CHAPTER – 3

**TRUING UP FOR FY-20**

BESCOM is seeking the true up 2019-20 in line with regulations of the Hon’ble Commission in its Terms and Conditions for Determination of Tariff for Distribution and Retail Sale of Electricity Regulations, 2006 has specified scope of truing up under the head 2.8.5, the extract is reiterated:

*“2.8.5*

*The scope of the annual performance review shall be a comparison of the performance of the Licensee with the approved forecast of ARR and ERC. Upon completion of annual performance review, the Commission shall pass an order recording:*

*a) Any financial loss or gain on account of variation in power purchase cost either on account of change in hydro-thermal mix or other uncontrollable factors and the mechanism by which the licensee shall pass through such gains or losses.*

*b) The approved aggregate gain or loss to the Licensee on account of other Uncontrollable factors and the mechanism by which the Licensee shall pass through such gains or losses.*

*c) The approved aggregate gain or loss to the Licensee on account of Controllable factors and the mechanism to share such gains or losses.*

*d) The approved modifications to the forecast for the remainder period of the Control period, if any.”*

Therefore based on the above, BESCOM is now seeking true-up of 2019-20.

Karnataka Electricity Regulatory Commission (KERC) approved the Annual Revenue Requirement (ARR) of BESCOM for FY-20 in its Tariff Order 2019, dated 30th May 2019.

Annual Accounts for FY-20 (awaiting Board approval) is finalized, audited by the Statutory Auditors and certified by Accountant General of India. BESCOM is submitting Truing up of FY-20 before the Commission based on audited accounts.

1. **Truing up of Revenue billed and Revenue available towards ARR:**

In the Tariff Order 2019, dtd: 30.05.2019 the Hon’ble Commission had approved sale of energy of 28858.33 MU for FY-20. Against the same, BESCOM has actually billed 27834.6 MU as sale of energy.

**Table 3.1**

|  |  |  |
| --- | --- | --- |
| **Category** | **Approved (MU)** | **Actual (MU)** |
| LT-1 BJ/KJ-more than 40 units  | 45.98 | 46.78 |
| LT-2a  | 7476.86 | 7285.82 |
| LT-2b | 54.82 | 56.57 |
| LT-3 | 2247.16 | 2240.82 |
| LT-4 (b) | 1.73 | 1.35 |
| LT-4 (c) | 4.54 | 5.67 |
| LT-5 | 1269.19 | 1217.67 |
| LT-6-WS | 1352.55 | 1317.38 |
| LT-6-SL | 513.92 | 524.64 |
| LT-7 | 141.02 | 205.45 |
| HT-1 | 715.85 | 762.04 |
| HT-2 (a) | 4866.56 | 4173.06 |
| HT-2 (b) | 2819.19 | 2345.62 |
| HT-2C | 380.51 | 331.52 |
| HT-3(a)& (b) | 47.4 | 58.42 |
| HT-4 | 70.38 | 78.30 |
| HT-5 | 87.67 | 89.48 |
| **Sub-Total other than BJ/KJ & IP sets** | **22095.33** | **20740.59** |
| LT-1 BJ/KJ | 137.90 | 177.65 |
| LT-4 (a)IP Sets | 6625.09 | 6916.36 |
| **Sub Total BJ/KJ & IP sets** | **6762.99** | **7094.01** |
| **Total** | **28858.33** | **27834.60** |

From the above table it can be seen that the energy sales of BESCOM has declined from the approved sales by 1023.72 MU. The major reductions in energy sales are in LT-2a, LT-5, LT-6-W/S, HT-2a, HT-2b and HT-2c category. The reduction in energy sales of LT-2a category may be contributed to demand side management initiatives like installing LED lights, solar water heaters etc. The progress and energy savings of Hosa Belaku scheme, Pavan scheme and solar water heater are depicted in the below table:

**Table 3.2**

|  |  |  |
| --- | --- | --- |
| **Particulars** | **Cumulative Progress (Nos.)** | **Energy Savings in MUs** |
| 9W LED bulbs (December-2015 to September -2020) | 1,11,79,681 | 595.79 |
| 20W LED tube lights (January-2017 to September -2020) | 2,73,454 | 15.72 |
| BEE 5 star rated Ceiling fans (April-2017 to September -2020) | 41,757 | 2.08 |

Solar water heater:

Total SWH installed from December-2007 to September-2020: 7,18,603

Annual energy savings in MU: 711.42

The HT sales have continued to reduce further as HT consumers are exiting the BESCOM network by opting for open access. For FY-20, 4604.28 MU is procured by HT consumers through wheeling/open access, captive/non-captive. Hence, there is a fall in HT consumption than the approved sales. The details of energy sales procured by HT consumers from BESCOM and energy sales procured by HT consumers from open access/wheeling for the years 2016-17, 2017-18, 2018-19 and 2019-20 are depicted in the table below:

**Table 3.3**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Category** | **Energy Procured by HT consumers from BESCOM (MU)** | **Energy procured by HT consumers under Open access/ wheeling (MU)** | **Total BESCOM sales & OA/ wheeling consumption (MU)** |
| 2016-17 | HT-2A | 4456.17 | 1962.38 | 6418.55 |
| 2017-18 | 4470.59 | 2557.85 | 7028.44 |
| 2018-19 | 4512.96 | 2639.87 | 7152.84 |
| 2019-20 | 4139.15 | 2765.90 | 6905.05 |
| 2016-17 | HT-2B | 2619.62 | 997.88 | 3617.50 |
| 2017-18 | 2562.32 | 945.57 | 3507.89 |
| 2018-19 | 2448.41 | 1551.3 | 3999.71 |
| 2019-20 | 2345.62 | 1758.64 | 4104.26 |
| 2016-17 | HT-2C | 270.05 | 43.89 | 313.94 |
| 2017-18 | 312.39 | 50.27 | 362.66 |
| 2018-19 | 321.45 | 68.81 | 390.26 |
| 2019-20 | 331.51 | 79.74 | 411.25 |

The major increase in actual sales over the approved sales is found in LT temporary, HT Water Supply and LT-4 – agricultural sales.

For FY-20, actual specific consumption for IP set is 7524 units/IP/annum as against the approved specific consumption of 7260 units/IP/annum, the difference being 264 units/IP/annum.

**Table 3.4**

|  |  |  |
| --- | --- | --- |
| **Particulars** | **FY-19** | **FY-20** |
| **LT-4a - Installations (Nos.)** | 904463 | 933908 |
| **Midyear installations (Nos.)** |   | 919186 |
| **LT-4a - Sales(MU)** |   | 6916.36 |
| **Specific consumption in units/IP/annum** |   | **7524.44** |

6 years specific consumption in units/IP/annum:

**Table 3.5**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Particulars** | **FY-14** | **FY-15** | **FY-16** | **FY-17** | **FY-18** | **FY-19** | **FY-20** |
| **LT4a - Installations (Nos.)** | 691785 | 768516 | 809170 | 841228 | 872229 | 904463 | 933908 |
| **Midyear installations (Nos.)** |   | 730151 | 788843 | 825199 | 856729 | 888346 | 919186 |
| **LT-4a - Sales(MU)** |   | 5759 | 6190 | 7285 | 6289 | 7202 | 6916 |
| **Specific consumption in units/IP/annum** |   | **7887.6** | **7847** | **8829** | **7341** | **8108** | **7524** |

Though there is a decrease in LT-2a, LT-5, LT-6-W/S, HT-2a, HT-2b and HT-2c category categories from the approved figures of the Commission, but there is an increase of 72.12 MU over the previous year FY-19. Comparison between the actual sales for FY-19 and FY-20 is shown in the below table:

 **Table 3.6 Sales in MU**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **FY-19** | **FY-20** | **Difference** |
| **LT-2a** | 6919.35 | 7285.82 | 366.47 |
| **LT-2b** | 51.57 | 56.57 | 5.00 |
| **LT-3** | 2083.65 | 2240.82 | 157.17 |
| **LT-4 (b)** | 1.53 | 1.35 | -0.18 |
| **LT-4 (c)** | 5.08 | 5.67 | 0.59 |
| **LT-5** | 1243.08 | 1217.67 | -25.41 |
| **LT-6-WS** | 1193.64 | 1317.38 | 123.74 |
| **LT-6-SL** | 499.92 | 524.64 | 24.72 |
| **LT-7** | 135.04 | 205.45 | 70.41 |
| **HT-1** | 726.15 | 762.04 | 35.89 |
| **HT-2 (a)** | 4512.96 | 4173.06 | -339.90 |
| **HT-2 (b)** | 2448.41 | 2345.62 | -102.79 |
| **HT2C** | 321.45 | 331.52 | 10.07 |
| **HT-3(a)& (b)** | 45.67 | 58.42 | 12.75 |
| **HT-4** | 70.04 | 78.30 | 8.26 |
| **HT-5** | 85.87 | 89.48 | 3.61 |
| **Sub-Total other than BJ/KJ & IP sets** | **20343.41** | **20693.81** | **350.40** |
| **LT-1 BJ/KJ** | 216.75 | 224.43 | 7.68 |
| **LT4 (a)IP Sets** | 7202.32 | 6916.36 | -285.96 |
| **Sub Total BJ/KJ & IP sets** | **7419.07** | **7140.79** | **-278.28** |
| **Total** | **27762.48** | **27834.60** | **72.12** |

There is increase in the overall metered category sales over the previous years, except for LT-5, HT-2a, HT-2b category. There is also reduction in the agricultural category sales over the previous year.

**Energy Requirement:**

**Table 3.7**

|  |  |  |  |
| --- | --- | --- | --- |
| **PARTICULARS** | **Approved** | **Actuals** | **Variation** |
| Sales in MU | 28858.33 | 27834.6 | 1023.73 |
| Percentage distribution losses in % | 12.25 | 11.99 | 0.26 |
| Distribution losses in MU | 4028.66 | 3791.13 | 237.53 |
| Energy at interface point in MU | 32886.99 | 31625.73 | 1261.26 |
| Percentage transmission losses in % | 3.162 | 2.37 | 0.79 |
| Total energy requirement in MU | 33960.83 | 32392.69 | 1568.14 |

From the above table, it can be seen that BESCOM has purchased 32392.69 MU as per the annual accounts, which is less by 1568.14 MU compared to the approved quantum of power purchase i.e., 33960.83 MU. From the above table, it can also be seen that there is reduction in the energy sales of BESCOM by 1023.73 MU as against the approved energy sales of 28858.33 MU. The distribution loss for FY-20 as per actuals is 11.99%.

**Incentive for reduction in distribution loss:**

As per MYT regulations, Licensee has to submit the range of distribution losses (upper and lower) for each year of the Control Period for the purpose of incentive/ penalties. BESCOM for FY-20 is below the range of distribution loss approved by the Hon'ble Commission. The approved distribution loss for FY-20 as per Tariff Order 2019, dtd:30.05.2019 is shown in the below table:

**Table 3.8**

|  |  |
| --- | --- |
| **Particulars** | **FY-20** |
| Upper limit  | 12.50 |
| Average | 12.25 |
| Lower limit  | 12.00 |

The calculation for incentive payable due to reduction in distribution loss is shown in the below table:

**Table 3.9**

|  |  |
| --- | --- |
| **Particulars** | **FY-20** |
| Actual input at IF point as per audited accounts in MU | 31625.73 |
| Retail sales in MU | 27834.60 |
| Distribution loss after rounding off | 11.99 |
| Target upper limit of distribution loss | 12.50 |
| Target distribution loss | 12.25 |
| Target lower limit of distribution loss | 12.00 |
| Reduction in loss - in percentage point | 0.51 |
| Input energy at upper limit of target loss for actual sales in MU | 31810.97 |
| Decrease in input energy due to reduction in distribution loss in MU | -185.24 |
| Average cost of power purchase in Rs./unit | 5.91 |
| Incentive due to decrease in losses Rs. Crores | 109.48 |

**Change in calculation of T&D loss for FY-20:**

The calculation of Distribution loss and AT&C loss of BESCOM were arrived based on the present month input and present month DCB. Concerns were expressed during the June-18 meeting that the method opted to arrive T&D and AT&C loss is technically not in proper way and suggested to work out by considering previous month input and present month DCB for calculation of T&D and AT&C losses (i.e. for April month energy audit the input shall be taken from March month and the DCB of April month shall be considered).

Further, Letter dtd: 01.07.2019 from CEA was received for “Discussion on the methodology of calculation of T&D losses”. In the letter they have mentioned that there has been increase in open access consumption across various DISCOMS in the country. The No. of franchisees appointed by DISCOMS in their area of supply is also increasing. Further the embedded renewable energy generation at various voltage levels within the boundary of the DISCOMS is also on the rise. All these factors affect the T&D losses of the DISCOMS and as their quantum is increasing day by day, it will have an impact on the T&D loss calculation of the DISCOMS in the coming days. Hence, it is felt that there is a need to include the impact of these factors in the methodology of calculation of T&D losses.

Hence, a new format was arrived considering all the above points for calculating the T&D loss for FY-20 as shown in the below table:

**Table 3.10**



In this new format, open access, wheeled energy and other renewable energy are added to the total input energy of BESCOM as they flow in the 11KV BESCOM network and the wheeled and open access sales are added to the total BESCOM sales. Considering the total energy flown to the BESCOM network and energy sales from the BESCOM network distribution losses are calculated. However the billing efficiency (energy input and energy sales for BESCOM) and AT&C losses (1-billing efficiency\*collection efficiency) doesn’t change as they are calculated for the BESCOM only and not for the network.

The provisional details of the month wise distribution loss for the year FY-21 (upto Sep-20) is shown in the below table.

**Method-1: Cumulative Distribution Loss for the Year FY-21 upto September-2020 (Provisional) -Same month Input and same month DCB:**

**Table 3.11**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Month** | **Total Input Energy to BESCOM in MUs** | **Metered Sales in MUs** | **Unmetered Sales MUs** | **Total Sales in MUs** | **Energy Loss in MUs**  | **% Distribution Loss** |
|
|  | **1** | **2** | **3** | **4=2+3** | **5=1-4** | **6=5/1** |
| Apr-20 | 2457.93 | 1563.14 | 857.23 | 2420.37 | 37.56 | 1.53 |
| May-20 | 2532.47 | 1363.32 | 711.89 | 2075.22 | 457.26 | 18.06% |
| Jun-20 | 2276.33 | 1585.69 | 615.59 | 2201.28 | 75.05 | 3.30% |
| **1st Quarter** | **7266.73** | **4512.15** | **2184.72** | **6696.87** | **569.86** | **7.84%** |
| Jul-20 | 1990.68 | 1503.24 | 482.00 | 1985.24 | 5.44 | 0.27% |
| Aug-20 | 2089.28 | 1485.05 | 285.69 | 1770.75 | 318.53 | 15.25% |
| Sep-20 | 1924.61 | 1528.57 | 358.62 | 1887.19 | 37.42 | 1.94% |
| **2nd Quarter** | **6004.56** | **4516.87** | **1126.31** | **5643.17** | **361.39** | **6.02%** |
| **Cum FY-20**  | **13271.29** | **9029.02** | **3311.03** | **12340.04** | **931.25** | **7.02%** |

**Method-2: Cumulative Distribution Loss for the Year FY-21 upto September-2020 (Provisional) –Last month Input and same month DCB:**

**Table 3.12**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Month** | **Total Input Energy to BESCOM in MUs** | **Metered Sales in MUs** | **Unmetered Sales MUs** | **Total Sales in MUs** | **Energy Loss in MUs**  | **% Distribution Loss** |
|
|  | **1** | **2** | **3** | **4=2+3** | **5=1-4** | **6=5/1** |
| Apr-19 | 2997.36 | 1563.14 | 857.23 | 2420.37 | 576.99 | 19.25 |
| May-19 | 2457.93 | 1363.32 | 711.89 | 2075.22 | 382.71 | 15.57% |
| Jun-19 | 2532.47 | 1585.69 | 615.59 | 2201.28 | 331.19 | 13.08% |
| **1st Quarter** | **7987.76** | **4512.15** | **2184.72** | **6696.87** | **1290.89** | **16.16%** |
| Jul-19 | 2276.33 | 1503.24 | 482.00 | 1985.24 | 291.09 | 12.79% |
| Aug-19 | 1990.68 | 1485.05 | 285.69 | 1770.75 | 219.93 | 11.05% |
| Sep-19 | 2089.28 | 1528.57 | 358.62 | 1887.19 | 202.09 | 9.67% |
| **2nd Quarter** | **6356.29** | **4516.87** | **1126.31** | **5643.17** | **713.11** | **11.22%** |
| **Cum FY-20**  | **16268.65** | **10552.48** | **3531.12** | **14083.59** | **2185.06** | **13.43%** |

BESCOM endeavours for taking Distribution Losses to the lowest possible level. BESCOM has achieved a significant reduction in distribution losses during recent years. These efforts shall be continued and will be enhanced in coming years. However, loss reduction is a slow process and to maintain the rate with which it has been decreasing is a difficult task. The reduction in HT Sales and increase in LT sales has also impacted the distribution losses. BESCOM, hence requests the Hon’ble Commission to approve the actual Distribution Loss.

**Revenue Realized:**

As against KERC approved revenue of Rs.21274.42 Crs., BESCOM has been able to realize an amount of Rs.21170.69 Crs.

**Table 3.13**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Description** | **Tariff** | **No of Consumers** | **Units Sold (Units in MU)** | **Opening Balance** |  **Opening Bal - Unbilled provision A/c 23.4** | **Demand Revenue** | **Net of Unbilled provision & reversal** | **Net Revenue Demand as per Accounts** |
| BJ/KJ ( Upto 40 Units ) | LT 1 | 798170 | 177.65 | 76.11 | 8.54 | 130.90 | -1.70 | 129.19 |
| BJ/KJ (Above 40 Units ) | 46057 | 46.78 | 39.93 | 1.94 | 24.18 | 1.33 | 25.51 |
| Lighting and AEH | LT 2 | 8285969 | 7342.39 | 136.82 | 335.25 | 4993.25 | 7.87 | 5001.12 |
| Commercial Lighting | LT 3 | 1143767 | 2240.82 | 18.47 | 151.69 | 2238.84 | -45.42 | 2193.42 |
| IP Sets (10HP & BELOW) FREEZED BALANCE Upto 31-07-2008 |   | 0 | 0.00 | 1367.57 | 0.00 | 0.00 | 0.00 | 0.00 |
| IP Sets (10HP & Above) | LT 4B | 255 | 1.35 | 3.50 | 0.06 | 0.75 | -0.01 | 0.74 |
| Pvt. HortI, Nuris, Coffee | LT 4C | 1756 | 5.67 | 3.00 | 0.23 | 2.82 | -0.03 | 2.79 |
| & Tea Plant |
| LT Industries | LT 5 | 218866 | 1217.67 | 4.84 | 64.44 | 989.53 | -23.53 | 966.00 |
| Water Supply | LT 6 A | 84209 | 1317.38 | 1633.75 | 59.27 | 719.52 | -7.13 | 712.40 |
| Street lights | LT 6 B | 68016 | 524.64 | 270.29 | 27.74 | 393.46 | -5.37 | 388.09 |
| Temporary Supply (LT) | LT 7A | 762299 | 204.44 | -24.91 | 14.37 | 395.42 | 7.49 | 402.92 |
| Temporary Supply (LT) | LT 7B | 4216 | 1.01 | 0.13 | 0.07 | 1.40 | 0.03 | 1.42 |
| Power Purchase (Auxiliary cons.) LT & SRPTV |   |   |   |   |   |   |   |   |
| **Pending for reconciliation of Sundry debtors**  |  |  |  | 97.14 | 0.00 | 0.00 | 0.00 | 0.00 |
| **LT TOTAL** | **I** | **11413580** | **13079.80** | **3626.63** | **663.60** | **9890.07** | **-66.48** | **9823.60** |
| Water Supply & Sewerage Pumping | HT 1 | 268 | 762.04 | 53.89 | 35.82 | 438.47 | 2.29 | 440.76 |
| HT Industries | HT 2A | 7419 | 4139.15 | 54.58 | 328.40 | 3685.34 | -63.78 | 3621.56 |
| HT Commercial | HT 2B | 7521 | 2345.62 | -8.52 | 241.96 | 2865.16 | -40.17 | 2746.59 |
| HT Hospitals | HT 2C | 833 | 331.51 | 1.43 | 26.60 | 221.58 | -2.68 | 297.30 |
| HT Lift Irg. Societies | HT 3A  | 43 | 57.09 | 23.37 | 0.91 | 18.18 | 0.57 | 18.75 |
| HT Lift Irg. Schemes & Govt Hort. | HT 3B | 16 | 1.33 | 0.04 | 0.07 | 0.69 | 0.00 | 0.69 |
| HT Residential Apartment  | HT 4 | 412 | 78.30 | 0.96 | 4.85 | 61.11 | 0.47 | 61.58 |
| Temporary Supply ( HT) | HT 5  | 1413 | 89.48 | -15.12 | 11.09 | 121.53 | -2.60 | 118.92 |
| Power Purchase (Auxiliary cons.) HT & SRTPV |   |   | 33.90 | 1.85 | 0.00 | 20.40 | 0.00 | 20.40 |
| **HT TOTAL** | **II** | **17925** | **7838.44** | **112.48** | **649.71** | **7432.46** | **-105.91** | **7326.55** |
| **TOTAL 1 (LT + HT+ Temporary)** | **III** | **11431505** | **20918.24** | **3739.11** | **1313.31** | **17322.53** | **-172.38** | **17150.15** |
| IP Sets (10HP & BELOW) FREE LIGHTING From 01-08-2008 (Subsidy Due for GOK) | LT 4A | 933908 | 6916.36 | 1657.68 | 243.10 | 2687.39 | -13.12 | 2674.28 |
| **Total -2** |  | **12365413** | **27834.60** | **5396.79** | **1556.41** | **20009.93** | **-185.50** | **19824.43** |
| **Less : Provision for withdrawal of Revenue Demand** |  |   |   |   |   | 17.21 |   | 17.21 |
| **Less: Withdrawal of revenue demand as credit adjustment.** |  |   |   |   |   | 20.31 |   | 20.31 |
| **Less :Credit Adjustment through Balance Transfer system** |  |   |   |   |   | 47.64 |   | 47.64 |
| **Other Operating Income** |  |   |   |   |   | 154.18 |   | 154.18 |
| **FAC** |  |   |   |   |   | 589.14 |   | 589.14 |
| **Cross subsidy surcharge and additional surcharge** |  |   |   |   |   | 362.50 |   | 362.50 |
| **Interest** |  |   |   |   |   | 325.60 |   | 325.60 |
| **Total - 3** |  | **0** | **0.00** | **0.00** | **0** | **1346.27** |  | **1346.27** |
| **Grand Total** |  | **12365413** | **27834.60** | **5396.79** | **1556.41** | **21356.19** | **-185.50** | **21170.69** |

The HT industrial, HT commercial and LT industrial sales for FY-20 have reduced by 339.9 MU, 92.72 MU and 25.41 MU over the previous year FY-19. This in turn has reduced the revenue demand for FY-20.

**Revenue from Operations**:

 **Table 3.14 Amount in Crs.**

|  |  |
| --- | --- |
| **Particulars** |  **For the year ended on 31st March 2020 (Ind AS)** |
|  |
| Sale of Power LT category (including unbilled revenue) | 12506.84 |
| Sale of Power HT category (including unbilled revenue) | 7317.59 |
| **Total (A)** | **19824.43** |
| **Other Operating Income** |   |
| Reconnection Fee (D & R) | 0.00 |
| Public lighting Maintenance Charges | 0.01 |
| Service Connection  | 71.48 |
| Other Receipts from consumers | 16.19 |
| Delayed payment charges from consumers | 325.60 |
| Registration fee towards SRTPV connection (Solar rooftop PV system | 0.38 |
| Facilitation fee towards SRTPV connection (Solar rooftop PV system) | 0.03 |
| Fuel Adjustment Charges | 589.14 |
| Cross subsidy surcharge and additional surcharge | 362.50 |
| Recoveries for theft of power | 52.19 |
| Meter Rent Collected from prepaid Consumer | 13.90 |
| **Total (B)** | **1431.42** |
| **Total (A)+(B)** | **21255.85** |
| Less: Provision for withdrawal of Revenue Demand | 17.21 |
| Less: Withdrawal of revenue demand as credit adjustment. | 20.31 |
| Less: Credit Adjustment through Balance Transfer system | 47.64 |
| **Grand Total** | **21170.69** |

Revenue realized through tariff is compared with the approved revenue from tariff in the below table:

**Table 3.15**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl No** | **Category** | **Approved**  | **Average Realization in Rs. Per Kwh** |  **Level of Cross Subsidy in % with ref. to ACS** | **Actuals** | **Average Realization in Rs. Per Kwh** |  **Level of Cross Subsidy in % with ref. to ACS Rs.8.17** |
|
| **Sales-MU** | **Revenue Rs. Crs.** | **Sales-MU** | **Revenue Rs. Crs.** |
|
| 1 | LT-1[fully subsidised by GoK] | 137.90 | 101.63 | 7.37 | 0.00 | 177.65 | 129.19 | 7.27 | -12.35% |
| 2 | LT-1 | 45.98 | 22.18 | 4.82 | -34.55 | 46.78 | 25.51 | 5.45 | -49.83% |
| 3 | LT-2(a)(i) | 6716.84 | 4547.26 | 6.77 | -8.17 | 6530.48 | 4491.70 | 6.88 | -18.78% |
| 4 | LT-2(a)(ii) | 760.02 | 460.21 | 6.06 | -17.86 | 755.34 | 459.63 | 6.09 | -34.26% |
| 5 | LT-2(b)(i) | 47.93 | 40.73 | 8.50 | 15.27 | 49.11 | 43.39 | 8.84 | 7.53% |
| 6 | LT-2(b)(ii) | 6.89 | 5.22 | 7.58 | 2.78 | 7.46 | 6.40 | 8.58 | 4.73% |
| 7 | LT-3(i) | 2073.68 | 1994.17 | 9.62 | 30.45 | 2030.20 | 1997.32 | 9.84 | 16.96% |
| 8 | LT-3(ii) | 173.48 | 154.55 | 8.91 | 20.84 | 210.62 | 196.09 | 9.31 | 12.25% |
| 9 | LT-4(a)(i)\* | 6625.09 | 2583.79 | 3.90 | -47.10 | 6916.36 | 2674.28 | 3.87 | -111.30% |
| 10 | LT-4(b) | 1.73 | 0.99 | 5.72 | 22.62 | 1.35 | 0.74 | 5.50 | -48.44% |
| 11 | LT-4 © | 4.54 | 2.31 | 5.09 | -55.72 | 5.67 | 2.79 | 4.93 | -65.78% |
| 12 | LT-5(a) | 922.45 | 771.95 | 8.37 | 13.52 | 864.62 | 690.68 | 7.99 | -2.27% |
| 13 | LT-5(b) | 346.74 | 326.40 | 9.41 | 27.69 | 353.05 | 275.31 | 7.80 | -4.77% |
| 14 | LT-6a | 1352.55 | 762.50 | 5.64 | -23.63 | 1317.38 | 712.40 | 5.41 | -51.08% |
| 15 | LT-6b | 513.92 | 384.46 | 7.48 | 1.48 | 524.64 | 388.09 | 7.40 | -10.45% |
| 16 | LT-7 | 141.02 | 207.84 | 14.74 | 266.27 | 205.45 | 404.34 | 19.68 | 58.49% |
|   | **LT - TOTAL** | **19870.76** | **12366.19** | **6.22** | **-15.58** | **19996.16** | **12497.88** | **124.82** | **-30.72%** |
| 1 | HT-1 | 715.85 | 420.72 | 5.88 | -20.28 | 762.04 | 440.76 | 5.78 | -41.25% |
| 2 | HT-2(a)(i) | 2910.20 | 2716.01 | 9.33 | 26.6 | 2388.73 | 2286.03 | 9.57 | 14.63% |
| 3 | HT-2(a)(ii) | 1956.36 | 1750.36 | 8.95 | 21.37 | 1784.33 | 1634.75 | 9.16 | 10.82% |
| 4 | HT-2(b)(i) | 2576.18 | 2743.88 | 10.65 | 44.48 | 2174.26 | 2646.53 | 12.17 | 32.88% |
| 5 | HT-2(b)(ii) | 243.01 | 243.23 | 10.01 | 35.77 | 171.36 | 181.10 | 10.57 | 22.70% |
| 6 | HT-2(c) (i) | 184.77 | 149.52 | 8.09 | 9.77 | 161.84 | 133.14 | 8.23 | 0.69% |
| 7 | HT-2(c) (ii) | 195.74 | 188.38 | 9.62 | 30.55 | 169.68 | 166.80 | 9.83 | 16.89% |
| 8 | HT-3(a)(i) | 42.90 | 11.80 | 2.75 | -62.70 | 55.22 | 18.03 | 3.26 | -150.29% |
| 9 | HT-3(a)(ii) | 2.77 | 0.95 | 3.43 | -53.35 | 1.87 | 0.72 | 3.86 | -111.41% |
| 10 | HT-3(a)(iii) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |   |  |
| 11 | HT - 3b | 1.73 | 0.82 | 4.74 | -35.57 | 1.33 | 0.69 | 5.23 | -56.10% |
| 12 | HT-4(a) | 70.38 | 51.29 | 7.29 | -1.15 | 78.30 | 61.58 | 7.86 | -3.89% |
| 13 | HT-5 | 87.67 | 116.75 | 13.32 | 80.64 | 89.48 | 118.92 | 13.29 | 38.52% |
|   | **HT - TOTAL** | **8987.56** | **8393.71** | **9.34** | **26.69** | **7838.44** | **7689.05** | **9.81** | **16.71%** |
|   | **TOTAL** | **28858.32** | **20759.90** | **7.19** | **-** | **27834.60** | **20186.93** | **7.25** | **-12.65%** |
|   | **Misc. Revenue** |  | 514.50 |  |  |  | 983.77 |  |  |
|   | **Grand Total** | **28858.32** | **21274.40** | **7.37** | **-** | **27834.60** | **21170.69** | **7.61** | **-8.34%** |

From the above table, it can be seen that there is a reduction in HT sales of 1149.12 MU from the approved level. This has resulted in the percentage reduction of cross subsidy component of 9.98% (26.69%-16.71%). Increase in IP sales needs to be compensated with increase in cross subsidy component of 64.2%(-47.10%-(-111.30%)).

It can be seen from the above table that the average realization rate has increased from the approved Rs.7.37 per unit to Rs.7.61 per unit. But, due to increase in the average cost of supply, the revenue for FY-20 is not reflecting the actual cost.

**Power Purchase Cost:**

The Hon’ble Commission in its Tariff Order 2019, dtd 30.05.2019 has approved the Power Purchase quantum of 33960.83MU and Power Purchase cost of Rs.18300.42Crs. with the Average Power Purchase rate at Rs. 5.39/unit. As against the approved Average Power Purchase rate the actual Average Power Purchase rate incurred by BESCOM is Rs. 5.91/unit. Detailed summary of the power purchase is shown in the below table:

**Table 3.16**

|  |
| --- |
| **D:\Kala\ERC\ERC FY-21\Chapter-3_Truing-up\Untitled 1.png** |
| **D:\Kala\ERC\ERC FY-21\Chapter-3_Truing-up\Untitled n.png** |
| **D:\Kala\ERC\ERC FY-21\Chapter-3_Truing-up\Untitled 3.png** |

* The above table depicts the source wise increase in actual power purchase cost as against the approved power purchase cost during FY-20. BESCOM’s actual energy input is 1567.85 MU less than the approved energy input for FY-20, there is an increase of Rs.844.52 Crs in the actual power purchase cost against the approved power purchase cost for FY-20.
* BESCOM has sold 726.43MU in IEX at an average rate of Rs.2.75/unit which has resulted in Rs.200.41 Crs. The said amount is depicted in Other Income.
* The difference of approved and actual PGCIL charges amounts to Rs.800.7 Crs.
* BESCOM has paid nearly 462.56 Crores towards fixed cost without purchasing any power from thermal stations having higher variable cost.
* The actual NCE cost for FY-20 is more than the approved cost by Rs.511.4 Crs.
* The actual CGS cost for FY-20 is more than the approved cost by Rs.516 Crs.
* The actual KPCL thermal cost for FY-20 is less than the approved cost by Rs.1186.2 Crs.

Due to the above, the increase in the actual power purchase cost as against approved power purchase cost for **BESCOM is Rs.844.52 Crs. for FY-20.**

BESCOM most respectfully submits that the above changes are beyond the reasonable control of BESCOM but well within the regulatory provisions for consideration in true up. Hon’ble Commission in its MYT Order has stated that, since the power purchase cost are uncontrollable as per MYT regulations, any excess quantum or cost will be trued up in the Annual Performance Review of the respective years. Hence, BESCOM requests the Hon’ble Commission to approve the power purchase expenses for FY-20 as per the Audited Accounts.

**Renewable Purchase Obligation (RPO) target for FY-20:**

As per KERC (Procurement of Energy from Renewable Sources)(Sixth Amendment) Regulations, 2018, target for FY-20 for Non-Solar RPO is 12% of the total power procurement and target for Solar RPO is 7.25% of the total power procurement.

The Commission approved the power procurement of 33960.827 MU which includes 6794.62 MU of energy from NCE sources for FY 20 to BESCOM. The actual percentage of Non Solar to the total purchase is 13.18 % and solar energy works out to 15.25% of the actual power purchase. Details are as under.

**Table 3.17**

|  |  |
| --- | --- |
| **RPO COMPLIANCE FOR** | **2019-20** |
| BESCOM Energy at Generation Point  | 32392.69 |
| Less: KPCL Hydro | 995.93 |
| Less: Jurala+TBPH | 101.42 |
| Less: Energy Balancing  | 257.63 |
| **Net Energy for calculation of RPO** | **31037.71** |
|   | **Solar RPO** | **Non Solar RPO** |
|   | 31037.71 | 31037.71 |
| Target @ 7.25% for Solar & 12% for Non Solar | 2250.23 | 3724.53 |
| Total RPO to be achieved  | 2250.23 | 3724.53 |
|   |   |   |
| Actual Energy Procured | 4732.45 | 4092.18 |
| Total Energy Procured | 4732.45 | 4092.18 |
| **Surplus Solar & Non Solar energy** | **2482.22** | **367.65** |
| Non Solar RPO achieved | 4092.18 | 13.18% |
| Solar RPO achieved  | 4732.45 | 15.25% |

BESCOM has exceeded both the Non-Solar RPO and solar RPO during FY-20.

**Capital Expenditure for FY-20:**

The capital expenditure incurred for FY20 is depicted in the table below. The expenditure booked by BESCOM is more than the KERC approved Capital expenditure for FY-20.

**Table 3.18**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Heads of works** | **Approved budget in Board (in Crs)** | **Approved by KERC (in Crs)** | **Provisional expenditure utilized in Crs** | **% against budget approved by Board** | **% against budget approved by KERC** |
| 1 | Ganga kalyana Works | 79.13 | 2165.58 | 85.63 | 108 | 116 |
| 2 | Service connection works  | 89.32 | 94.56 | 106 |
| 3 | Water Works | 40.9 |
| **4** | **Planned works Total** | **209.35** | **180.19** | **86** |
| 5 | 11 KV Evacuation line | 118.58 | 113.44 | 96 |
| 6 | Providing Additional DTC's / Enhancement of DTCs | 50.42 | 44.98 | 89 |
| 7 | Reconductoring of HT lines in No.s/Circuit kms | 134.65 | 78.22 | 58 |
| 8 | Reconductoring of LT lines in No.s/circuit kms  | 114.39 | 98.14 | 86 |
| 9 | Local planning, Safety works, Emergency / Calamity Works | 87.65 | 79.24 | 90 |
| 10 | SDP Progress | 73.48 | 100% funded by GOK | 0 |
| 11 | Replacement of Faulty transformers | 100 | 161.19 | 161 |
| **12** | **Non-Planned works Total** | **679.16** | **575.22** | **85** |
| 13 | Meters | 132.72 | 18.06 | 14 |
| 14 | Providing Infrastructure to Unauthorised IP sets | 401.44 | 368.91 | 92 |
| 15 | NJY | 131.72 | 158.67 | 120 |
| 16 | HVDS | 144.8 | 139.54 | 96 |
| 17 | RGGVY 12th plan | 0.11 | -2.41 | -2292 |
| 18 | RAPDRP B | 1.52 | 8.41 | 553 |
| 19 | DDUGJY | 142.42 | 136.49 | 96 |
| 20 | IPDS | 311.03 | 179.3 | 58 |
| 21 | Errection of distribution transformer centres using 11 mtrs Spun poles | 33.59 | 41.29 | 123 |
| 22 | RAPDRP A | 6.62 | 1.98 | 30 |
| 23 | DAS  | 43.53 | 0.99 | 2 |
| 24 | SG | 19.21 | -0.26 | -1 |
| 25 | DSM | 18.17 | 1.87 | 10 |
| 26 | Civil Engineering Works  | 90.22 | 78.59 | 87 |
| 27 | IT initiative | 18.48 | 1.93 | 10 |
| 28 | TIC | 8.95 | 2.32 | 26 |
| 29 | Auto reclosure | 52.58 | 19.33 | 37 |
| 30 | Model Sub division | 450.41 | 422.26 | 94 |
| 31 | Smart City | 124.51 | 84.07 | 68 |
| 32 | Model village | 27.75 | 26.56 | 96 |
| 33 | System improvement works of Indiranagar division | 61.41 | 29.51 | 48 |
| 34 | Conversion of OH line into UG/AB cable | 359.32 | 27.62 | 8 |
| 35 | T&P | 12.11 | 16.76 | 138 |
| 36 | Corporate office reserve fund | 37.53 |   | 0 |
| 37 | Others |   | 5.26 |   |
| **38** | **Project total** | **2630.13** | **1767.06** | **67** |
| **39** | **Grand Total** | **3518.63** | **2522.48** | **72** |

**Operation and Maintenance Expenses:**

The Commission, in its Tariff Order 2019, dated 30.05.2019 had approved the Operation and Maintenance Expenses (O&M Expenses) of Rs.1890.61 Crs., O&M Expenses includes, Repair and Maintenance expenses, Employee cost and Administrative and General Expenditure. Commission is approving O&M Expenses through formula on normative basis. Factors contributing for increase in O&M expenses are Inflation index and consumer growth rate. Increases in cost by these indices are reduced to an extent of predetermined BESCOM’s efficiency factor of 1%.

For-20, to arrive at normative O&M expenses, Commission considered Whole sale Price Index (WPI) as per the data available from the Ministry of Commerce & Industry, Government of India and Consumer Price Index (CPI) as per the data available from the Labour Bureau, Government of India and adopted the methodology followed by CERC with CPI and WPI in a ratio of 80:20, allowing annual escalation rate for FY20 at 8.276%.

Approved O&M expenses for FY-20 as per Tariff Order 2019, dated 30.05.2019 is shown below:

**Table 3.19**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars** | **FY-19** | **FY-20** | **FY-21** | **FY-22** |
| No. of Installations |   | 12398151 | 13070613 | 13786156 |
| CGI based on 3 Year CAGR |   | 5.05% | 5.14% | 5.42% |
| Inflation index |   | 8.28% | 8.28% | 8.28% |
| Base Year O&M expenses (as per actuals of FY-19)- Rs. Crs | 1683.21 |  |  |   |
| **Total allowable O&M Expenses-Rs. Crs** |   | **1890.61** | **2125.41** | **2395.34** |

Employee expenses comprise of salaries, dearness allowance, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses.

Administrative expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, other debits etc.

Repairs and Maintenance Expenses go towards the day to day upkeep of the distribution network of the company and form an integral part of the company’s efforts towards reliable and quality power supply as also in the reduction of losses in the system. The following table provides the summary of O&M Expenses for the FY 2019-20 as per audited accounts, O&M expenses are as follows:

 **Table 3.20 Amount in Crs**

|  |  |
| --- | --- |
| **Particulars** | **Accounts (FY-20)** |
| Other operating (Repair & Maintenance) expenses | 113.83 |
| Employee Benefits Expense | 1513.41 |
| Other expenses | 459.91 |
| **Total** | **2087.15** |

It is noticed that some expenses which are separately approved as per regulatory formats are added in A&G expenses (other expenses as per audited accounts).

 **Table 3.21 Amount in Crs**

|  |  |
| --- | --- |
| **Particulars** |  **For the year ended on 31st March 2020** **(Ind AS)**  |
| Rent |  28.06  |
| Postage stamps & Telephone charges |  8.57  |
| Remuneration to contract agencies  |  242.13  |
| Professional, legal and consultancy |  4.40  |
| Conveyance & Travel expenses |  53.40  |
| Fees & Subscriptions |  6.06  |
| Printing & Stationery |  5.62  |
| Advertisement Expenses |  4.48  |
| Computer stationary and floppies |  0.59  |
| Contributions |  0.33  |
| Electricity Charges |  4.06  |
| **Miscellaneous including provisions** |   |
| Rates & Taxes |  1.13  |
| Water Charges |  0.54  |
| DSM Expenses |  0.39  |
| Miscellaneous expenses |  9.34  |
| Details of Payments to Auditors (including legal & Professional charges) |   |
| a) Audit Fees |   |
|  - Statutory Audit Fees |  0.12  |
|  - Tax Audit Fees |  0.02  |
|  - GST |  -  |
| Expenses towards CSR- (Corporate Social Responsibilities) |  3.00  |
| **Less:-**Other Expenses charged to capital works (Credit Account) |  (0.64) |
| **Sub total -1** |  **371.60**  |
| Small & Low value items Written off |  0.56  |
| Asset decommissioning cost |  1.01  |
| **Sub total -2** |  **1.57**  |
| Bank charges |  19.91  |
| Interest on Security Deposits from staff |  -  |
| Interest paid to service tax department |  -  |
| Stamp duty  |  1.80  |
| **Sub total -3** |  **21.71**  |
| Provision Against ex-employee recoverable |  -  |
| Provision against receivables |  8.03  |
| Miscellaneous losses and Write offs including provisions |  (1.66) |
| Bad Debts written off |  -  |
| Loss of materials by pilferage, etc., |  -  |
| Provision for Loss on obsolescence of stores, etc. in stock |  0.05  |
| **Sub total -4** |  **6.42**  |
| Interest on belated payment for electricity tax |  -  |
|   |   |
| Provision for Bad & doubtful debts |  58.62  |
| **Sub total -5** |  **58.62**  |
| **Total (Sub total 1+2+3+4+5)** |  **459.91**  |

Items added to other expenses (A&G) are removed and added to the respective heads for the purpose of regulatory computation.

 **Table 3.22 Amount in Crs**

|  |  |  |
| --- | --- | --- |
| **Sl No.** | **PARTICULARS** | **Current Year 2019-20** |
| 1 | Rent | 28.06 |
| 2 | Postage stamps & Telephone charges | 8.57 |
| 3 | Remuneration to contract agencies  | 242.13 |
| 4 | Professional, legal and consultancy | 4.40 |
| 5 | Conveyance & Travel expenses | 53.40 |
| 6 | Fees & Subscriptions | 6.06 |
| 7 | Printing & Stationery | 5.62 |
| 8 | Advertisement Expenses | 4.48 |
| 9 | Computer stationary and floppies | 0.59 |
| 10 | Contributions | 0.33 |
| 11 | Electricity Charges | 4.06 |
| 12 | Miscellaneous including provisions | 0.00 |
| 13 | Rates & Taxes | 1.13 |
| 14 | Water Charges | 0.54 |
| 15 | DSM Expenses | 0.39 |
| 16 | Miscellaneous expenses | 9.34 |
|   | Details of Payments to Auditors (including legal & Professional charges) |   |
| 17 | a) Audit Fees |   |
| 18 |  - Statutory Audit Fees | 0.12 |
| 19 |  - Tax Audit Fees | 0.02 |
| 20 |  - GST | 0.00 |
| 21 | Expenses towards CSR- (Corporate Social Responsibilities) | 3.00 |
|  | **TOTAL** | **372.24** |

The audited O&M Expenses (net off Capitalization) for the FY 2019-20 as per regulatory formats are as follows:

 **Table 3.23 Amount in Crs**

|  |  |
| --- | --- |
| **Particulars** | **Actual(FY-20)** |
| Other operating (Repair & Maintenance) expenses excluding Rs. 4.23 Crs towards material cost variance | 109.60 |
| Employee Benefits Expense excluding expense capitalised of Rs.5.27 Crs. | 1518.68 |
| Other expenses excluding expense capitalised of Rs.0.64 Crs. | 372.24 |
| **Total** | **2000.53** |

Commission is approving the O&M expenses on normative basis by considering weighted inflation index of composite series of CPI and WPI and consumer growth rate. Actual inflation rate and consumer growth rate for FY-20 is now available. Considering the actual data, normative O&M expenses is computed as under.

Central Electricity Regulatory Commission (CERC) vide notification dated 27.03.2020 notified the escalation rates 2020 for (i) annual escalation rate for escalable transmission charges for the purpose of evaluation; (ii) discount rate for computation of levelized transmission charges for evaluation; and (iii) annual inflation rate for escalable transmission charges for the purpose of payment by arriving composite series of CPI at 55% and WPI at 45%.

**Table 3.24**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **WPI** | **CPI** | **45% of WPI** | **55% of CPI** | **Composite series** | **YT/Y1=Rt** | **Ln Rt** | **Year-1(t-1)** | **Product [(t-1) x (Ln Rt)** |
| 1 | 2 | 3 | 4=45% of (2) | 5=55% of (3) | 6=(4+5) |  |  |  |  |
| 2008 | 80.0 | 141.7 | 36.00 | 77.92 | 113.92 |  |  |  |  |
| 2009 | 81.9 | 157.1 | 36.86 | 86.40 | 123.25 | 1.08 | 0.08 | 1 | 0.08 |
| 2010 | 89.7 | 176.0 | 40.37 | 96.77 | 137.14 | 1.20 | 0.19 | 2 | 0.37 |
| 2011 | 98.2 | 191.5 | 44.19 | 105.34 | 149.53 | 1.31 | 0.27 | 3 | 0.82 |
| 2012 | 105.7 | 209.3 | 47.57 | 115.12 | 162.68 | 1.43 | 0.36 | 4 | 1.43 |
| 2013 | 111.1 | 232.2 | 50.00 | 127.69 | 177.69 | 1.56 | 0.44 | 5 | 2.22 |
| 2014 | 114.8 | 246.9 | 51.66 | 135.80 | 187.46 | 1.65 | 0.50 | 6 | 2.99 |
| 2015 | 110.3 | 261.4 | 49.64 | 143.77 | 193.41 | 1.70 | 0.53 | 7 | 3.70 |
| 2016 | 110.3 | 274.3 | 49.64 | 150.89 | 200.52 | 1.76 | 0.57 | 8 | 4.52 |
| 2017 | 114.1 | 281.2 | 51.35 | 154.63 | 205.98 | 1.81 | 0.59 | 9 | 5.33 |
| 2018 | 118.9 | 294.8 | 53.52 | 162.16 | 215.68 | 1.89 | 0.64 | 10 | 6.38 |
| 2019 | 121.2 | 317.4 | 54.54 | 174.57 | 229.11 | 2.01 | 0.70 | 11 | 7.69 |
| A = Sum of "product" |  |  |  |  | 35.53 |
| B= 6 times (6 x A) |  |  |  |  | 213.16 |
| C= (n-1) x n x (2n-1); n = No. of Years of data = 12 |  |  |  |  | 3036 |
| D = B/C |  |  |  |  | 0.07 |
| g (Exponential Factor) = Exponential (D) -1 |  |  |  |  | 0.07 |
| e = Annual Escalation Rate (%) = g x100 |  |  |  |  | 7.27 |

Recomposing the above table by considering CPI at 80% and WPI at 20% being the weightage of employee expense as percentage of total O&M cost for CPI (WI) and the weightage of R&M and A&G as a percentage of total O&M cost for WPI respectively. Actual weighted inflation is as follows.

**Table 3.25**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **WPI** | **CPI** | **20% of WPI** | **80%of CPI** | **Composite series** | **YT/Y1=Rt** | **Ln Rt** | **Year-1(t-1)** | **Product [(t-1) x (Ln Rt)** |
| 1 | 2 | 3 | 4=20% of (2) | 5=80% of (3) | 6=(4+5) |  |  |  |  |
| 2008 | 80.0 | 141.7 | 16.00 | 113.34 | 129.34 |  |  |  |  |
| 2009 | 81.9 | 157.1 | 16.38 | 125.67 | 142.05 | 1.10 | 0.09 | 1 | 0.09 |
| 2010 | 89.7 | 176.0 | 17.94 | 140.76 | 158.70 | 1.23 | 0.20 | 2 | 0.41 |
| 2011 | 98.2 | 191.5 | 19.64 | 153.22 | 172.86 | 1.34 | 0.29 | 3 | 0.87 |
| 2012 | 105.7 | 209.3 | 21.14 | 167.44 | 188.58 | 1.46 | 0.38 | 4 | 1.51 |
| 2013 | 111.1 | 232.2 | 22.22 | 185.74 | 207.96 | 1.61 | 0.47 | 5 | 2.37 |
| 2014 | 114.8 | 246.9 | 22.96 | 197.52 | 220.48 | 1.70 | 0.53 | 6 | 3.20 |
| 2015 | 110.3 | 261.4 | 22.06 | 209.12 | 231.18 | 1.79 | 0.58 | 7 | 4.07 |
| 2016 | 110.3 | 274.3 | 22.06 | 219.47 | 241.53 | 1.87 | 0.62 | 8 | 5.00 |
| 2017 | 114.1 | 281.2 | 22.82 | 224.92 | 247.74 | 1.92 | 0.65 | 9 | 5.85 |
| 2018 | 118.9 | 294.8 | 23.78 | 235.84 | 259.62 | 2.01 | 0.70 | 10 | 6.97 |
| 2019 | 121.2 | 317.4 | 24.24 | 253.92 | 278.16 | 2.15 | 0.77 | 11 | 8.42 |
| A = Sum of "product" |  |  |  |  | 38.76 |
| B= 6 times (6 x A) |  |  |  |  | 232.54 |
| C= (n-1) x n x (2n-1); n = No. of Years of data = 12 |  |  |  |  | 3036 |
| D = B/C |  |  |  |  | 0.08 |
| g (Exponential Factor) = Exponential (D) -1 |  |  |  |  | 0.08 |
| e = Annual Escalation Rate (%) = g x100 |  |  |  |  | 7.96 |

Weighted inflation rate to be considered for FY-20 is 7.96%

**Consumer Growth rate:**

For the purpose of computation of normative O&M expenses, Commission in its Tariff Order -2019, dated 30.05.2019 has considered three year compounded annual growth rate (CAGR) of the number of installations.

Similarly, BESCOM has considered the CAGR for 3 years and computed the consumer growth rate for FY-20 which is tabulated as under:

**Table 3.26**

|  |  |
| --- | --- |
| **Particulars** | **Numbers** |
| Consumers as on 31.03.2017 (As per Accounts) | 10696029 |
| Consumer as on 31.03.2020(As per Accounts) | 12365413 |
| **Annual Growth rate** | **4.95%** |

Based on the above inputs, O&M cost for FY-20 on normative basis is tabulated as under.

Formula for working out the O&M expenses on normative basis as prescribed by the Commission in its Tariff Order-2008 dated 11.1.2008 is as follows:

*O&M Cost t = O&M Cost t-1 \* (1 + WII + CGI – X)*

*Where,*

*‘O&M Cost t’ is the normative O&M cost approved by the Commission for the financial year t*

*‘WII’ is the weighted inflation index of CPI and WPI based on the contribution of employee cost, R&M and A&G towards the total O&M cost*

*‘CGI’ is the Consumer growth index, which is linked to increase (CAGR) in no of consumers from FY03 to FY07 which is 5.47%*

*‘X’ is the efficiency factor. For BESCOM the Commission fixes the same as 1%*

Here ‘t’ year = FY-20, t-1= FY-19, WII= 7.96%, CGI=4.95%, X=1%

**Table 3.27**

|  |  |
| --- | --- |
| **Particulars** | **FY-20** |
| Weighted Inflation Index (WII) | 7.96% |
| Consumer Growth Index (CGI) based on 3 Year CAGR | 4.95% |
| **True up O & M expenses for FY19 in Rs. Crs** | **1515.81** |
| **O&M expenses in Rs. Crs = t-1 cost \* (1+WII+CGI-X)** | **1696.39** |

Commission in its Tariff Order-2020, dtd: 04.11.2020 has allowed Rs. 1809.8 Crs. towards O&M expenses for FY-19, inclusive of uncontrollable O&M expenses towards contributions to P&G trust of RS.293.99 Crs. Hence, an amount of Rs. 1515.81 is considered as true up O&M expenses for FY-19 as O&M cost t-1.

Since, the base year data i.e. FY-19 includes the O&M expenses exclusive of contribution to the P & G Trust, BESCOM has considered the contribution to the P & G Trust as additional employees cost.

 **Table 3.28 Amount in Crs.**

|  |  |
| --- | --- |
| **Particulars** | **FY-20** |
| Normative O&M expenses | 1696.39 |
| Additional employees Cost (uncontrollable expenses-P&G Trust) | 399.58 |
| **Allowable O&M expenses for FY-20** | **2095.97** |

Comparison of approved, actual and proposed for truing up for FY-20 is depicted below:

 **Table 3.29 Amount in Crs.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Particulars** | **Approved by the Commission for FY-20** | **Actuals as per Accounts** | **Proposed for Truing UP on normative basis** |
| O&M Expenses (in Crs.) | 1890.61 | 2087.15 | 2095.97 |

Commission is requested to true up the O&M expenses of Rs. **2095.97 Cr**. on normative basis.

**Depreciation:**

BESCOM submits that for FY-20, the Hon’ble Commission in it Tariff Order dated 30th May 2019 has considered the Depreciation in accordance with the provisions of the KERC (Terms and Conditions for determination of Tariff) Regulations, 2006. On the similar line BESCOM is claiming the depreciation. A comparison of Depreciation expense approved by the Hon’ble Commission and actual depreciation expenses of BESCOM is shown in the following table.

 **Table 3.30 Amount in Crs.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Particulars** | **Approved** | **Actual** | **Deviation** |
| Depreciation on Buildings | 10.37 | 9.40 | -0.97 |
| Depreciation on Civil works (pipeline, sewage, drainage, water supply etc.,) | 0.31 | 0.37 | 0.06 |
| Depreciation on Other Civil Works | 0.10 | 0.16 | 0.06 |
| Depreciation on Plant and Machinery | 176.45 | 253.97 | 77.52 |
| Depreciation on lines, cable, network etc., | 520.80 | 661.49 | 140.69 |
| Depreciation on Vehicles | 1.66 | 1.93 | 0.27 |
| Depreciation on furniture, fixtures | 0.95 | 1.03 | 0.08 |
| Depreciation on Office equipment | 0.82 | 1.12 | 0.30 |
| Depreciation on intangible assets |   | 62.55 | 62.55 |
| Depreciation charged on released material intended to re-use | 2.57 | 2.72 | 0.15 |
| **Total**  | **714.03** | **994.74** | **280.71** |
| Less: Depreciation Withdrawn from contributions /subsidies as per Ind AS 20 | 178.51 | 241.21 | 62.70 |
| **Depreciation for the year** | **535.52** | **753.53** | **218.01** |

Ministry of Corporate Affairs (MCA) has issued Indian Accounting Standards (IND AS), which is applicable to BESCOM from FY-17 with comparative period of one year. In pursuance with Ind AS 20, Government Grants/subsidies received from the Government or other authorities towards capital expenditure as well as consumer’s contribution to capital works are treated initially under deferred income and taken to fixed assets based on commissioning of the assets and depreciation is charged in accordance with the class of assets it belongs.

The proportion equivalent to % of depreciation charged for plant and machinery/line and cables are reckoned as basis for arriving at depreciation write back against such quantum received over the year including current financial year under grants/subsidies/consumer contribution and the same is charged back as income and shown distinctively in depreciation schedule in the statement of Profit and Loss.

Depreciation amount of Rs. 994.74 Crs is worked out as per annual accounts for FY-20(awaiting Board approval). After deducting an amount of Rs. 241.21 Crs. as per Ind AS 20, the net depreciation works out to Rs. 753.53 Crs.

Commission is requested to true up the depreciation of Rs.753.53 Cr. as per actual.

**Interest and Finance Charges:**

As per MYT regulations, Commission is allowing actual interest incurred on the loans borrowed towards creation of Capital Assets, interest paid towards consumer deposit and interest on working capital on normative basis.

Breakups of interest and finance charges are as under:

**Long term loan:**

The interest expenditure on account of long-term loans depends on the outstanding loan, repayments, and prevailing interest rates on the outstanding loans. Further, the projected capital expenditure and the funding of the same also have a major bearing on the long-term interest expenditure.

As per the final Accounts, an amount of Rs. **5493.62** Crore of long term borrowings are existing as at the end of FY-20. Details of loans outstanding and interest paid are shown below:

 **Table 3.31 Amount in Crs.**

|  |  |  |
| --- | --- | --- |
| **Sl. No**  |  **Financial institutions/ Banks**  | **FY-20** |
| **Opening Balance**  |  **New loan addition**  |  **Total loan at the end of the year**  | **Repayment of principal**  | **Interest for the year**  |  **Closing Bal**  |
|   | **Secured Loans** |   |   |   |   |   |   |
| 1 | **Loans from REC (DTC metering)** | 107.73 |   | 107.73 | 15.39 | 13.43 | 92.34 |
| 2 | **Loans from REC (NJY Phase-2)** | 179.31 | 24.22 | 203.53 | 31.67 | 22.41 | 171.86 |
| 3 | **Loan from REC APDRP (10 Towns)** | 0.17 |   | 0.17 | 0.17 | 0.07 |  -  |
| 4 | **Loan from PFC-RAPDRP (Part-B)** | 58.73 |   | 58.73 |   |   | 58.73 |
| 5 | **Loan from PFC-RAPDRP (Part-B) (counter funding)** | 125.83 |   | 125.83 | 11.99 | 13.60 | 113.84 |
| 6 | **REC-HVDS** | 169.35 | 13.21 | 182.56 | 22.81 | 18.55 | 159.75 |
| 7 | **REC\_UAIP** | 190.43 | 11.80 | 202.23 | 25.28 | 21.62 | 176.95 |
| 8 | **REC-General Capex** | 259.11 |   | 259.11 | 32.38 | 28.91 | 226.73 |
| 9 | **REC-Static meters** | 95.24 |   | 95.24 | 10.58 | 11.22 | 84.66 |
| 10 | **REC-RGGVY-12th Plan** | 1.14 | 1.98 | 3.12 | 0.21 | 0.31 | 2.91 |
| 11 | **REC-NJY Phase-3** | 640.35 | 6.49 | 646.84 | 0.66 | 72.68 | 646.18 |
| 12 | **REC\_HVDS-Phase2** | 151.39 |   | 151.39 |   | 16.26 | 151.39 |
| 13 | **REC UNIP** | 299.46 | 447.58 | 747.04 |   | 60.00 | 747.04 |
| 14 | **REC DDUGJY** | 38.44 | 32.16 | 70.60 |   | 5.78 | 70.60 |
| 15 | **REC IPDS** | 36.77 | 100.63 | 137.40 |   | 9.11 | 137.40 |
| 16 | **Loans from Commercial Bank-SBI** | 528.40 | 87.78 | 616.18 | 68.48 | 54.41 | 547.70 |
| 17 | **Loan from Commercial Bank-BOI** |  -  |   |  -  |  -  | 1.58 |  -  |
| 18 | **Loan from commercial bank-Canara** | 899.67 | 184.76 | 1,084.43 | 134.82 | 90.14 | 949.61 |
| 19 | **Loan from commercial bank- Bank of Maharashtra**  | 76.64 | 284.11 | 360.75 | 78.11 | 23.66 | 282.64 |
| 20 | **Loan from Commercial Bank-SBM** |  -  |   |  -  |   |   |  -  |
| 21 | **Loan from Commercial Bank-Bank of Baroda** | 76.17 | 67.58 | 143.75 | 10.08 | 10.87 | 133.67 |
| 22 | **Loan from commercial bank-Vijaya Bank** | 0.00 | 0.00 | 0.00 |   |   | 0.00 |
|   |  | **3934.32** | **1262.3** | **5196.62** | **442.63** | **474.61** | **4753.99** |
|   | **UNSECURED LOANS** |  |  |  |  |  |  |
| 1 | **Loan from GoK-PMGY** | 0.22 |   | 0.22 | 0.11 | 0.04 | 0.11 |
| 2 | **Loan from GoK-APDRP** | 12.51 |   | 12.51 | 4.17 | 1.81 | 8.34 |
| 3 | **Loan from GoK-Int free** | 0.94 |   | 0.94 |   |   | 0.94 |
| 4 | **Loan from GoK-RGGY** | 4.90 |   | 4.90 | 3.96 | 0.41 | 0.94 |
| 5 | **Loan from GoK-JICA** | 403.29 |   | 403.29 | 174.00 | 12.41 | 229.29 |
| 6 | **GOK interest free loan towards KPC dues** |   | 500.00 | 500.00 |   |   | 500.00 |
|   |  | **421.86** |  **-**  | **921.86** | **182.24** | **14.67** | **739.62** |
|   | **Total Long term loan**  | **4356.18** | **1762.3** | **6118.48** | **624.87** | **489.28** | **5493.62** |

Interest is calculated on the normative average loan availed during the year using Weighted average interest rate as shown in following table:

 **Table 3.32 Amount in Crs.**

|  |  |  |
| --- | --- | --- |
| **Particulars** | **Approved** | **Actuals** |
| Opening Balance Long term Loans | 4741.54 | 4356.18 |
| Add new loans | 900.00 | 1762.30 |
| Less: Repayments | 349.97 | 624.87 |
| Total Loan at the end of the year | 5291.57 | 5493.62 |
| Average loan | 5016.56 | 4924.90 |
| Weighted average rate of interest in % | 8.59 | 9.93 |
| **Interest on long term loans** | **430.91** | **489.28** |

Interest paid on Long Term borrowings for the year FY-20 is Rs.489.28 Crs. Weighted Average interest rate works out at 9.93%.

As per KERC (Terms and Conditions for determination of Tariff for Distribution and Retail sale electricity) (second amendment), Regulations 2015, “For the purpose of allowing interest on Loans during APR, the rate of interest shall be the weighted average rate of interest incurred by licensee”. BESCOM request the Hon’ble Commission to consider Rs 489.28 Crs as interest on Long term loans.

**Short term loan and Over drafts:**

To meet the day to day expenditure i.e., for working capital, BESCOM borrowed short term loan and over drafts. As per the final Accounts, an amount of **Rs. 4,836.01** **Crore** of short term and over draft borrowings are existing as at the end of the year FY-20. Details of loans outstanding and interest paid are shown below:

 **Table 3.33 Amount in Crs.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Short term loans**  |  **Opening Balance**  |  **New loan addition**  |  **Total loan at the end of the year**  | **Repayment of principal**  |  **Interest for the year**  |  **Closing Bal**  |
| **Vijaya Bank** | 750.00 | 3500.00 | 4250.00 | 3000.00 | 65.73 | 1250.00 |
| **Corporation Bank** | 350.00 | 250.00 | 600.00 | 350.05 | 29.97 | 249.95 |
| **SBM** |  -  | 1400.00 | 1400.00 | 669.62 | 43.48 | 730.38 |
| **Syndicate Bank** | - | - | - | - | - | - |
| **Bank of India** |  -  | 400.00 | 400.00 | 99.99 | 19.11 | 300.01 |
| **Union Bank**  |  -  | 250.00 | 250.00 | 12.51 | 1.44 | 237.49 |
| **Canara Bank** | 100.02 | 200.00 | 300.02 | 174.99 | 15.98 | 125.03 |
| **REC** | 75.00 | 150.00 | 225.00 | 200.00 | 10.98 | 25.00 |
| **Total short term loan** | **1275.02** | **6150** | **7425.02** | **4507.16** | **186.69** | **2917.86** |
| **BANK OVER Drafts** |   |   |   |   |   |   |
| **Bank of Baroda** | 189.56 | 97.67 | 287.23 |   | 38.40 | 287.23 |
| **Vijaya Bank** | 590.70 |   | 590.70 | 590.70 |   |  -  |
| **Canara Bank** | 981.76 | 14.45 | 996.21 |   | 82.83 | 996.21 |
| **Syndicate Bank** | 324.92 | 22.86 | 347.78 |   | 48.69 | 347.78 |
| **Bank of India** | 176.78 | 22.07 | 198.85 |   | 14.10 | 198.85 |
| **State Bank of Mysore** | 377.18 |   | 377.18 | 377.18 |  -  |  -  |
| **State Bank of India** | 37.50 | 50.58 | 88.08 |   | 9.54 | 88.08 |
| **Over Draft Total** | **2678.4** | **207.63** | **2886.03** | **967.88** | **193.56** | **1918.15** |
| **Total short term loan (working Capital)** | **3953.42** | **6357.63** | **10311.05** | **5475.04** | **380.25** | **4836.01** |

**Interest on working capital:**

As per the Audited Accounts, BESCOM has paid interest on working capital. BESCOM further submits that the working capital is mainly required to meet the liabilities. Short term borrowing and over drafts for the year FY-20 is Rs.4836.01 Crs. BESCOM has incurred an amount of Rs 380.25 Crores towards interest on short term loans and bank overdrafts. Details are shown below:

Hon’ble Commission in its Tariff Order 2019, dated 30.05.2019 has considered only 11% as rate of interest on working capital for FY-20.

**Computed interest on working capital on normative basis is as under:**

 **Table 3.34 Amount in Crs.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.No** | **Particulars** | **Approved** | **Actual** |
| 1 | One-sixth of the revenue | 3387.02 | 3528.45 |
| 2 | One-twelth of the amount of O&M Expenses | 157.55 | 174.66 |
| 3 | 1% of Opening Balance of Gross Fixed Assets | 132.99 | 147.76 |
|   | **Total** | **3677.56** | **3850.87** |
| 4 | Allowable Interest on working capital at 11.90% | 404.53 | 458.25 |
| 5 | Actual interest incurred for working capital |   | 380.25 |
| **6** | Savings to the Normative cost |   | 78 |
| 7 | **Allowable interest on working capital (50% of savings+ actual cost)****(As per amended version)** |  | **419.25** |

As per KERC (Terms and Conditions for determination of Tariff for Distribution and Retail sale electricity (second amendment), Regulations 2015, it is stated that

*“Provided that, during Annual Performance Review, the Commission shall consider the allowable interest on working capital calculated on normative basis at the available base rate of interest as on 1st April of the financial year as notified by RBI plus 250 basis points. If the actual expenditure is less than the normative amount, the allowable interest on working capital shall be limited to actual expenditure plus fifty percent of the difference between the actual expenditure and the amount as calculated on normative basis.”*

As per RBI notification Base Rate for April 2020: Min 8.15% and Max 9.40% (9.40% + 250 points =11.9%). The allowable interest on working capital as per the regulation is 11.90%.

The Hon’ble Commission in its Tariff Order 2019, dtd 30.05.2019 has considered MCLR for loan with tenure of one year as 8.55%, considered interest on working capital at 11% per annum for FY-20 to FY-22.

BESCOM requests the Hon’ble Commission to allow interest on working capital on normative basis calculated as per RBI base rate which works out to Rs.419.25 Crs.

**Interest on consumer Security Deposit:**

In accordance with the KERC (Interest on Security Deposit) Regulations 2005, the interest rate on consumer security deposit to be allowed is the bank rate prevailing on the 1st of April of the financial year for which interest is due. As per Reserve Bank of India notification dated 1st April, 2019, notified bank rate as 6.50%.

Actual interest paid to consumer security deposit against the approved is tabulated below:

 **Table 3.35 Amount in Crs.**

|  |  |  |
| --- | --- | --- |
| **Particulars** | **Approved** | **Actuals** |
| Open balance of Consumer Security deposit(01.04.2019) | 4105.86 | 3974.69 |
| Added for FY-20 | 300.00 | 379.43 |
| Consumer Security at the end of year | 4405.86 | 4354.13 |
| Weighted Average | 4255.86 | 4164.41 |
| Rate of interest | 6.50% | 6.50% |
| Calculated interest on consumer security Deposit | 276.63 | 270.69 |
| Interest on Consumer Security deposit paid |   | **238.87** |

Commission is requested to allow Rs.238.87 Crs as interest on consumer security deposit for FY-20

**Other finance charges:**

BESCOM submits that it has incurred Other Finance Charges amounting to Rs. 22.29 Crs during the FY-20 as against Commission approved amount of Rs.4 Crs.

 **Table 3.36 Amount in Crs.**

|  |  |  |
| --- | --- | --- |
| **Other finance charges** | **Approved** | **Actuals** |
| Bank Charges |  | 19.91 |
| Stamp duty |  | 1.80 |
| Guarantee commission to GoK |  | 0.59 |
| Interest on Security Deposit from staff |  | 0.00 |
| Interest paid to service tax department |  | 0.00 |
| **Total** | **4.00** | **22.29** |

**Expenses capitalized:**

As per the audited accounts following are the expenses capitalized. Hon’ble Commission is requested to allow Rs.212.39 Cr to capitalize for FY-20 as against Commission approved amount of Rs.99.75 Crs.

 **Table 3.37 Amount in Crs.**

|  |  |  |
| --- | --- | --- |
| **Expenses Capitalised:** | **Approved** | **Actuals** |
| Interest Capitalized |  | -206.48 |
| Employee Cost |  | -5.27 |
| Administrative and general expenses |  | -0.64 |
| **Total** | **99.75** | **-212.39** |

Interest and Finance Charges approved, actual and proposed for truing up for FY-20 is tabulated as under:

 **Table 3.38 Amount in Crs.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Particulars** | **Approved by the Commission for FY-20** | **Actual as per Accounts FY-20** | **Proposed for truing up on normative basis FY-20** |
| Interest on Loan Capital | 430.91 | 489.28  | 489.28  |
| Interest on Working Capital | 404.53 | 380.25  |  419.25  |
| Interest on Consumer Security Deposit | 276.63 | 238.87 | 238.87 |
| Other Interest & Finance Charges | 4.00 | 22.29 | 22.29 |
| Less: interest & other expenses Capitalized | 99.75 | 206.48 | 212.39 |
| **Total** | **1016.32** | **924.21** | **957.30** |

The Commission is requested to approve the interest and finance charges of Rs.957.30 Crs. for FY-20.

**Other Debits:**

Commission is approving the other debits based on actuals. As per accounts other debits are as under:

 **Table 3.39 Amount in Crs.**

|  |  |
| --- | --- |
| **Other Debits:** | **Actuals** |
| Small & Low value items Written off | 0.56 |
| Asset decommissioning cost | 1.01 |
| Material cost variance | 4.23 |
| Miscellaneous losses and Write offs including provisions | -1.66 |
| Bad Debts written off | 0.00 |
| Provision for Loss on obsolescence of stores, etc in stock | 0.05 |
| Provision against receivables | 8.03 |
| **Total** | **12.21** |

Commission is requested to consider Rs. 12.21 Crs., as other debits for FY-20.

Commission is not considering the provisions for bad debts provided in the audited accounts. Hence, Rs. 58.62 Crs., provided as other expenses (provision for bad and doubtful debts) is not proposed for truing up.

**Return on Equity:**

The Commission in Tariff Order dated 14th May, 2018 stated that, in accordance with the provisions of the MYT Regulations, return on equity has considered at15.5% duly grossed up with the applicable Minimum Alternate Tax (MAT) of 21.342%. Further, an amount of Rs.100.00 Crores of recapitalized consumer security deposit as net-worth is considered as per the orders of the Hon’ble Appellate Tribunal for Electricity in Appeal No.46/2014.

Return on Equity computed and Approved for FY-20 is as follows:

**Approved Return on Equity for FY-20**

 **Table 3.40 Amount in Crs.**

|  |  |
| --- | --- |
| **Particulars** |  **FY-20** |
| Opening balance of paid up share capital  | 546.92 |
| Share deposit | 738.69 |
| Reserve and Surplus | -205.79 |
| Less: Recapitalised Security Deposit  | -100 |
| Total Equity | 979.82 |
| **Approved Return on Equity with MAT** | **193.59** |

Following points are placed for kind consideration of the Commission.

As per Accounts of FY-20(awaiting Board approval), debit and equity ratio for FY-20 is tabulated as under:

**As per accounts Debt Equity Ratio**

**Table 3.41**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Particulars** | **GFA** | **Debt** | **Equity** | **Normative Debt@70% of GFA** | **Normative Equity@30% of GFA** | **%age of actual debt on GFA** | **%age of actual Equity on GFA** |
| **Opening Balance** | 14776.14 | 4,356.17 | 546.92 | 10343.3 | 4432.8 | 29.48% | 3.70% |
| **Closing Balance** | 12122.34 | 3,753.07 | 925.87 | 8485.6 | 3636.7 | 30.96% | 7.64% |

From the above table, the percentage of debt to gross fixed asset is within the norms framed by the Commission under MYT Regulations.

**Disallowance on ATE Appeal No. 46/2014: Deduction of Rs. 100/- cr. for computation of equity.**

The Commission is deducting Rs. 100 Cr. from the equity for computation of equity by referring the Hon’ble Tribunal order in Appeal No. 46/2014 dated 17th Sept 2014 Dr. Subrahmanya Bhat, S/O Dr. Bheema Bhat, Residing at Hegdekodi, Veerakambha Village, Bantval Taluk, Post-Kodapadavu-574 222 Karnataka State Versus KERC and MESCOM.

The extract of the findings of the Tribunal Order on this issue is reiterated as under and emphasis is made by underling the word for better explanation:

*“The Fifth Issue is relating to the Computation of Return on Equity.*

*44. According to the Appellant, the State Commission has ignored the fact of capitalization of consumer security despot amounting to Rs.49.03 Crores for the purpose of calculating ROE for the Respondent No.2. The Respondent No.2 is claiming ROE on the same and the interest on the consumer security is passed through in the APR as well. The State Commission should have disallowed ROR on the said amount of Rs.49.03 Crore.*

*45. According to the learned Counsel for the State Commission, this issue is covered by the judgment dated 2.1.2013 of this Tribunal in Appeal No.108 of 2010. According to the learned Counsel for the MESCOM (R-2), the consumer’s deposit was capitalized as per the Government Order dated 31.5.2003 and they are claiming interest paid on consumer security deposit as pass through and also ROE strictly in accordance with the provisions of the MYT Regualtions and once the asset has been capitalized in the books, the ROE will accrue in such capitalized assets. He has also relied on the decision of the Tribunal in Appeal No.108 of 2013.*

*46. Admittedly, the consumer security deposit has been capitalized pursuance to the State Govt order and the Respondent No.2 is claiming ROE on such capitalized sum. We feel that the consumer security deposit is not a capital asset on which ROE can be claimed. Even if the State Government has ordered capitalization of consumer security deposit and accordingly the balance sheet of the Distribution Companies has been drawn up with gross fixed assets including the consumer security deposit, the State Commission should have deducted the amount of consumer security deposit while allowing ROE on the equity component of the capital cost.*

*47. As already held by this Tribunal, the State Commission is not bound to follow the audited accounts and the State Commission can scrutinize the same and allow the expenditure only after prudence check. By allowing ROE on consumer security deposit and also allowing interest paid by the Distribution Licensee to the consumers against consumer security deposit in the ARR of the Distribution Licensee, the consumer has been burdened unreasonably. On one hand the Distribution Company has been allowed ROE on the security deposit which is contributed by the consumer and on the other hand the interest paid to the consumer on such deposit is also allowed as a pass through in the tariff to be recovered from the consumers. This is wrong.*

*48. Hence, we find force in the arguments of the Appellant that ROE on consumer security deposit amount capitalized in the books of accounts of the Distribution Licensee should not have been allowed in the ARR of the Distribution Licensee. Accordingly, we direct the State Commission to adjust the excess amount of ROE allowed in the Impugned Order from FY 2011-12 onwards in the APR/True up for these years to provide relief to the consumers.*

*49. The learned Counsel for the State Commission and the Respondent No.2 has argued that the issue is covered by the decision of this Tribunal in Appeal No.108 of 2010 as against the Appellant. We do not agree with the same. In the judgment dated 2.1.2013 in Appeal No.108 of 2010, this Tribunal did not go into the issue of inclusion of the consumer security deposit in the gross fixed assets of the Distribution Company and consequent allowance of ROE on the same being passed on in the ARR and retail supply tariff. The Tribunal only noted the statement of the State Commission that the interest is being paid regularly to the consumers on the consumer’s deposit despite the capitalization of the security deposit and held that the issue has become in fructuous.*

*50. Another issue raised by the Appellant is that the State Commission has violated the MYT Regulations in so far as ROR in APR as well as ARR are concerned and the State Commission has allowed ROE on the equity component (aggregate of equity and free reserve) without considering the debt equity ratio, as per the Regulations.*

*51. According to the learned Counsel for the State Commission, gross asset in FY 2011-12 is Rs.218 Crores and increase in equity is Rs.57.20 Crore which would show that component of equity was less than 30%.*

*52. We find that the State Commission has not shown the break-up of GFA into debt and equity component. In the absence of the opening and closing GFA figures and corresponding debt and equity components, we are not able to find whether the debt equity ratio and ROE has been allowed as per the Regulations. The State Commission is directed to transparently show the opening and closing GFA along with break-up into equity and loan component in the tariff order henceforth. The State Commission is also directed to consider the contentions of the Appellant while truing-up the accounts for the FYs 2011-12 to 2014-15. Accordingly, this issue is decided in favour of the Appellant.*

From the above Hon’ble Tribunal decided the issue that the Capitalized portion of Consumer security deposit shall be deducted while allowing ROE. The implied aspect in the same order is that the State Commission is not bound to follow the audited accounts and the State Commission can scrutinize the same and allow

Commission’s kind attention is drawn to the Chapter No. 4 in on page NO.60 to 62 of the Tariff Order -2009 issued on 25th November 2009. Commission noted the break up furnished by the BESCOM for capitalization Consumer Meter Security Deposit (Not consumer security deposit) and others. Details in the said order are reiterated as under.

***“4.10 Directive - 10***

***Directive on Analysis of Consumers’ Security Deposit (Page 29 of Tariff Order dated 11.01.2008)***

*The relevant extract of the tariff order is as under:*

*The Commission notes that, besides the above objector, the FKCCI and many other objectors have been repeatedly raising the issue of differences in the closing balances and opening balances of consumers’ security deposit, but no satisfactory answer has been provided by BESCOM. BESCOM is therefore directed to make an analysis of the closing balances and opening balances before and after the formation of BESCOM, in consultation with KPTCL and highlight the factual position as to whether a part of the consumer deposits has been capitalized as equity by the GoK, while arriving at the opening balance sheet figures of BESCOM. Since this is a matter, which involves public money, the Commission expects that, all the adjustments made should be brought out in a clear and transparent manner. BESCOM shall file a status report along with details in this regard within two months from the date of issue of this order.*

***Compliance:***

*The GoK vide Order No: D18/PSR 2003/Bangalore dated 31.05.2003 approved to recapitalize net worth of KPTCL/ESCOMs by utilizing the balances of meter equipment security deposit existing in the books of ESCOMs aggregating to Rs.205 Crores. Further, the GoK has assured the contingent liability arising on account of recapitalization as and when it arises.*

*KPTCL was consulted on the captioned subject and KPTCL has clarified vide letters dated 15th &16th May 2008. The separation of Transmission and Distribution business was done considering Accounting units as the basis. The segregated figures were made available to GoK, for verifying the Opening Balance Sheets of new Companies. GoK vide Order dt.31.05.2003 notified the Opening Balance Sheet of KPTCL and ESCOMs as on 31.05.2002. After notification, the sum total of Trial balance rendered by the Accounting units as on 31.05.2002 under each ESCOM and KPTCL was tallied after taking into BRP Adjustments.*

*As per May 2002 Closure Accounts, the Security Deposit held by the Accounting units under the jurisdiction of BESCOM was Rs.632 cores. The Amount of Security deposit from the consumer notified as Opening Balance by GoK was also Rs.632 Crores and as such no BRP adjustment was made in respect of Security Deposit from the consumers.*

*However, GoK vide Order dt.31.05.2003, approved recapitalization of the net worth of KPTCL/ESCOMs utilizing the balances of meter equipment security deposit existing in the books of ESCOMs aggregating to Rs.205 Crores. The details of adjustments along with accounting code and ESCOMs wise are shown below.*

*TABLE – 3.42*

***Security Deposit – Adjustment***

 ***TABLE – 3.42* Amount in Rs. Crores**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Accounting Codes*** | ***Nomenclature*** | ***BESCOM*** | ***MESCOM*** | ***HESCOM*** | ***GESCOM*** | ***TOTAL*** |
| ***47.603*** | ***Security deposit for meter equipment’s*** | ***85.97*** | *47.72* | *32.29* | *17.57* | *183.55* |
| *47.604* | *Revenue suspense* | *12.07* | *1.08* | *0.99* | *0.04* | *14.18* |
| *47.605* | *Voluntary loan contribution by IP consumers* | *2.4* | *0.12* | *0.01* | *0.03* | *2.56* |
| *47.606* | *Revenue collection pending classification over sundry debtors* | *0.99* | *0.11* | *0.02* | *4.07* | *5.19* |
| ***Total*** | ***101.43*** | ***49.03*** | ***33.31*** | ***21.71*** | ***205.5*** |

*GoK resorted to recapitalization of Deposits to ensure providing viable opening balance sheets to ESCOMS with ideal Debt: Equity Ratio. This metering security deposit is refundable to the consumer at the time of termination of contract (permanent disconnection) & the corresponding obligation in respect of such deposits would stand transferred to the GoK.*

 ***Commission’s Views:***

*The information furnished by BESCOM has been communicated to the FKCCI. The Commission has informed FKCCI to contact BESCOM, in case further clarification in the matter is required. “*

As per the above data, BESCOM’s capitalized consumer meter security deposit is Rs.85.97 Crs. and not Rs. 100 Crs. Hence, Commission is requested to correct the amount as Rs. 85.97 Crs. instead of Rs.100/- Cr.

Further, Commission kind attention is drawn for the Annual Account of BESCOM for the year 2011-2012, 2012-13 and 2013-14 vide Note No.20 ‘Other Income ‘head. Amount received from the Government of Karnataka under tripartite agreement was credited to other income instead of reducing the receivable from the Government of Karnataka. Details are as under:

***TABLE – 3.43***

|  |  |  |
| --- | --- | --- |
| ***Year*** | ***Nomenclature*** | ***Amount in Crs.*** |
| *2011-12* | *Subsidy received from GOK* | *10.93* |
| *2012-13* | *Subsidy received from GOK* | *10.38* |
| *2013-14* | *Subsidy received from GOK* | *9.85* |
| ***Total*** |  | ***31.16*** |

Since the amount is credited to other income, Commission has already considered the amount as a reduction in ARR of respective years for truing of respective years, BESCOM requests the Commission to credit this amount against the capitalized consumer security deposit and balance to be considered as reduction in the equity. It is submitted that, Hon’ble Appellate Tribunal for Electricity ruled in the appeal No. 46/2014 that the State Commission is not bound to follow the audited accounts and the State Commission can scrutinize the same and allow the expenditure only after prudence check.

Commission is requested to look into the accounts submitted by the Commission for the year FY-12, FY-13 and FY-14 and to consider the BESCOMs request. Amount to be considered for reduction is tabulated below:

***TABLE – 3.44***

|  |  |  |
| --- | --- | --- |
| ***Sl.No.*** | ***Particulars*** | ***Amount in Crs.*** |
| *1* | *Security deposit for meter equipment* | *85.97* |
| *2* | *Less: Amount considered as other income for the year from 2011-12, 2012-13 and 2013-14* | *31.16* |
| ***Amount to be considered for reduction in equity consequent to capitalization of consumer meter security deposit*** | ***54.81*** |

Government of Karnataka induced the equity for FY-20. The details are as follows:

* **Table 3.45**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Additional Equity received during FY-20** | **Crores** | **Received on**  | **No of months** | **RoE allowed Rs. Crs.** |
| EN 84 PSR 2019 dtd:14.06.2019 | 1.99 | 27.06.2019 | 9 | 0.23 |
| EN 86 PSR 2019 dtd:13.06.2019 | 11.37 | 28.06.2019 | 9 | 1.32 |
| EN 82 PSR 2019 dtd:13.06.2019 | 55 | 01.07.2019 | 9 | 6.39 |
| EN 84 PSR 2019 dtd:19.09.2019 | 0.38 | 25.09.2019 | 6 | 0.03 |
| 1.61 | 26.09.2019 | 6 | 0.12 |
| EN 82 PSR 2019 dtd:23.09.2019 | 55 | 10.10.2019 | 5 | 3.55 |
| EN 86 PSR 2019 dtd:19.09.2019 | 11.37 | 17.10.2019 | 5 | 0.73 |
| EN 86 PSR 2019 dtd:21.12.2019 | 67.98 | 03.01.2020 | 3 | 2.63 |
| EN 53 PSR 2019 dtd:21.12.2019 |
| EN 84 PSR 2019 dtd:21.12.2019 |
| EN 84 PSR 2019 dtd:19.09.2019 | 0.38 | 04.01.2020 | 3 | 0.01 |
| EN 84 PSR 2019 dtd:21.12.2019 | 0.38 | 05.03.2020 | 1 | 0 |
| EN 84 PSR 2019 dtd:25.02.2020 | 1.61 | 05.03.2020 | 1 | 0.02 |
| EN 53 PSR 2019 dtd:20.02.2020 | 55 | 06.03.2020 | 1 | 0.71 |
| EN 86 PSR 2019 dtd:28.02.2020 | 11.37 | 10.03.2020 | 1 | 0.15 |
| **Total** | **273.4** |  |  | **15.92** |

For FY-20, Government of Karnataka induced Rs.273.44 Crs. towards equity under different occasions as tabulated above. The Commission is requested to consider the same for computation of return on equity.

With the above back ground BESCOMs calculated eligible return on equity as under for FY-20.

**Table 3.46**

|  |  |
| --- | --- |
| **Particulars** |  **FY-20** |
| Opening balance of paid up share capital  | 546.92 |
| Share deposit | 796.62 |
| Equity addition during the year | 15.92 |
| Reserve and Surplus | -147.67 |
| Less: Recapitalised Security Deposit  | -54.81 |
| **Total Equity** | **1156.98** |
| **Return on Equity @15.5%** | **179.33** |

Commission is requested to consider Rs. 179.33 Crs., as RoE for FY-20.

**Income Tax:**

As per the Audited Annual Accounts for FY-20(awaiting Board approval), an amount of Rs.25.6 Crores and Rs.19.77 Crores are paid towards Current tax and Deferred Tax Liability respectively. The Commission is allowing the actual tax paid by the Company. Hence, the Commission is requested to allow Rs.5.83 Crs. for FY-20.

**Other income:**

Commission in its Tariff Order 2019 dated 30.05.2019 had approved other income to an extent of Rs. 270.58 Crs. for FY-20.

As per the audited accounts for FY-20(awaiting Board approval) other income is tabulated as under:

 Table 3.47 Amount in Crs

|  |  |
| --- | --- |
| **Particulars** | **2019-20** |
| Interest on Income | 9.17 |
| Profit on sale of stores | 0.26 |
| Losses/gain relating to fixed Assets | -11.01 |
| Rent | 3.19 |
| Incentive Received | 122.35 |
| Value of materials found excess during physical verification | 0.14 |
| Miscellaneous | 148.66 |
| Interest subsidy received under National Electricity Fund Scheme | 0.00 |
| Rebate 0.5% for Collection of Electricity Duty | 7.05 |
| Revenue from sale of power through Indian Energy Exchange (IEX) | 200.41 |
| **TOTAL** | **480.23** |

Major portion of other income is from incentives received i.e., Rs.122.35 Crs.

With efficient financial management, power purchase bills are being paid in advance to earn incentives on this count. Company is drawing overdraft from the commercial bank and making advance payments to the Generators to earn arbitrage in the difference of interest on over draft and the incentive earned.

In this context National Tariff policy, is also quoted for supporting the claims. National tariff policy states that

*“…….Making the distribution segment of the industry efficient and solvent is the key to success of power sector reforms and provision of services of specified standards. Therefore, the Regulatory Commissions need to strike the right balance between the requirements of the commercial viability of distribution licensees and consumer interests. Loss making utilities need to be transformed into profitable ventures which can raise necessary resources from the capital markets to provide services of international standards to enable India to achieve its full growth potential. Efficiency in operations should be encouraged. Gains of efficient operations with reference to normative parameters should be appropriately shared between consumers and licensees…………….”*

State Commission is disallowing the interest on belated power purchase payment bills under the concept that interest on working capital is being passed through. On the same lines, Incentive earned by the Distribution Company should be allowed to be retained by the Distribution Company as an efficiency gain.

BESCOM is facing serious cash flow problems. Under recovery of costs over the years ended in poor financial position. If the efficiency parameters are not appraised and not fully allowed to retain it will result in disallowing the costs and capturing the income. BESCOM requests the Hon’ble Commission to share the efficiency gain by at least 50%.

Revised other income is tabulated as under:

 Table 3.48 Amount in Crs

|  |  |
| --- | --- |
| **Particulars** | **2019-20** |
| Interest on Income | 9.17 |
| Profit on sale of stores | 0.26 |
| Losses/gain relating to fixed Assets | -11.01 |
| Rent | 3.19 |
| Incentive Received (50% of Rs 209.36) | 61.18 |
| Value of materials found excess during physical verification | 0.14 |
| Miscellaneous | 148.66 |
| Interest subsidy received under National Electricity Fund Scheme | 0.00 |
| Rebate at 0.5% for Collection of Electricity Duty | 7.05 |
| Revenue from sale of power through Indian Energy Exchange (IEX) | 200.41 |
| **TOTAL** | **419.05** |

Commission is requested to consider Rs.419.05 Crs. as other Income for FY-20.

**ABSTRACT of Truing up of FY-20:**

Based on the above analysis, the summary of ARR (after sharing of efficiency gains & losses) for the Wires Business and Supply Business, as per Audited Account and as approved by the Hon’ble Commission, for 2019-20 is presented in the table below.

**Table 3.49**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Particulars** | **Approved** | **Actual** | **Trued up** |
|  | **Revenue at existing tariff in Rs. Crs.** |  |  |  |
| 1 | Revenue from tariff and Misc. Charges | 17777.04 | 18367.22 | 18367.22 |
| 2 | Tariff Subsidy from BJ/KJ | 93.77 | 129.193 | 129.193 |
| 3 | Tariff Subsidy from IP | 2451.28 | 2674.278 | 2674.278 |
|  | **Total Revenue** | **20322.09** | **21170.69** | **21170.69** |
|  | **Expenditure in Rs. Crs.** |  |  |  |
| 4 | Power Purchase Cost | 15717.97 | 15956.91 | 15757.68 |
| 5 | Transmission charges of KPTCL | 1741.81 | 1741.81 | 1741.81 |
| 6 | Transmission charges of PGCIL | 829.46 | 1630.14 | 1630.14 |
| 7 | SLDC/POSOCO Charges | 11.18 | 16.49 | 16.49 |
|  | **Power Purchase Cost including cost of transmission** | **18300.42** | **19345.35** | **19144.94** |
| 8 | Employee Cost |  | 1513.41 | 1591.14 |
| 9 | Repairs and Maintenance |  | 113.83 | 114.83 |
| 10 | Admin & General Expenses |  | 459.91 | 390.00 |
|  | **Total O&M Cost** | **1890.61** | **2087.15** | **2095.97** |
| 11 | Depreciation | **535.52** | **753.53** | **753.53** |
|  | **Interest & Finance Charges** |  |  |  |
| 12 | Interest on Loans | 430.91 | 489.28 | 489.28 |
| 13 | Interest on Working capital | 404.53 | 380.25 | 419.25 |
| 14 | Interest on consumer deposits | 276.63 | 238.87 | 238.87 |
| 15 | Other Interest & Finance charges | 4.0 | 0.59 | 22.29 |
| 16 | **Less interest & other expenses capitalized** | 99.75 | 206.48 | 212.39 |
|  | **Total Interest and Finance charges** | **1016.32** | **902.51** | **957.30** |
| 17 | Other debits |  |  | **12.21** |
| 18 | Net Prior period debit/credits |  |  |  |
| 19 | Return on Equity | 193.59 | 146.51 | 179.3 |
| 20 | Funds towards Consumer Relations/Consumer | 1 |  |  |
| 21 | Income tax/Deferred tax liability |  | 5.83 | 5.83 |
| 22 | Other Income | 270.58 | 480.23 | 419.05 |
|  | Surplus for FY18 carried forward | 392.46 |  |  |
|  | Incentive for decreasing distribution loss |  |  |  |
|  | **ARR** | **21274.42** | **22760.65** | **22730.07** |
|  | **GAP** | **-952.33** | **-1589.96** | **1559.37** |
|  |  |  |  |  |
|  | Sales | 28858.33 | 27834.6 | 27834.6 |
|  | **Average cost of supply** | **7.37** | **8.18** | **8.17** |

Considering Aggregate Revenue Requirement and total Revenue, the revised gap works out to deficit of Rs. 1559.37 Crs. as against Rs. 952.33 Crs., deficit approved in Tariff Order 2019, dated 30.05.2019 by the Hon’ble Commission.

**Average Cost of Supply:**

Commission determined the average cost of supply at Rs.8.17 per unit for FY-20. Actual Average Cost of Supply is tabulated below:

**Table 3.50**

|  |  |
| --- | --- |
| **Particulars** | **FY-20** |
| **Approved** | **Actual** |
| Net ARR (in Crs.) | 21274.42 | 22730.07 |
| Approved/Actual Sales (MU) | 28858.33 | 27834.6 |
| Average Cost of Supply (Rs./unit) | 7.37 | 8.17 |

As per proposed trued up figures, average cost of supply shoots up to Rs. 8.17 per unit as against approved average cost of Supply of Rs. 7.37 per unit.

Thus the actual Revenue Gap for FY-20 works out to deficit of Rs. 1559.37 Crs. BESCOM requests the Hon’ble Commission to allow BESCOM the true up requirement as submitted above.