

# **Bihar Electricity Regulatory Commission**



**Case No. 22 of 2023 (NBPDCCL)  
and  
Case No. 23 of 2023 (SBPDCL)**

## **Tariff Order**

**True up for FY 2022-23,  
Annual Performance Review for FY 2023-24,  
Annual Revenue Requirement (ARR) and Determination of Retail  
Tariff for FY 2024-25**

**for  
North Bihar Power Distribution Company Limited (NBPDCCL)  
South Bihar Power Distribution Company Limited (SBPDCL)**

**Issued on 1<sup>st</sup> March 2024  
(With effect from 1<sup>st</sup> April 2024)**

Ground Floor, Vidyut Bhawan-II, B.S.E.B. Campus,  
Jawahar Lal Nehru Marg (Bailey Road), Patna – 800021, Bihar (India)

Phone:091-612-2504489; Fax:0612-2950376

Email: [bercpat@bihar.gov.in](mailto:bercpat@bihar.gov.in) ;Website :[www.berc.co.in](http://www.berc.co.in)



# CONTENTS

|                                                                                                                 |           |
|-----------------------------------------------------------------------------------------------------------------|-----------|
| <b>ORDER .....</b>                                                                                              | <b>1</b>  |
| <b>1. Introduction .....</b>                                                                                    | <b>9</b>  |
| 1.1. Bihar Electricity Regulatory Commission (BERC) .....                                                       | 9         |
| 1.2. Functions of BERC: .....                                                                                   | 9         |
| 1.3. Brief history and Profile of DISCOMs .....                                                                 | 10        |
| 1.4. Admission of Current Petition and Public Hearing Process .....                                             | 11        |
| 1.5. Approach of this Order .....                                                                               | 14        |
| 1.6. Organisation of Order .....                                                                                | 15        |
| <b>2. Summary of Petition filed for Truing up for FY 2022-23, APR for FY2023-24 and ARR for FY 2024-25 ....</b> | <b>16</b> |
| 2.1. Petitions filed by DISCOMs .....                                                                           | 16        |
| 2.2. Tariff Proposals .....                                                                                     | 19        |
| <b>3. Stakeholders' Objections / Suggestion, Petitioners' Response and Commission Observation</b>               | <b>22</b> |
| 3.1. Introduction .....                                                                                         | 22        |
| 3.2. List of Names of the Objectors / Stakeholders .....                                                        | 22        |
| 3.3. Comments/Suggestions of Stakeholders, reply by Petitioner and views of the Commission: .....               | 23        |
| 3.3.1 Additional surcharge: .....                                                                               | 23        |
| 3.3.2 Cross subsidy surcharge: .....                                                                            | 24        |
| 3.3.3 Renewable Purchase Obligation (RPO) .....                                                                 | 25        |
| 3.3.4 Wheeling charges .....                                                                                    | 25        |
| 3.3.5 Increase in Power purchase cost/rate: .....                                                               | 26        |
| 3.3.6 Increase in Transmission charges: .....                                                                   | 27        |
| 3.3.7 Distribution Loss: .....                                                                                  | 27        |
| 3.3.8 Rural Domestic category tariff: .....                                                                     | 29        |
| 3.3.9 Urban Domestic category tariff: .....                                                                     | 29        |
| 3.3.10 Contract demand: .....                                                                                   | 30        |
| 3.3.11 Private Agriculture Category (IAS-I Unmetered category): .....                                           | 31        |
| 3.3.12 Loss from Distribution franchisee (DF): .....                                                            | 32        |
| 3.3.13 Increase in tariff, Collection efficiency: .....                                                         | 32        |
| 3.3.14 Security Deposit: .....                                                                                  | 33        |
| 3.3.15 Tariff for cold storage, poultry farms, horticulture: .....                                              | 34        |
| 3.3.16 Service line charges: .....                                                                              | 34        |
| 3.3.17 Fixed charges: .....                                                                                     | 34        |
| 3.3.18 kVAh billing for IAS-I: .....                                                                            | 35        |
| 3.3.19 Load factor incentive: .....                                                                             | 36        |
| 3.3.20 Time of Day (ToD) tariff: .....                                                                          | 37        |
| 3.3.21 Rebate for online payment: .....                                                                         | 37        |
| 3.3.22 Billing Demand: .....                                                                                    | 38        |
| 3.3.23 Terms and Conditions: .....                                                                              | 39        |
| 3.3.24 FPPCA: .....                                                                                             | 40        |
| 3.3.25 HTIS tariff and Cross Subsidization: .....                                                               | 42        |
| 3.3.26 Voltage Rebate .....                                                                                     | 43        |
| 3.3.27 Billing and Collection efficiency .....                                                                  | 43        |
| 3.3.28 Audited Annual Accounts .....                                                                            | 43        |
| 3.3.29 Asset Register .....                                                                                     | 44        |
| 3.3.30 Interest on loan .....                                                                                   | 44        |
| 3.3.31 Return on Equity .....                                                                                   | 45        |
| 3.3.32 Increase in A & G charges .....                                                                          | 46        |
| 3.3.33 Non tariff income .....                                                                                  | 46        |
| 3.3.34 Savings due to Prepaid metering system .....                                                             | 46        |

|           |                                                                               |            |
|-----------|-------------------------------------------------------------------------------|------------|
| 3.3.35    | Subsidy from State Government.....                                            | 47         |
| 3.3.36    | Creation of new HTSS 132 kV category.....                                     | 47         |
| 3.3.37    | Surplus power and its utilization.....                                        | 48         |
| 3.3.38    | Representation of stakeholder in the Board of Discoms .....                   | 49         |
| 3.3.39    | Electricity Duty .....                                                        | 49         |
| 3.3.40    | Open Access.....                                                              | 50         |
| 3.3.41    | Capacitors to reduce losses.....                                              | 50         |
| 3.3.42    | Energy Savings Certificates (ESCerts).....                                    | 50         |
| 3.3.43    | Holding Company expenses .....                                                | 51         |
| 3.3.44    | RPO Reserve .....                                                             | 52         |
| 3.3.45    | Current initiatives.....                                                      | 52         |
| 3.3.46    | Future plans and road map .....                                               | 52         |
| 3.3.47    | Cross departmental implementation.....                                        | 53         |
| 3.3.48    | Setting up an Analytics - Center for excellence.....                          | 54         |
| <b>4.</b> | <b>Truing-up for FY 2022-23.....</b>                                          | <b>55</b>  |
| 4.1.      | Background.....                                                               | 55         |
| 4.2.      | Number of Consumers, Connected Load and Energy Sales for FY 2022-23.....      | 56         |
| 4.3.      | Distribution losses .....                                                     | 67         |
| 4.4.      | Power Purchase for FY 2022-23 .....                                           | 75         |
| 4.5.      | Energy Balance .....                                                          | 80         |
| 4.6.      | Power Purchase Cost.....                                                      | 83         |
| 4.7.      | Additional Power Purchase due to excess distribution loss.....                | 101        |
| 4.8.      | Renewable Power Purchase Obligation .....                                     | 108        |
| 4.9.      | Capital Expenditure .....                                                     | 115        |
| 4.10.     | Gross Fixed Assets .....                                                      | 127        |
| 4.11.     | Depreciation .....                                                            | 128        |
| 4.12.     | Interest on Loans .....                                                       | 133        |
| 4.13.     | Other Interest and Finance Charges.....                                       | 137        |
| 4.14.     | Return on Equity.....                                                         | 140        |
| 4.15.     | Employees Cost .....                                                          | 143        |
| 4.16.     | Repairs and Maintenance (R&M) Expenses .....                                  | 147        |
| 4.17.     | Administrative and General (A&G) Expenses.....                                | 149        |
| 4.18.     | Total O & M expenses .....                                                    | 160        |
| 4.19.     | Holding Company Expenses .....                                                | 161        |
| 4.20.     | Interest on Security Deposit.....                                             | 163        |
| 4.21.     | Bad debts claimed by SBPDCL .....                                             | 166        |
| 4.22.     | Non-Tariff Income .....                                                       | 167        |
| 4.23.     | Interest on working capital.....                                              | 171        |
| 4.24.     | Revenue from sale of power with existing tariff for FY 2022-23 .....          | 175        |
| 4.25.     | Annual Revenue Requirement and sharing of gains/(losses) for FY 2022-23 ..... | 178        |
| 4.26.     | Revenue Gap/(Surplus) for FY 2022-23 .....                                    | 184        |
| <b>5.</b> | <b>Annual Performance Review for FY 2023-24.....</b>                          | <b>187</b> |
| 5.1.      | Background.....                                                               | 187        |
| 5.2.      | Number of Consumers, Energy Sales and Connected Load for FY 2023-24.....      | 187        |
| 5.3.      | Distribution Losses for FY 2023-24.....                                       | 198        |
| 5.4.      | Transmission Losses for FY 2023-24.....                                       | 200        |
| 5.5.      | Central Transmission Loss for FY 2023-24.....                                 | 200        |
| 5.6.      | Power Purchase for FY 2023-24 .....                                           | 200        |
| 5.7.      | Energy Balance for FY 2023-24.....                                            | 209        |
| 5.8.      | Power Purchase Cost for FY 2023-24 .....                                      | 210        |
| 5.9.      | Transmission Charges for FY 2023-24 .....                                     | 227        |

|                                                        |                                                                                                |            |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------|------------|
| 5.10.                                                  | Renewable Purchase Obligation (RPO) .....                                                      | 228        |
| 5.11.                                                  | Capital Expenditure .....                                                                      | 232        |
| 5.12.                                                  | Gross Fixed Assets .....                                                                       | 239        |
| 5.13.                                                  | Depreciation .....                                                                             | 240        |
| 5.14.                                                  | Interest on Loans .....                                                                        | 242        |
| 5.15.                                                  | Other finance charges .....                                                                    | 245        |
| 5.16.                                                  | Return on Equity .....                                                                         | 246        |
| 5.17.                                                  | Operation and Maintenance (O&M) Expenses .....                                                 | 247        |
| 5.17.1.                                                | Employee Cost .....                                                                            | 247        |
| 5.17.2.                                                | Administrative and General (A&G) Expenses .....                                                | 250        |
| 5.17.3.                                                | Repairs and Maintenance (R&M) Expenses .....                                                   | 252        |
| 5.17.4.                                                | Allocation of Holding Company Expenses .....                                                   | 253        |
| 5.17.5.                                                | Summary of Operation and Maintenance (O&M) Expenses .....                                      | 254        |
| 5.18.                                                  | Interest on Security Deposit .....                                                             | 255        |
| 5.19.                                                  | Non-Tariff Income .....                                                                        | 256        |
| 5.20.                                                  | Energy Saving Certificate (ESCs) .....                                                         | 257        |
| 5.21.                                                  | Interest on working capital .....                                                              | 264        |
| 5.22.                                                  | Revenue from sale of power at existing tariff .....                                            | 266        |
| 5.23.                                                  | Annual Revenue Requirement and Revenue Gap at existing tariff projected for FY 2023-24 (RE) .. | 268        |
| <b>Annexure-5.1</b>                                    | .....                                                                                          | <b>270</b> |
| <b>Annexure-5.2</b>                                    | .....                                                                                          | <b>274</b> |
| <b>6. Aggregate Revenue Requirement for FY 2024-25</b> | .....                                                                                          | <b>278</b> |
| 6.1.                                                   | Background .....                                                                               | 278        |
| 6.2.                                                   | Number of Consumers, Connected Load and Sales for FY 2024-25 .....                             | 278        |
| 6.3.                                                   | Distribution Loss .....                                                                        | 295        |
| 6.4.                                                   | Transmission Loss .....                                                                        | 297        |
| 6.5.                                                   | Central Transmission Loss (CTU) .....                                                          | 298        |
| 6.6.                                                   | Power Purchase .....                                                                           | 298        |
| 6.7.                                                   | Energy Balance .....                                                                           | 305        |
| 6.8.                                                   | Power Purchase Cost for FY 2024-25 .....                                                       | 316        |
| 6.9.                                                   | Transmission Charges .....                                                                     | 329        |
| 6.10.                                                  | Total Power Purchase Cost .....                                                                | 331        |
| 6.11.                                                  | Renewable Power Purchase Obligation .....                                                      | 331        |
| 6.12.                                                  | Capital Expenditure .....                                                                      | 335        |
| 6.13.                                                  | Gross Fixed Assets .....                                                                       | 339        |
| 6.14.                                                  | Depreciation .....                                                                             | 340        |
| 6.15.                                                  | Interest on Loans .....                                                                        | 341        |
| 6.16.                                                  | Other Finance Charges .....                                                                    | 344        |
| 6.17.                                                  | Return on Equity .....                                                                         | 345        |
| 6.18.                                                  | Operation and Maintenance (O&M) expenses .....                                                 | 347        |
| 6.18.1                                                 | Employee Costs .....                                                                           | 347        |
| 6.18.2                                                 | Administrative and General (A&G) Expenses .....                                                | 350        |
| 6.18.3                                                 | Repairs and Maintenance (R&M) Expenses .....                                                   | 353        |
| 6.18.4                                                 | Holding Company Expenses .....                                                                 | 354        |
| 6.18.5                                                 | Summary of Operation and Maintenance (O&M) Expenses .....                                      | 355        |
| 6.19                                                   | Interest on Security Deposit .....                                                             | 355        |
| 6.20                                                   | Non-Tariff Income .....                                                                        | 356        |
| 6.21                                                   | Energy Saving Certificate (ESCs) .....                                                         | 358        |
| 6.22                                                   | Demand side management .....                                                                   | 359        |
| 6.23                                                   | Interest on working capital .....                                                              | 360        |
| 6.24                                                   | Annual Revenue Requirement for FY 2024-25 .....                                                | 363        |