the service rentals on the original load, if applicable thereon.

e) An increase in the connected load even without increase in the contract demand shall call for payment of service connection charges on "per kW" basis as applicable to the category in which total connected load after extension falls and shall be recoverable for extension of the electrical part only. Consumers seeking extension in contract demand within the sanctioned connected load shall not be required to pay service connection charges on KW basis.

f) Consumers seeking contract demand higher than 60% of the connected load, shall be charged one time charge termed 'Contract Demand Charges' as follows :

Table 173: Charges applicable for contract demand higher than 60% of connected load

S. No	Particulars	INR/kVA
1	For Contract Demand above 60% and up to 80% of connected load	200/-
2	For Contract Demand above 80% and up to 100% of connected load	300/-
3	Large Supply Consumers getting at 33 kV and above are exempted from the payment of one time contract demand charges for purpose of increasing contract demand	

g) In case of LT connections, Service rentals to the consumer existing prior to 1-11- 2002, if applicable already shall continue.

D. Recovery of service connection charges for extension of load by consumers who had paid the full cost of the line

Industrial and Bulk supply consumers availing connection for load exceeding 1 MW have to pay the entire cost of service line laid for them. By virtue of paying the entire cost of the line involved in releasing the connection, the consumer is entitled to avail (within five years) extension in load upto 100% of the original line for which the line had been erected provided that line so erected is capable of carrying the load i.e. original load and extended load up to 100% of the original load. If, however, line already erected is unable to take 100% extension of load, extension in load shall be limited to the capacity of the line. In such an event, the consumer is not required to pay service connection charges for the extension in load, provided the cost of the line already provided by him is more than the per kW charges calculated at the applicable rate from time to time on the total load including extension in load applied by the consumer.

a) If the extension in load applied by the consumer is in excess of the capacity of line already erected or more than 100 % of the original load, consumer shall pay the service connection charges as applicable to the new applicants.

b) If during the period of 5 years from the date of connection some load has already been released from the line, whose entire cost has been paid by the consumer, who seeks extension in load within five years up to the extent of the capacity of the line or 100% of the original load within 5 years up to the extent of the capacity of the line or 100 % of the original load, whichever is lesser, release of additional load shall be regulated as under:

Load released on voltage above 11 kV and loads 1MW and above:

Secretary (I/c), JERC
(For Goa and UTs)

Extension in load to the original consumer shall be allowed (within the contract demand for which the line was originally erected for the said consumer) at the cost of the electricity department, even if augmentation/ erection of new lines are required.

Load less than 1MW released on 11 kV

In this case care should be taken for a period of 5 years that a margin of 100 % of the load of the original consumer is available in the capacity of the line. If other consumer(s) want connection(s) to be released by utilizing the available margin, new consumer(s) singly or jointly, as the case may be shall pay towards the cost of augmentation of the line so that sufficient margin in electricity carrying capacity is available to cater to the additional requirement of the original consumer.

a) Provisions of the preceding Para's of this schedule shall not be applicable where as a result of extension in load the supply voltage level of the consumer changes or when the consumer changes the site of the premises.

E. Service connection charges for agriculture power

All prospective tube well consumers covered under general category shall pay INR 3,000 per BHP as service connection charges. The above charges are recoverable where the total length of the service line including new 11 kV line, LT line (new/augmented) and service cable is upto 1 Km (out of which LT line/Service cable route length should not exceed 500 meters from the common pole).Where the total length of the service line is more than 1 km (out of which LT line/Service cable route length should not exceed 500 meters), any applicant under this category shall be required to pay the cost of the new 11 kV line beyond this limit at INR 125 per meter as additional service connection charges. However, no component of distribution substation/transmission cost would be charged.

Secretary (I/c), JERC
(For Goa and UTs)

Annexures

Annexure 1: List of Stakeholders

The following is the list of the participants in Public Hearings conducted on 17th March 2023:

Table 174: List of participants in Public Hearing

S. No.	Name of Person/ Organisation	Address
1	Indian Citizen's Forum	R.O: # 508, Sec-15, Panchkula.
2	Residents' Welfare Organisation	Sector 38- A&B, Chandigarh
3	National Consumer Awareness Group	Bay Shop No. 391, Sector 44-0, Chandigarh
4	Group Captain R.C.Goyal (Retd)	Kothi No.1579, Sector 36D, Chandigarh-160036
5	Bharti Airtel Ltd.	Circle Office, Plot No. 21. Rajiv Gandhi Technology Park Chandigarh - 160101
6	Gopal Dutt Joshi	U.T. Powermen Union, Chandigarh
7	Mr. Jasmit	-