A. Introduction

- 1.1 BSES Yamuna Power Limited (BYPL), 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 The Executive Summary contains the summary of the Petition filed by BYPL for True-up for FY 2020-21 (based on audited accounts), 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 Petitions filed by BYPL for ease of understanding to various stakeholders. Complete Petition is also available on DERC website http://www.derc.gov.in/

B. True up for FY 2020-21

1.5 BYPL has submitted its Energy Sale in FY 2020-21 as follows:

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

| Sr. No. | Category | Sales (MU) |
|---------|------------------------------------|------------|
| Α | Domestic | 3,963 |
| В | Non Domestic | 1,221 |
| С | Industry | 318 |
| D | Public Lighting | 63 |
| Е | Agriculture & Mushroom Cultivation | 0 |
| F | DMRC | 70 |
| G | DJB | 152 |
| Н | Others* | 78 |
| Total | | 5,866 |

^{*}Includes enforcement, Own consumption, Temporary Supply, net metering and Advertisement & Hoardings etc.

1.6 BYPL realised revenue amounting to Rs. 4,272 Cr. (excluding 8% Surcharge, Pension Surcharge, LPSC and Electricity Tax).

1.7 BYPL has submitted the actual Distribution loss and Collection Efficiency for FY 2020-21 as follows:

Table 2: Distribution Losses and Collection Efficiency for FY 2020-21 (%)

| Sr. No. | Particulars | Actual performance |
|---------|-----------------------|--------------------|
| Α | Distribution Losses | 7.98% |
| В | Collection Efficiency | 100.57% |

- 1.8 The Petitioner purchases almost 80% of the power from generating companies owned and/ or fully controlled by the Central Government and State Government by virtue of long term power purchase agreements which have been inherited from DTL.
- 1.9 The actual Power Purchase Quantum and Cost claimed during FY 2020-21 is as follows:

Table 3: Power Purchase Quantum for FY 2020-21

| Sr. No. | Particulars | MU |
|---------|---|------|
| Α | Power Purchase | |
| i | Gross Power Purchase Quantum | 8066 |
| ii | Power sold to other sources | 1412 |
| iii | Net Power Purchase | 6654 |
| В | Transmission Loss | |
| 1 | Total transmission loss (Inter State & Intra State) | 279 |
| С | Net power available after Transmission Loss* | 6374 |

^{*} Excluding Open Access

Table 4: Power Purchase Cost for FY 2020-21

| Sr.No. | Particulars | Amount (Cr.) |
|--------|----------------------------------|--------------|
| Α | Power Purchase Cost | |
| i | Gross Power Purchase Cost | 2,900.31 |
| ii | Power sold to other sources | 442.68 |
| iii | Other Payments | (3.91) |
| iv | Net Power Purchase Cost | 2,453.71 |
| В | Transmission Charges | |
| i | Inter-state transmission charges | 437.11 |
| ii | Intra-state transmission charges | 172.56 |
| iii | Other Transmission charges | 56.56 |
| iv | Total Transmission charges | 666.23 |
| С | Rebate | |
| i | Power Purchase Rebate | 2.73 |
| ii | Rebate on Transmission Charges | 34.86 |
| iii | Total rebate | 37.59 |

| Sr.No. | Particulars | Amount (Cr.) |
|--------|--|--------------|
| D | Add: Net Metering | 3.77 |
| E | Add: Self Generation(Roof Top Solar) | 0.14 |
| F | Net Power Purchase including Transmission charges before incentive & net of rebate | 3,086.3 |

1.10 The O&M expenses as considered by BYPL during FY 2020-21 are tabulated as follows:

Table 5: O&M expenses for FY 2020 - 21

| Network | Network Capacity as on 31/03/2021 | O&M expenses per unit | | O&M expenses (Rs. Cr.) |
|-------------------|-----------------------------------|-----------------------|-------|------------------------------|
| 66 kV Line | 230 | Lakh/ckt. km | 4.857 | 11.2 |
| 33 kV Line | 408 | Lakh/ckt. km | 4.857 | 19.8 |
| 11kV Line | 2983 | Lakh/ckt. km | 2.036 | 60.7 |
| LT Line system | 5622 | Lakh/ckt. km | 9.173 | 515.7 |
| 66/11 kV Grid S/s | 1815 | Lakh/MVA | 1.157 | 21.0 |
| 33/11 kV Grid S/s | 2056 | Lakh/MVA | 1.157 | 23.8 |
| 11/0.415 kV DT | 3485 | Lakh/MVA | 2.534 | 88.3 |
| | Total | | | 740.5 |

1.11 BYPL has claimed certain amount on account of Statutory Levies/Taxes and Miscellaneous Expenses which are uncontrollable in nature and not covered in the above normative O&M expenses during FY 2020-21 as follows:

Table 6: Other uncontrollable costs/ miscellaneous expenses

| Sr. No | Particulars | Amount (Rs. Cr.) |
|--------|--|------------------|
| Α | Arrears paid on account of 7 th Pay Commission revision | 78.6 |
| В | Legal Expenses | 14.2 |
| С | Loss on Sale of Retired Assets | 5.6 |
| D | COVID-19expenses | 5.1 |
| E | Expenses for raising loan for Funding of Working Capital and Regulatory Assets | 0.9 |
| F | Ombudsman Fees | 0.22 |
| G | GST Impact | 6.0 |
| Н | New Initiatives | 0.34 |
| I | Total | 111 |

1.12 BYPL has considered the Actual capitalization and de-capitalisation as per the Audited Accounts for FY 2020- 21 to derive the closing balance of GFA as follows:

Table 7: Gross Fixed Assets for FY 2020-21 (Rs. Cr.)

| Sr.No | Particulars | Amount |
|-------|-------------|--------|
| А | Opening GFA | 3950.0 |

| Sr.No | Particulars | Amount |
|-------|--------------------------------|--------|
| В | Capitalisation during the year | 300.9 |
| С | De-capitalisation | 70.4 |
| D | Closing GFA | 4180.5 |
| E | Average GFA | 4065.2 |

1.13 The financing of Capitalisation (net of de-capitalisation and consumer contribution) through debt and equity in the ratio of 70:30 is as follows:

Table 8: Financing of Capitalisation for FY 2020-21 (Rs. Crore)

| Sr.No | Particulars | Amount |
|-------|------------------------|--------|
| Α | Total Capitalisation | 300.9 |
| В | De-capitalisation | 70.4 |
| С | Consumer Contribution | 33.7 |
| D | Balance Capitalisation | 196.9 |
| E | Equity | 59.1 |
| F | Debt | 137.9 |

1.14 The average Consumer Contribution and Grants for FY 2020-21 is as follows:

Table 9: Consumer contribution and Grants for FY 2020-21 (₹ Crore)

| Sr.No | Particulars | Amount |
|-------|-------------------------------|--------|
| Α | Opening Balance | 322.9 |
| В | Additions during the year | 33.7 |
| С | Closing Balance | 356.5 |
| D | Average Consumer Contribution | 339.7 |

1.15 The average rate of Depreciation for FY 2020-21 as submitted based on the Audited Accounts is as follows:

Table 10: Computation of Average rate of Depreciation for FY 2020-21 (Rs. Cr.)

| Sr. No. | Particulars | Amount |
|---------|--------------------------------------|--------|
| Α | Opening GFA as per audited accounts | 3920.6 |
| В | Closing GFA as per audited accounts | 4151.1 |
| С | Average of GFA | 4035.8 |
| D | Depreciation as per Audited Accounts | 197.8 |
| E | Average depreciation rate (%) | 4.90% |

Table 11: Depreciation for FY 2020-21 (Rs. Cr.)

| Sr. No. | Particulars | Amount |
|---------|---|--------|
| Α | Average GFA | 4065.2 |
| В | Average Consumer Contribution and Grants | 339.7 |
| С | Average GFA net of consumer contribution & Grants | 3725.6 |
| D | Average rate of depreciation (%) | 4.90% |
| E | Depreciation | 182.6 |

1.16 BYPL has computed the Working Capital Requirement for FY 2020-21 as follows:

Table 12: Working Capital Requirement (Rs. Crore)

| Sr.No | Particulars | Amount |
|-------|--|--------|
| А | Annual Revenues from Tariff & Charges | 4408.7 |
| A1 | Receivables equivalent to two months average | 734.8 |
| В | Power Purchase Expenses | 3086.3 |
| B1 | Less:1/12thofpowerpurchaseexpenses | 257.2 |
| С | Working Capital | 477.6 |
| D | Opening Working Capital | 478.4 |
| E | Change in Working Capital | -0.8 |

1.17 The Regulated Rate Base (RRB) for FY 2020-21 has been computed as follows:

Table 13: Regulated Rate Base for FY 2020-21 (Rs. Crore)

| Sr.No | Particulars | Amount |
|-------|--|--------|
| Α | RRB Opening | 2332.6 |
| В | ΔAB(Change in Capital Investments) | 69.9 |
| С | Investments Capitalized | 230.5 |
| D | Depreciation | 182.6 |
| Е | Add: Depreciation on De-capitalised Assets | 55.7 |
| F | Consumer Contribution | 33.7 |
| G | Change in WC | -0.8 |
| Н | RRB Closing | 2401.7 |
| I | RRB(i) | 2366.8 |

1.18 BYPL has considered the actual rate of interest of capex loans during 2020-21 i.e.12.01% and Grossed up RoE at 21.38% for computation of WACC as follows:

Table 14: Weighted Average Cost of Capital (WACC) (Rs. Cr.)

| Sr. No | Particulars | Amount |
|--------|----------------|--------|
| Α | Average Equity | 1074.5 |
| В | Average Debt | 1430.0 |

| Sr. No | Particulars | Amount |
|--------|----------------------------------|--------|
| С | Return on Equity | 16.00% |
| D | Income Tax Rate (%) | 25.17% |
| E | Grossed up Return on Equity | 21.38% |
| F | Rate of Interest | 12.02% |
| G | Weighted average cost of Capital | 16.03% |

1.19 The Return on Capital Employed (RoCE) for FY 2020-21 is thus computed as follows:

Table 15: RoCE for FY 2020-21 (Rs. Cr.)

| Sr. No. | Particulars | Amount |
|---------|---|--------|
| Α | Weighted Average Cost of Capital (WACC) | 16.03% |
| В | RRB (i) | 2367 |
| С | RoCE | 379 |

1.20 BYPL has submitted the Non-Tariff Income for FY 2020-21 as follows:

Table 16: Non-Tariff Income for FY 2020-21 (Rs. Cr.)

| Sr. No. | Particulars | Amount |
|---------|---|--------|
| Α | Other Operating Income | 72.6 |
| В | Other Income | 37.9 |
| I | Total Income as per Accounts | 110.5 |
| С | Add: Interest on CSD | 21.3 |
| D | Add: Differential in SLD | 4.0 |
| II | Total Other Income | 135.8 |
| E | Pole Rental Income | 2.2 |
| F | Street Light Maintenance Charges | 0.2 |
| III | Net Income to be considered | 133.3 |
| G | Less: LPSC | 21.8 |
| Н | Less: Short term gain | 8.0 |
| I | Less: Transfer from Consumer contribution for capital works | 18.4 |
| J | Less: Bad debts recovered | 2.1 |
| К | Less: Write-back of misc. provisions | 3.6 |
| L | Less: Commission on collection of Electricity Duty | 5.3 |
| IV | Net Non-Tariff Income | 74.1 |

1.21 BYPL has claimed the overachievement for FY 2020-21as follows:

Table 17: Overachievement incentive sought on Collection Efficiency for FY 2020-21

| Sr.No | Particulars | UoM | FY2020-21 |
|-------|---|--------|-----------|
| Α | Amount Billed | Rs.Cr. | 4,247.51 |
| В | Amount Collected | Rs.Cr. | 4,271.64 |
| D | Collection efficiency | % | 100.57 |
| E | Collection Efficiency Target | % | 99.50 |
| F | Total Financial Impact(Incentive) on account of overachievement of Collection efficiency Target | Rs.Cr. | 45.37 |
| G | Incentive Petitioner Share | Rs.Cr. | 34.75 |
| Н | Incentive Consumers Share | Rs.Cr. | 10.62 |

Table 18: Overachievement incentive sought on Distribution Loss for FY 2020-21

| S.No | Particulars | UoM | FY 2020-21 |
|------|--|--------|------------|
| А | Energy Purchased at Distribution Periphery | MU | 6,374.42 |
| В | Distribution Loss target for previous Year i.e.FY2019-20 | % | 10.50% |
| С | Distribution Loss target for Current Year i.e. FY 2020-21 | % | 9.00% |
| D | Loss target-50%*(previous year target-current year target) | % | 8.25% |
| E | Actual Distribution loss for FY2020-21 | % | 7.98% |
| F | Average Power Purchase cost for FY2020- 21 | Rs/kWh | 4.84 |
| E | Total Financial Impact on account of overachievement of Distribution Loss Target | Rs.Cr. | 31.39 |
| F | Impact of Financial benefit to be retained by the Petitioner | Rs.Cr. | 13.21 |
| G | Impact of Financial benefit to be passed on to the consumer | Rs.Cr. | 18.18 |

1.22 Based on the above submissions, the Aggregate Revenue Requirement for FY 2020-21 sought by BYPL for True-up is as follows:

Table 19: Aggregate Revenue Requirement during FY 2020-21 (Rs. Cr.)

| Sr. No. | Particulars Particulars | Amount |
|---------|--|---------|
| Α | Power Purchase including Transmission and SLDC Charges | 3,086.3 |
| В | O&M Expenses | 740.5 |
| С | Additional O&M expenses | 111.0 |
| D | Depreciation | 182.6 |
| E | Return on Capital Employed(RoCE) | 379.5 |
| F | Sub-total Sub-total | 4,499.9 |
| G | Less: Non-Tariff Income | 74.1 |
| Н | Less: Income from Open Access | 17.0 |
| I | Aggregate Revenue Requirement (ARR) | 4,408.7 |

1.23 The Revenue Available to meet ARR is tabulated as follows:

Table 20: Revenue Available to meet ARR (Rs. Cr.)

| Sr. | Particulars | FY 2020-21 |
|-----|--|------------|
| No. | | |
| Α | Total Revenue Collected | 4,271.6 |
| В | Less: Incentive on overachievement of Distribution Loss | 13.2 |
| | Targets (Petitioner share) | 13.2 |
| С | Less: Incentive on over achievement of Collection Efficiency | 34.7 |
| | Target (Petitioner share) | 54.7 |
| D | Less: Incentive on sale of surplus power | 12.6 |
| Е | Less: Carrying cost | 178.0 |
| F | Revenue Available towards ARR | 4,033.1 |

1.24 The Revenue (Gap) during FY 2020-21 is as follows:

Table 21: Revenue (Gap) for FY 2020-21

| Sr.No | Particulars | Rs.Crore |
|-------|-------------------------------|----------|
| Α | ARR for FY 2020-21 | 4,409 |
| В | Revenue available towards ARR | 4,033 |
| С | Revenue(Gap)/Surplus | (376) |

Truing-up of past period

- 1.25 BYPL's claims pertaining to true-up of expenses with respect to earlier periods have been divided into three parts as follows:
 - a. Impact of issues under consideration but yet to be implemented by the Hon'ble Commission.
 - Implementation of APTEL Judgements in absence of any stay from Hon'ble Supreme Court:
 - a) Impact of APTEL Judgements which have attained

finality vide Supreme Court Order dated 1/12/2021

- b) Impact of APTEL Judgements yet to be implemented by the Commission
- c. Impact of Review Petition filed before the Commission against

 Tariff Order dated 30/09/2021
- d. Impact of issues challenged in Appeal and pending adjudication before the Hon'ble APTEL.

C. ARR and Tariff for FY 2022-23

1.26 BYPL has projected the Energy Sales and Revenue for FY 2022-23 as follows:

Table 22: Estimated Energy Sales for FY 2022-23 (MU)

| | | FY 201 | 9-20 (Actu | al) | Growth F | Rate | | FY 202 | 2-23 (Proje | ections) |
|-------|-----------------------------|--------|------------|-------|----------|---------|------------|--------|-------------|----------|
| Sr.No | Category | H1 | H2 | Total | H1 | H2 | Basis | H1 | H2 | Total |
| Α | Domestic | 2,556 | 1,501 | 4,057 | | | | 2,911 | 1,654 | 4,565 |
| A.1 | Domestic (other 2 to A4) | 2,488 | 1,458 | 3,946 | 4.48% | 3.51% | 2 yrs CAGR | 2,838 | 1,617 | 4,454 |
| A.2 | CGHS | 13 | 8 | 21 | 11.35% | -4.99% | 2 yrs CAGR | 18 | 7 | 25 |
| A.3 | 11 KV p/Hospital | 45 | 29 | 74 | -0.05% | -5.05% | 2 yrs CAGR | 44 | 25 | 70 |
| A.4 | DVB Staff | 11 | 5 | 16 | 0.00% | 0.00% | NIL Growth | 11 | 5 | 16 |
| В | Non Domestic | 1,027 | 709 | 1,737 | | | | 966 | 584 | 1,550 |
| B.1 | Non Domestic | 837 | 576 | 1,412 | -1.37% | -5.21% | 2 yrs CAGR | 803 | 490 | 1,293 |
| B.2 | Non Domestic | 191 | 134 | 324 | -5.12% | -11.03% | 2 yrs CAGR | 163 | 94 | 257 |
| С | Industrial | 202 | 170 | 373 | | | | 243 | 167 | 410 |
| C.1 | Industrial LT | 154 | 135 | 289 | 6.67% | 1.37% | 2 yrs CAGR | 187 | 140 | 328 |
| C.2 | Industrial HT | 48 | 36 | 84 | 5.08% | -9.56% | YOY Growth | 56 | 26 | 82 |
| D | Agriculture | 0 | 0 | 0 | 0.00% | 0.00% | NIL Growth | 0 | 0 | 0 |
| E | Public Utilities | 213 | 179 | 392 | | | | 194 | 126 | 321 |
| E.1 | Public Lighting | 49 | 44 | 93 | -1.18% | -20.10% | 2 yrs CAGR | 47 | 22 | 69 |
| E.2 | DJB LT | 6 | 6 | 12 | 6.31% | 2.10% | 2 yrs CAGR | 8 | 7 | 14 |
| E.3 | DJB HT | 69 | 68 | 137 | 0.74% | 0.33% | 2 yrs CAGR | 71 | 68 | 139 |
| E.4 | DMRC | 89 | 61 | 150 | -8.44% | -21.89% | 2 yrs CAGR | 69 | 29 | 98 |
| F | Temporary | 29 | 23 | 52 | 10.20% | 4.22% | 2 yrs CAGR | 39 | 26 | 65 |

| | FY 2019-20 (Actual) Growth Rate | | | FY 2022-23 (Projections) | | | | | | |
|-------|---------------------------------|-------|-------|--------------------------|--------|--------|------------|-------|-------|-------|
| Sr.No | Category | H1 | H2 | Total | H1 | H2 | Basis | H1 | H2 | Total |
| G | Advertisement dings | 0 | 0 | 0 | 0.00% | 0.00% | NIL Growth | 0 | 0 | 0 |
| Н | E Vehicle | 7 | 9 | 16 | 25.00% | 25.00% | 25.00% | 13 | 18 | 32 |
| 1 | Others | 13 | 17 | 30 | | | | 11 | 6 | 17 |
| Total | | 4,049 | 2,608 | 6,657 | | | | 4,377 | 2,583 | 6,960 |

Table 23: Estimated Revenue for FY 2022-23

| | Table 23: Estimated Revenue for FY 2022-23 | | | | | | |
|--------|--|--------------------|--------------------|--------------------|-------------------|--|--|
| Sr.No. | Category | Fixed | Energy | TOD | Revenue | | |
| | | Charges (₹ Cr.) | Charges (₹ Cr.) | Charges (₹ Cr.) | Billed (₹ Cr.) | | |
| Α | Domestic | 197 | 1861 | -2 | 2056 | | |
| | Domestic | 137 | 1001 | _ | 2030 | | |
| A.1 | Domestic (oher than A2 to A4) | 180 | 1791 | 0 | 1971 | | |
| A.2 | CGHS | 1 | 11 | 0 | 12 | | |
| A.3 | 11 KV Worship / Hospital | 15 | 56 | -2 | 69 | | |
| A.4 | DVB Staff | 0 | 3 | 0 | 4 | | |
| В | Non-Domestic | 469 | 1308 | -7 | 1769 | | |
| B.1 | Non-Domestic LT | 409 | 1079 | 0 | 1488 | | |
| B.2 | Non-Domestic HT | 59 | 229 | -7 | 281 | | |
| С | Industrial | 64 | 332 | -2 | 394 | | |
| C.1 | Industrial LT | 54 | 266 | 0 | 320 | | |
| C.2 | Industrial HT | 10 | 66 | -2 | 74 | | |
| D | Agriculture | 0 | 0 | 0 | 0 | | |
| D | Public Utilities | 63 | 214 | -5 | 272 | | |
| D.1 | Public Lighting | 10 | 47 | 0 | 57 | | |
| D.2 | Delhi Jal Board IT | 5 | 10 | 0 | 15 | | |
| D.3 | Delhi Jal Board HT | 26 | 94 | -3 | 117 | | |
| | Delhi Metro Rail Corporation | | | | | | |
| D.4 | (DMRC) | 22 | 64 | -2 | 84 | | |
| E | Temporary supply | 0 | 59 | 0 | 59 | | |
| F | Advertisement & Hoardings | 0 | 0 | 0 | 0 | | |
| G | E Vehicle | 0 | 14 | 0 | 14 | | |
| Н | Others | 0 | 0 | 0 | 0 | | |

| Sr.No | . Category | Fixed Charges (₹ Cr.) | Energy Charges (₹ Cr.) | TOD Charges (₹ Cr.) | Revenue Billed (₹ Cr.) |
|-------|----------------------------|-----------------------------|------------------------------|---------------------------|------------------------------|
| ı | Total | 793 | 3788 | -16 | 4565 |
| J | Total Collection @ 99.50 % | | | | 4542 |

- 1.27 BYPL submitted that the Regulation-25 (1) of DERC (Business Plan) Regulations, 2019 specifies the Distribution Loss Target from FY 2020-21 to FY 2022-23.
- 1.28 BYPL has considered Collection Efficiency of 99.50% during FY 2022-23 in accordance with Regulation 26(1) of DERC (Business Plan) Regulations, 2019.
- 1.29 BYPL has considered the Distribution Loss @ 8.50% and Collection Efficiency @ 99.50% for FY 2022-23.

Table 24: Distribution Loss Target and Collection Efficiency for FY 2022-23

| Sr. No | Particulars | % |
|--------|-----------------------|--------|
| Α | Distribution Loss | 8.50% |
| В | Collection Efficiency | 99.50% |

1.30 Based on the sales projected for FY 2022-23 and Distribution loss as specified for FY 2022-23 in *DERC (Business Plan) Regulations, 2019,* the Energy Requirement has been estimated by BYPL as follows:

Table 25: Energy Requirement for FY 2022-23

| Sr. No. | Particulars | Unit | Quantity |
|---------|--------------------|------|----------|
| Α | Energy sales | MU | 6,960 |
| В | Distribution Loss | % | 8.50% |
| С | Energy Requirement | MU | 7,607 |
| D | Distribution Loss | MU | 647 |

1.31 The Power Purchase Quantum and Costs from various sources including from short term sources have been summarized as follows:

Table 26: Total Power Purchase Quantum and Cost for FY 2022-23

| Sr. No. | Source | Quantity | Amount | Average Cost |
|----------|-------------------------------|----------|-------------|--------------|
| 31. 110. | Source | (MU) | (Rs. Crore) | (Rs./ kWh) |
| Α | Power Purchase from CSGS | 8,485 | 3,655 | 4.31 |
| В | Inter-State Loss & Charges | 297 | 437 | |
| С | Cost towards REC | | | |
| D | Power Available at Delhi | 8,188 | 4,092 | 5.00 |
| D | Periphery | | | |
| Е | Power Purchase from SGS* | 795 | 586 | 7.37 |
| F | Intra-State Losses & Charges | | | |
| Г | including SLDC Charges | 82 | 253 | |
| G | Shortfall to be met at DISCOM | 156 | 69 | 4.42 |

| Sr. No. | Carrier | Quantity | Amount | Average Cost |
|---------|-----------------------------|----------|-------------|--------------|
| Sr. NO. | Source | (MU) | (Rs. Crore) | (Rs./ kWh) |
| | Periphery | | | |
| н | Total Power available to | 9,058 | 4,999 | 5.52 |
| П | DISCOM | | | |
| 1 | Sales | 6,960 | | |
| J | Distribution Loss | 647 | | |
| K | Less: Normative rebate | | 81 | |
| | Required power for the | 7,607 | 4,509 | 5.93 |
| L | DISCOM | | | |
| M | Total Sale of Surplus Power | 1,451 | 409 | 2.8 |

^{*} includes SGS and state/Renewable etc.

1.32 BYPL has computed the normative O&M expenses for FY 2022-23 as follows:

Table 27:O&M Expenses during FY 2022-23

| Sr. No. | Assets/ lines | Avg. Capacity for FY 2022-23 | Units | Norms | Amount (Rs. Cr.) |
|------------|----------------------------------|---------------------------------------|----------------------|-------|---------------------|
| А | 66 kV Line 33 kV Line (cktkm) | 705 | Rs. Lakh/ Ckt. Km | 5.236 | 37 |
| В | 11 kV Line (cktkm) | 3099 | Rs. Lakh/ Ckt. Km | 2.195 | 68 |
| С | LT Line system (cktkm) | 5859 | Rs. Lakh/ Ckt. Km | 9.890 | 579 |
| D | 66/11 kV33/11 kV GridS/s(MVA) | 4171 | Rs. Lakh/MVA | 1.247 | 52 |
| Е | 11/0.415kVDT(MVA) | 3686 | Rs. Lakh/ MVA | 2.732 | 101 |
| F | Total | | | | 837 |

- 1.33 In terms of Regulation 11(9) of the Tariff Regulations, 2017 and Regulation 23 of Business Plan Regulations, 2019, BYPL has submitted the additional O&M expenses estimated during FY 2022 -23 at Rs. 243 Cr.
- 1.34 In terms of Para 3.46 of Tariff Order dated 30/09/2021 BYPL requested the Commission to allow the estimated refundable amount Rs.96 Cr. in the Tariff for FY 2022-23.
- 1.35 The Petitioner has considered the gross capitalisation of Rs. 463 Crore during FY 2022-23 as approved by the Commission.
- 1.36 BYPL has computed the depreciation for FY 2022-23 as follows:

Table 28: Depreciation for FY 2022-23 (Rs. Crore)

| Sr. No. | Particulars | Amount |
|---------|---------------------------|--------|
| Α | Opening GFA for FY2021-22 | 4181 |

| Sr. No. | Particulars | Amount |
|---------|---|--------|
| В | Addition during FY2021-22 | 430 |
| С | Opening GFA for FY2022-23 | 4611 |
| D | Additions during the year | 463 |
| E | Closing GFA for FY2022-23 | 5074 |
| F | Average GFA | 4842 |
| G | Less: Average Consumer Contribution | 439 |
| Н | Average GFA ne tof CC | 4403 |
| I | Average rate of depreciation | 4.90% |
| J | Depreciation for FY2022-23 | 216 |
| K | Opening accumulated Depreciation for FY 2022-23 | 1708 |
| L | Closing accumulated Depreciation for FY 2022-23 | 1924 |

1.37 BYPL has computed the Working Capital Requirement for FY 2022-23 as follows:

Table 29: Working Capital for FY 2022-23

| Sr.No | Particulars | Amount (Rs. Cr.) |
|-------|---|------------------|
| А | Annual Revenue Requirement | 6,292 |
| В | Receivables equivalent to 2months average billing | 1,049 |
| С | Net Power Purchase expenses | 4,509 |
| D | Power purchase expenses for 1Month | 376 |
| E | Total Working Capital | 673 |
| F | Opening Working Capital | 467 |
| G | Change in WC | 206 |

1.38 Based on the above discussions, the Regulated Rate Base (RRB) for FY 2022-23 has been computed as follows:

Table 30: Regulated Rate Base for FY 2022-23

| Sr.No. | Particulars | Amount (Rs. Cr.) |
|--------|---|------------------|
| Α | Opening GFA | 4,611 |
| В | Opening Accumulated Depreciation | 2,315 |
| С | Opening Consumer Contribution | 405 |
| D | Opening Working Capital | 467 |
| E | Accumulated Depreciation on De-capitalised Assets | 218 |
| F | Opening RRB | 2,577 |
| G | Investment during the year | 178 |
| Н | Net Capitalisation | 463 |
| 1 | Depreciation | 216 |
| J | Consumer Contribution | 69 |
| K | Change in Working Capital | 206 |

| Sr.No. | Particulars | Amount (Rs. Cr.) |
|--------|-----------------------------|------------------|
| L | Regulated Rate Base-Closing | 2,960 |
| М | RRB(i) | 2,871 |

- 1.39 The rate of interest on debt for FY 2022-23 has been considered as 12.35%.
- 1.40 Rate of return on equity has been considered as 16%. Further, the effective income tax rate for FY 2020-21 has been considered for FY 2022-23.
- 1.41 BYPL has computed WACC for FY 2022-23 as follows:

Table31: Weighted Average Cost of Capital (WACC) for FY 2022-23 (₹ Cr.)

| Sr.No. | Particulars | Amount (Rs. Cr.) |
|--------|----------------------------------|------------------|
| Α | Equity | 1,278 |
| В | Debt | 1,705 |
| С | Return on Equity | 16% |
| D | Income Tax Rate | 25.17% |
| E | Grossed up Return on Equity | 21.38% |
| F | Rate of Interest | 12.35% |
| G | Weighted average cost of Capital | 16.22% |

1.42 BYPL has computed Return on Capital Employed (RoCE) for FY 2022-23 as follows: Table 19:RoCE for FY 2022-23

| Sr. No. | Particulars | Submission (Rs Cr.) |
|---------|-------------|------------------------|
| Α | WACC | 16.22% |
| В | RRB (i) | 2,871 |
| С | RoCE | 466 |

- 1.43 BYPL has considered the Non-Tariff Income during FY 2022-23 same as submitted for FY 2020-21 i.e. Rs. 74 Crore.
- 1.44 The Aggregate Revenue Requirement during FY 2022-23 is tabulated as follows:

Table 33: Aggregate Revenue Requirement for FY 2022-23

| Sr. No. | Particulars | Amount (Rs Cr.) |
|---------|--|-----------------|
| Α | Power Purchase Cost including Transmission Charges | 4,509 |
| В | O&M Expenses | 837 |
| С | Additional O&M Expenses | 243 |
| D | Depreciation | 216 |
| E | Return on Capital Employed (RoCE) | 466 |
| F | Other Expenses* | 96 |

| Sr. No. | Particulars | Amount (Rs Cr.) |
|---------|---|-----------------|
| G | Less: Non-Tariff income | 74 |
| н | Aggregate Revenue Requirement excl. Carrying Cost on RA | 6,292 |

^{*}In terms of APTEL Judgement dated 31/08/2021

1.45 The Revenue (Gap)/Surplus for FY 2022-23 at existing tariff is as follows:

Table 34: Revenue (Gap)/ Surplus at Existing Tariff for FY 2022-23 (Rs. Crore)

| Sr. No. | Particulars | Amount |
|---------|--|--------|
| Α | Aggregate Revenue requirement for the year | 6,292 |
| В | Revenue available for the year | 4,542 |
| С | Revenue (Gap)/ Surplus for the year | (1750) |

Tariff Rationalization Proposal:

- 1.46 BYPL has propose the following tariff rationalisation measures:
 - a) Time bound recovery of Regulatory Assets/Revenue Gap.
 - b) Cross subsidy as per Tariff Policy
 - c) Removal of capping and allow Monthly PPAC
 - d) Tariff Simplification
 - e) Revision of Security Deposit on 2 months average billing
 - f) Lead plus Lag for high voltage consumers
 - g) Harmonic Dumping
 - h) Fixed charges on MDI for Domestic Consumers
 - i) Tariff of Electric Vehicle
 - j) Surcharge on Excess load for Domestic Consumers
 - k) Delivery of bill through digital mode
 - I) Collection Charges to be provided on collection of Pension Trust Surcharge
 - m) Compliance to Recent Statutes and Government Directions