## A. INTRODUCTION

- 1.1 New Delhi Municipal Council (NDMC), the Distribution Licensee, has filed its Petition for Approval of True-up of FY 2020-21 and Aggregate Revenue Requirement (ARR) for FY 2022-23.
- 1.2 This Executive Summary contains the summary of the Petition filed by NDMC for True-up of FY 2020-21 and ARR Tariff for FY 2022-23.
- 1.3 The True up for FY 2020-21, ARR and Tariff for FY 2022-23 shall be determined based on the provisions of *DERC* (*Terms and Conditions for Determination of Tariff*) Regulations, 2017 and *DERC* (Business Plan) Regulations, 2019. ARR broadly has the following components:
  - a) Power Purchase Cost including transmission charges
  - b) Operation and Maintenance (O&M) expenses
  - c) Return on Capital Employed
  - d) Depreciation
  - e) Income Tax.
  - f) Non-tariff Income, etc.
- 1.4 The following tables/ figures have been extracted from the Petition filed by NDMC for ease of understanding to various stakeholders. Complete Petition is also available on DERC website <a href="http://www.derc.gov.in/">http://www.derc.gov.in/</a>

## **B. TRUE UP OF FY 2020-21**

1.5 NDMC has submitted that Sales and Revenue for FY 2020-21 based on actual as follows:

Table 1: Energy Sales for FY 2020-21 (MU)

| Sr.<br>No. | Consumer Category                   | Approved in TO<br>FY 2020-21 | Actual  |
|------------|-------------------------------------|------------------------------|---------|
| 1          | Domestic                            | 252.00                       | 255.78  |
| 2          | Non-Domestic                        | 804.00                       | 156.27  |
| 3          | Mixed Load                          | 804.00                       | 553.73  |
| 4          | Industrial (Small Industrial Power) | 0.00                         | 0.03    |
| 5          | Public Lighting                     | 7.00                         | 6.91    |
| 6          | DMRC                                | 33.00                        | 23.90   |
| 7          | Others                              | 13.00                        | 13.58   |
| 8          | Total                               | 1109.00                      | 1010.19 |

Table 2: Revenue from Sale of Power for FY 2020-21 (Rs. Cr.)

| Sr. No. | Particulars                                       | Approved in TO FY 2020-21 | Actual  |
|---------|---------------------------------------------------|---------------------------|---------|
| 1       | Energy Charges Billed (excluding Electricity Tax) | 868.43                    | 800.06  |
| 2       | Fixed Charges                                     | 193.94                    | 255.58  |
| 3       | Total (1+2)                                       | 1062.37                   | 1055.63 |



| Sr. No. | Particulars                                            | Approved in TO FY 2020-21 | Actual  |
|---------|--------------------------------------------------------|---------------------------|---------|
| 4       | E-tax billed                                           | 0.000                     | 52.24   |
| 5       | Revenue Billed including Electricity Tax and Surcharge | 1062.37                   | 1107.88 |

1.6 The Distribution Loss and Collection Efficiency for FY 2020-21 submitted by NDMC is as follows:

Table 3:Distribution Loss & Collection Efficiency for FY 2020-21 (%)

| Sr. No. | Particulars           | Actual  |
|---------|-----------------------|---------|
| 1       | Distribution Loss     | 8.43%   |
| 2       | Collection Efficiency | 104.64% |

1.7 The Power Purchase Quantum and Cost submitted by NDMC for FY 2020-21 is as follows:

Table 4: Power Purchase Quantum for FY 2020-21 (MU)

| Sr. | Particulars                                                  | Approved in   |         |
|-----|--------------------------------------------------------------|---------------|---------|
| No. |                                                              | TO FY 2020-21 | Actual  |
| 1   | Power Purchase from Central Stations Dadri                   | 305.00        | 29.00   |
| 2   | Power Purchase from Short Term Small Hydro                   |               | 87.21   |
| 3   | Total Interstate: Power Purchase                             | 305.00        | 116.21  |
| 4   | Interstate Transmission Losses                               | -6.00         | -1.92   |
| 5   | Net Power Purchase from Central Stations and Small<br>Hydro  | 299.00        | 114.28  |
| 6   | Power Purchase from State Generating Stations (Excluding RE) | 830.00        | 750.54  |
| 7   | Power purchase from DMSWSL                                   | 6.15          | 6.83    |
| 8   | Power purchase from IEX                                      |               | 156.47  |
| 9   | Power available at Delhi Periphery                           | 1135.15       | 1028.13 |
| 10  | Intra State Transmission Loss                                | -10.00        | -9.06   |
| 11  | Power Available at NDMC Periphery                            | 1125.15       | 1019.07 |
| 12  | Power Purchase from Short Term Large Hydro at NDMC Periphery | 0.00          | 223.90  |
| 13  | Power Purchase from UI                                       |               | 8.69    |
| 14  | Solar Power from Grid Connected Plant                        |               | 1.73    |
| 15  | Total                                                        | 1125.15       | 1253.39 |
| 16  | Sale of Power (IEX) & UI                                     |               | 150.23  |
| 17  | Net Power Available for Retail Sale                          | 1125.15       | 1103.16 |

Table 5: Power Purchase Cost for FY 2020-21

| Sr. No. | Particulars                                                                                       | Power Quantum (MU) | Amount (Rs. Cr.) |  |  |
|---------|---------------------------------------------------------------------------------------------------|--------------------|------------------|--|--|
| 1       | Gross Power Purchase Cost excluding Waste to Energy, Short Term Purchase and Transmission Charges |                    | 572.77           |  |  |
| 2       | Waste to Energy                                                                                   | 6.83               | 4.80             |  |  |



| Sr. No. | Particulars                               | Power Quantum (MU) | Amount (Rs. Cr.) |
|---------|-------------------------------------------|--------------------|------------------|
| 3       | Total Long Term                           | 786.36             | 577.57           |
| 4       | Short Term Purchase                       | 476.26             | 196.68           |
| 5       | Solar Power – Grid Connected              | 1.73               | 0.00             |
| 6       | Inter State Transmission Losses / Charges | -1.92              | 23.77            |
| 7       | Intra State Transmission Losses / Charges | -9.05              | 34.36            |
| 8       | OA Charges for Small Hydro                |                    | 5.32             |
| 9       | STOA Charges for large Hydro              |                    | 4.74             |
| 10      | Gross Power Purchase                      | 1253.39            | 842.43           |
| 11      | Less: Rebate on Power Purchase            | 0.00               | 15.02            |
| 12      | Less: Total Rebate on Transmission        | 0.00               | 0.83             |
| 13      | Less: Sale of Surplus Power               | 150.23             | 32.64            |
| 14      | Net Power Purchase                        | 1103.16            | 793.94           |
| 15      | Average Cost Per Unit                     |                    | 7.20             |

1.8 The O&M Expenses as submitted by NDMC during FY 2020-21 is as follows:

Table 6: O&M Expenses for FY 2020-21

| Sr. | Particulars       | Units  | As on      | Addition         | As on      | Rate in | Amt. in  | Rs. Cr. |
|-----|-------------------|--------|------------|------------------|------------|---------|----------|---------|
| No  |                   |        | 31/03/2020 | <b>During FY</b> | 31/03/2021 | Lakh    | Lakh     |         |
|     |                   |        |            | 2020-21          |            |         |          |         |
| 1   | 66 kV Line        | Ckt KM | 55.21      | 0.49             | 55.71      | 3.079   | 171.52   | 1.72    |
| 2   | 33 kV Line        | Ckt KM | 169.01     | 6.29             | 175.30     | 3.079   | 539.76   | 5.40    |
| 3   | 11kV Line         | Ckt KM | 1045.08    | 4.24             | 1049.32    | 0.935   | 981.11   | 9.81    |
| 4   | LT Line system    | Ckt KM | 4253.64    | 20.05            | 4273.69    | 7.338   | 31360.33 | 313.60  |
| 5   | 66/11 kV Grid S/s | MVA    | 490.00     | 0.00             | 490.00     | 0.954   | 467.46   | 4.67    |
| 6   | 33/11 kV Grid S/s | MVA    | 1006.00    | 0.00             | 1006.00    | 0.954   | 959.72   | 9.60    |
| 7   | 11/0.415 kV DT    | MVA    | 803.93     | 41.00            | 844.93     | 1.489   | 1258.10  | 12.58   |
|     | Total             |        |            |                  |            |         | 357.38   |         |

- 1.9 NDMC has submitted the Non-Tariff Income for FY 2020-21 as Rs. 4.55 Cr. Further, NDMC has submitted that they are exempted from paying the Income Tax, therefore claim for such tax liabilities has not been proposed in the Petition.
- 1.10 NDMC has submitted the ARR during FY 2020-21 as follows:

Table 7: Trued up ARR for FY 2020-21 (Rs. Crore)

| Sr.No. | Description                           | T.O 2020-21 | Actual  |
|--------|---------------------------------------|-------------|---------|
| 1      | Net Power Purchase Cost               | 737.18      | 793.94  |
| 2      | Net Operation & Maintenance (O&M)     | 240.72      | 357.38  |
| 3      | Depreciation                          | 22.77       | 37.42   |
| 4      | Return on Capital Employed (including | 24.43       | 52.06   |
|        | Interest on Working Capital)          |             |         |
| 5      | Income Tax                            | 0.00        | 0.00    |
| 6      | Less: Non-Tariff Income               | -7.90       | -4.55   |
| 7      | Aggregate Revenue Requirement (ARR)   | 1017.20     | 1236.25 |



1.11 The Revenue Surplus/(Gap) for FY 2020-21 is as follows:

Table 8: Revenue (Gap) for FY 2020-21 (Rs. Crore)

| Sr. No | Particulars Particulars Particulars | T.O. 2020-21 | Actual   |
|--------|-------------------------------------|--------------|----------|
| 1      | ARR for FY 2020-21                  | 1017.20      | 1236.25  |
| 2      | Revenue Available Towards ARR       | 1037.74      | 1049.63  |
| 3      | Revenue(Gap)/Surplus                | 20.54        | (186.62) |

## C. Aggregate Revenue Requirement for FY 2022-23

1.12 The Energy Sales and Revenue projected for FY 2022-23 are as follows:

Table 9: Category-wise Energy Sales and Revenue for FY 2022-23 (MU)

| Sr. No. | Consumer Category      | FY 2022-23 | Revenue |
|---------|------------------------|------------|---------|
| 1       | Domestic               | 255.78     | 202.03  |
| 2       | Non Domestic           | 1039.00    | 1031.34 |
| 3       | Mixed Load             |            |         |
| 4       | Small Industrial Power | 0.03       | 0.03    |
| 5       | Public Lighting        | 7.07       | 4.91    |
| 6       | DMRC                   | 40.97      | 28.01   |
| 7       | Other                  | 14.57      | 11.23   |
| 8       | Total                  | 1357.42    | 1277.54 |

1.13 The Distribution Loss & Collection Efficiency for FY 2022-23 are as follows:

Table 10: Distribution Loss & Collection Efficiency for FY 2022-23

| Sr. No. | Particulars           | FY 2022-23 |
|---------|-----------------------|------------|
| 1       | Distribution Loss     | 8.50%      |
| 2       | Collection Efficiency | 99.50%     |

1.14 The Energy Requirement projected for FY 2022-23 is as follows:

Table 11: Energy Requirement Projections for FY 2022-23

| Sr. No. | Particulars Particulars                        | FY 2022-23 |
|---------|------------------------------------------------|------------|
| 1       | Energy Sales (MU)                              | 1357.42    |
| 2       | Distribution Loss (%)                          | 8.50%      |
| 3       | Distribution Loss (MU)                         | 126.10     |
| 4       | Energy Required at Distribution Periphery (MU) | 1483.52    |

1.15 The Energy Balance projected for FY 2022-23 is as follows:

Table 12: Energy Balance Projections for FY 2022-23 (in MU)

| Sr. No. | Particulars                                          | FY 2022-23 |
|---------|------------------------------------------------------|------------|
| Α       | Energy Requirement                                   |            |
| 1       | Energy Sales                                         | 1357.42    |
| 2       | Distribution Loss (%)                                | 8.50%      |
| 3       | Distribution Loss (MU)                               | 126.10     |
| 4       | Energy Required at Distribution Periphery            | 1483.52    |
| В       | Energy Availability                                  |            |
| 1       | Power Purchase from Large Hydro (Teesta) outside the | 611.00     |
| 1       | State                                                | 611.00     |



| Sr. No. | Particulars                                       | FY 2022-23 |
|---------|---------------------------------------------------|------------|
| 2       | Power Purchase from Small Hydro outside the State | 70.00      |
| 3       | Less: Interstate Transmission Losses (3.20%)      | 21.79      |
| 4       | Net Power Purchase from outside States            | 659.21     |
| 5       | Power Purchase from within the State              | 796.00     |
| 6       | DMSWSL and EDWPCL                                 | 6.15       |
| 7       | Solar Power (100 MW)                              | 160.00     |
| 8       | Short Term Bilateral Hydro                        | 75.00      |
| 9       | From IEX                                          | 15.00      |
| 10      | Gross Power Purchase Quantum                      | 1711.36    |
| 11      | Less: Intra-State Transmission Loss (0.88%)       | 15.06      |
| 12      | Net Power Available at NDMC Periphery             | 1696.30    |
| 13      | Sale of Surplus Power                             | 212.78     |
| 14      | Net Power available for Retail Sales              | 1483.52    |

1.16 The Power Purchase Quantum and Cost for FY 2022-23 is as follows:

Table 13: Power Purchase Cost for FY 2022-23

| Sr. No. | Particulars                                                | Power<br>Quantum<br>(MU) | Amount<br>(Rs. Cr.) |
|---------|------------------------------------------------------------|--------------------------|---------------------|
| 1       | Power Purchase from Large Hydro (Teesta) outside the State | 611.00                   | 241.96              |
| 2       | Power Purchase from Small Hydro outside the State          | 70.00                    | 32.62               |
| 3       | Less: Interstate Transmission Losses                       | 21.79                    | 22.30               |
| 4       | Net Power Purchase from outside States                     | 659.21                   |                     |
| 5       | Power Purchase from within the State                       | 796.00                   | 524.26              |
| 6       | DMSWSL and EDWPCL                                          | 6.15                     | 4.32                |
| 7       | Solar Power Long Term                                      | 160.00                   | 39.20               |
| 8       | Short Term Bilateral Hydro                                 | 75.00                    | 31.95               |
| 9       | From IEX                                                   | 15.00                    | 5.70                |
| 10      | Gross Power Purchase Quantum                               | 1711.36                  |                     |
| 11      | Less: Intra-State Transmission Loss                        | 15.06                    | 44.86               |
| 12      | OA Charges for Small Hydro Power                           |                          | 5.32                |
| 13      | STOA Charges for Large Hydro Power                         |                          | 4.74                |
| 14      | Total Power Purchase Cost                                  | 1696.30                  | 957.23              |
| 15      | Rebate on Power Purchase                                   |                          | 13.89               |
| 16      | Sale of Surplus Power                                      | 212.78                   | 46.17               |
| 17      | Net Power Purchase Cost                                    | 1483.52                  | 897.17              |

1.17 The O&M Expenses projected for FY 2022-23 is as follows:

Table 14: O&M Expenses Projected for FY 2022-23

| Sr.<br>No | Particulars | Units  | Projection as on | During         | 31/03/2023 | Rate in<br>Lakh | Amt. in<br>Lakh | Rs. Cr. |
|-----------|-------------|--------|------------------|----------------|------------|-----------------|-----------------|---------|
|           |             |        | 31/03/2022       | FY 2022-<br>23 |            |                 |                 |         |
| 1         | 66 kV Line  | Ckt KM | 55.71            | 0.00           | 55.71      | 3.320           | 184.95          | 1.85    |
| 2         | 33 kV Line  | Ckt KM | 199.80           | 0.00           | 199.80     | 3.320           | 663.35          | 6.63    |
| 3         | 11kV Line   | Ckt KM | 1076.33          | 136.17         | 1212.50    | 1.008           | 1222.20         | 12.22   |



| Sr.<br>No | Particulars       | Units  | Projection as<br>on<br>31/03/2022 | During | 31/03/2023 | Rate in<br>Lakh | Amt. in<br>Lakh | Rs. Cr. |
|-----------|-------------------|--------|-----------------------------------|--------|------------|-----------------|-----------------|---------|
| 4         | LT Line system    | Ckt KM | 4273.75                           | 31.00  | 4304.75    | 7.912           | 34059.18        | 340.59  |
| 5         | 66/11 kV Grid S/s | MVA    | 490.00                            | 0.00   | 490.00     | 1.029           | 504.21          | 5.04    |
| 6         | 33/11 kV Grid S/s | MVA    | 1066.00                           | 0.00   | 1066.00    | 1.029           | 1096.91         | 10.97   |
| 7         | 11/0.415 kV DT    | MVA    | 845.93                            | 9.00   | 854.93     | 1.605           | 1372.16         | 13.72   |
| Total     |                   |        |                                   |        |            | 391.03          |                 |         |

1.18 The Non-Tariff Projected Income for FY 2022-23 is as follows:

Table 15: Projected Non-Tariff Income for FY 2022-23 (Rs. Crore)

| Particulars       | FY 2022-23 |
|-------------------|------------|
| Non-Tariff Income | 4.00       |

1.19 The projected ARR & Revenue Gap for FY 2022-23 is as follows:

Table 16: Projected ARR & Revenue Gap for FY 2022-23 (Rs. Crore)

| S. No. | Particulars                                             | FY 2022-23    |
|--------|---------------------------------------------------------|---------------|
| 1      | Cost of power purchase, including T&D Losses            | 897.17        |
| 2      | Inter-State Transmission charges                        | Included in 1 |
| 3      | Intra-state Transmission charges including SLDC charges |               |
| 4      | Rebate on Timely Payments                               |               |
| 5      | Net Operation & Maintenance (O&M)                       | 391.03        |
| 6      | Depreciation                                            | 41.02         |
| 7      | Return on Capital Employed                              | 57.11         |
| 8      | Income Tax                                              | 0.00          |
| 9      | Aggregate Revenue Requirement (ARR)                     | 1386.33       |
| 10     | Less: Non-Tariff Income                                 | (4.00)        |
| 11     | Net ARR                                                 | 1382.33       |
| 12     | Revenue at Existing Tariff                              | 1277.54       |
| 13     | Revenue (Gap)/Surplus for FY 2022-23                    | (104.79)      |

