# CHAPTER – 6

# NEW PROPOSALS

1. **Domestic tariff:**

Domestic tariff is one of the categories which always requires cross subsidy from the other categories. Consumption under this category constitutes about 26% of the total BESCOM’s consumption. Loss level, Operation cost and providing infrastructures are very high but utilization of net work is minimal. Hence, the average cost of supply to this category is very high on the contrary the revenue realization is lower.This category needs segmentation and appropriate relief to the economically weaker section.

**The consumption patterns of consumers are listed in the below table:**

|  |  |
| --- | --- |
| **Slabs** | **Urban** |
| **Consumers** | **Consumption** |
| **0-30** | 28.3% | 3.2% |
| **31-100** | 41.4% | 25.6% |
| **101-200** | 22.7% | 34.6% |
| **For Monthly units between 201 and 300** | 5.2% | 15.3% |
| **For Monthly units between 301 and 400** | 1.3% | 5.9% |
| **For Monthly units above 401**  | 1.1% | 15.4% |

# The approved tariff structure fetches an average of rate of Rs. 7.47 per unit from the domestic consumers as against the approved average cost of supply of Rs. 8.14 per unit.

# Existing Tariff for LT-2a(i) Category:

|  |
| --- |
| Energy Charges (Rs/units) for units consumed in a month as per Tariff Order-2020, dtd: 04.11.2020 |
| 0.30 units (Lifeline consumption) | 4.00 |
| 31-100 units | 5.45 |
| 101-200 units | 7.00 |
| 201 units and above | 8.05 |

# BESCOM is proposing a non-telescopic tariff with reduced energy charges upto 200 units as the State has surplus power situation. BESCOM has proposed consumption wise segregation of its consumers in domestic category as a methodology of intra cross subsidization.

# BESCOM intends to supply power to the domestic consumers at lower tariff. The present tariff structure demands cross subsidization to domestic consumers from other categories viz. HT industries, HT Commercial, LT Commercial, etc. Due to this other cross subsidizing consumers are leaving the grid. Hence, BESCOM has proposed non-telescopic tariff to retain back the HT consumers by avoiding cross subsidization.

According to the new proposal the tariff rates upto 200 units slabs are reduced. Hence the sales are expected to increase under this category. The ARR as per the proposed tariff rates works out to be 7.96 with the additional revenue of 620 Crs.

The proposed energy charges are as shown in the below table:

|  |
| --- |
| Energy Charges (Rs/units) for units consumed in a month |
| 0-30 units (Lifeline consumption) | 3.40 |
| 0-100 units (all units) | 4.80 |
| 0-200 units (all units) | 5.80 |
| 0-300 units (all units) | 6.75 |
| 0-400 units (all units) | 7.50 |
| 0-401 units and above (all units) | 7.75 |

Revenue impact due to proposed tariff for different slabs is compared and shown in the below table:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Existing tariff** | **Proposed tariff** |  |  |  |  |
| **Consumers** | **Consumer %** | **Consumption %** | **EC** | **EC** | **Consumer** | **Energy in MU** | **Existing FC** | **EC as per proposed tariff** |
|   | 6840620 | 6960.10 |   |   |   |   |   |   |
| Non telescopic |   |   |   |   |   |   |   |   |
| 0-30 | 28.3 | 3.2 | 4.0 | 3.40 | 1935896 | 222.72 | 1352.00 | 75.73 |
| 31-100 | 41.4 | 25.6 | 5.45 | 4.80 | 2832017 | 1781.79 | 855.26 |
| 101-200 | 22.7 | 34.6 | 7.0 | 5.80 | 1552821 | 2408.20 | 1396.75 |
| For Monthly units between 201 and 300(all units) (i.e 1 to 300) | 5.2 | 15.3 | 4.0 / 5.45/ 7.0/ 8.05 | 6.75 | 355712 | 1064.90 | 718.80 |
| For Monthly units between 301 and 400(all units) (i.e. 1 to 400) | 1.3 | 5.9 | 4.0 / 5.45 /7.0 /8.05 | 7.50 | 88928 | 410.65 | 307.98 |
| For Monthly units above 401 (all units) | 1.1 | 15.4 | 4.0 / 5.45/ 7.0 / 8.05 | 7.75 | 75247 | 1071.86 | 830.69 |
|   |   |   |   |   |   |   |   |
| **Total** |   |   |   |   | **6840620** | **6960.10** | **1352.00** | **4185.22** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Existing** | **Proposed** |  |  |
| **Consumption in MU** | **FC** | **EC** | **Total** | **ARR** | **FC** | **EC** | **Total** | **ARR** | **Addl. Revenue due to increase in tariff** |
| 6960.10 | 1352 | 3923.76 | 5275.65 | 7.58 | 1352 | 4185.22 | 5537.22 | 7.96 | 261.46 |

The revenue computed as per the proposed non-telescopic tariff is 4185.22 Crs. as against revenue as per existing tariff of Rs. 3923.76 Crs. There is an increase of 261.46 Crs. in energy charges. The ARR as per the proposed non-telescopic tariff is Rs. 7.96 /unit as against the existing ARR of Rs. 7.58 /unit.

**New Domestic tariff proposals are as under:**

* Rs. 3.40 per unit upto 30 units (all units)
* Rs. 4.80 per unit for the consumption from 31 units to 100 units (all units)
* Rs. 5.80 per unit for the consumption from 101 units to 200 units (all units)
* Rs. 6.75 per unit for the consumption from 201 units to 300 units (all units)
* Rs. 7.50 per unit for the consumption from 301 units to 400 units (all units)
* Rs. 7.75 per unit for the consumption above 401 units (all units)
1. **Proposed Incentive Scheme to HT industrial consumers:**
* **Preamble:**

The State is having surplus power due to penetration of more Renewable Energy into the Grid. The availability of energy from different sources is more than quantum required by all ESCOMs. The RE power has must run stature & doesn’t come under Merit order dispatch. To off-take the RE Power, the thermal stations having higher variable cost is backed down & kept under Reserve Shut Down(RSD). Due to fourth & fifth amendments to CERC Deviation Settlement Regulations, more discipline in the Grid is to be ensured and if not adhered to the additional charges & penalties are to be paid due to sign change & under drawals.

Hitherto surplus power was traded in Indian Energy Exchange (IEX). Due to depletion of rates in IEX, the quantum put to bid is not cleared and revenue from sale of power in IEX is minimum.

To avoid the additional charges & penalties for DSM & quoting the surplus quantum at cheaper rate in IEX, BESCOM is proposing an incentive scheme for HT Sales for FY-22.

* **Background**:-

BESCOM has a HT Consumer base of around 17,925 installations. Though these consumers account for 0.14% of total active Consumer base of about 123.65 lakhs, the revenue contributed by these HT Consumers amounts to 35% of total revenue of BESCOM. Hence, though they are small in number, they are the most valued consumers of BESCOM.

About 28% of consumption is from HT category. The HT category is high paying and cross subsidizing category. The trend in HT industrial and commercial sales across BESCOM over 10 Financial Years is shown in the table below.

|  |
| --- |
| **HT 2a, 2b and 2c sales trend** |
|  **Year** | **Sales in MU** | **Growth Compared to previous year in MU** |
| FY-10 | 5677.38 |   |
| FY-11 | 6295.41 | 618.03 |
| FY-12 | 7010.50 | 715.08 |
| FY-13 | 7693.43 | 682.94 |
| FY-14 | 8014.52 | 321.09 |
| FY-15 | 7735.34 | -279.18 |
| FY-16 | 7440.66 | -294.68 |
| FY-17 | 7345.85 | -94.80 |
| FY-18 | 7345.30 | -0.50 |
| FY-19 | 7282.82 | -62.50 |
| FY-20 | 6850.20 | -432.62 |

From the above table, it can be seen that there is a downward trend in HT sales consistently under achieving KERC targets. There is a phenomenal decrease in HT sales growth from FY-15 onwards. The decrease in growth in sales has clearly affected BESCOM adversely as they are high paying and cross subsidizing category.

* **Reasons attributable for downward trend in HT sales:**

There is continuous upward movement in off-grid consumption during the last 5 Financial Years. The trend is shown in the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Captive** | **Wheeling (Non captive)** | **OPEN ACCESSS** | **Total** |
| **No of consumer** | **Consumption in mu** | **No of consumer** | **Consumption in mu** | **No of consumer** | **Consumption in mu** | **No of consumer** | **Consumption in mu** |
| **FY-16** | 140 | 63.06 | 336 | 1264.29 | 72 | 478.73 | 548 | 1806.07 |
| **FY-17** | 231 | 441.19 | 322 | 1373.56 | 149 | 1189.72 | 702 | 3004.47 |
| **FY-18** | 231 | 1020.97 | 400 | 1294.73 | 163 | 1238.33 | 794 | 3554.04 |
| **FY-19** | 182 | 1040.22 | 444 | 2752.12 | 96 | 468.35 | 722 | 4260.69 |
| **FY-20** | 202 | 1157.22 | 448 | 3068.23 | 46 | 378.825 | 696 | 4604.28 |

As can be seen from the table, BESCOM has lost 3554.04 of sales in FY-18 and the same is 4260.69 MU for FY-19 and has increased to 4604.28 MU during FY-20. With the HT category ARR of Rs 9.48 for FY-20, the probable loss in revenue would approximately Rs 3388.46 Crs. (excluding captive consumption) for BESCOM for FY-20. As price is the major criteria, BESCOM Consumers are opting for Open Access/Wheeling, where they get power at a lower rate. The Renewable Purchase Obligation (RPO) which mandates procurement of a specific percentage of the total energy requirement from renewable sources is also one of the reasons for Consumers opting out of BESCOM grid. The RE generators sell power produced at lower rates.

The other reasons that could be attributed for downward trend in HT sales are as listed below.

1. Consistent increase in approved HT Tariff. In the last five years energy charge has gone by 207 paise/kWh (Energy charges are steeply increasing, whereas Demand charge has hardly gone up. As a result, fixed charge recovery has come down and energy charges are realized less on account of consumers moving away from the grid)
2. Waiver of wheeling charges for Solar energy.
3. Capturing of BESCOM HT consumers by NCE generators located in the jurisdictions of other ESCOMs.
4. NCE generators could be absorbing the additional Cross subsidy surcharge levied to the consumers who are participating in wheeling transaction and offering a price at a lower rate than the BESCOM tariff.
5. Would enable them to buy Green power (at a cheaper rate than the rate offered by discoms) – Green power tariff of KERC is 50 paise more than the normal tariff, which has to be met out of the renewable energy procured by discoms over and above their RPO.
* **Impact of downward trend in HT sales on BESCOM:**

As the collection efficiency in HT category is little below 100%, the reduction in sales has resulted in reduction of profitable consumption.

* Technical loss cross subsidization (as HT consumption decreases, technical loss will go up and affect the overall loss levels)
* Monetary loss (Higher HT sales would have given the required cross subsidization to BESCOM. But with less sales, it will affect the financials and increase the gap)

The other impacts are as listed below-

* Increases working capital requirements (collection from HT is 99.71%) and non-profitable sales.
* Imposes higher subsidy burden on State as the cross subsidy that was coming from HT will come down from reduction in HT sales.
* **Consumers who have opted OA/Wheeling:**

494 Number of Consumers have opted for OA/Wheeling. 80% of these come from Bangalore Metropolitan Area Zone. HT-2(a) and HT-2(b) consumers have largely moved out of BESCOM grid. These comprise of major industries and IT enabled service firms.

* **Corrective action initiated by BESCOM**
1. Considering the seriousness of the issue, BESCOM initiated action to interact with HT industrial Consumers and to ascertain the reasons for their moving away from the grid. While appreciating this move, as one of the rare initiatives to encourage the HT industrial consumption, several consumers expressed that they are willing to come back to BESCOM if:-
2. They are offered price/unit at a competitive rate.
3. BESCOM can issue certificates/letters for the incremental energy drawn by them as sourced from NCE to meet their RPO obligations
4. Certainty of discounted tariff rate over the year is assured (i.e. Rs.6/unit).

1. BESCOM has computed the financials by retaining the consumption projected by BESCOM at the Commission approved rate in tariff Order-2020, dtd: 04.11.2020. The consumer who’s consumption in a month exceeds the previous year i.e. FY-21 average consumption by 10% is offered a discounted rate of Rs.6/unit. We have further examined the possible sales growth (incremental energy consumption) at 10%. BESCOM is targeting IEX consumers and open access consumers.
2. The Revenue Realization pre and post introduction of the incentive scheme has also been worked and shown in the financial model.
* **Introduction of HT Incentive Scheme:**

BESCOM proposes Incentive Scheme for HT Industrial/Commercial/Educational Institutes and Hospitals consumers whose consumption exceeds 1 lakh and above consumption. Additionally, actual consumption in a month for the current year shall be 10% more than the average consumption of previous year.

The discount rate will be less than the landed cost charged by IEX and wheeling and Banking Generators for non –solar, non-captive use, as one of its efforts to bring back HT Consumers to its grid during monsoon period. It will be a win –win situation for both BESCOM and the HT Consumers.

BESCOM through this incentive scheme is attempting to generate additional revenue from HT consumers by encouraging them to consume 10% more than the average consumption of FY-21 by offering a concessional tariff rate. In case the consumers get attracted to this scheme, HT sales will go up, which in-turn would help BESCOM to come closer to achieving the HT sales target approved by the Commission during FY-22. This will have a positive impact on the cross subsidy generation also, which in-turn could reduce the subsidy burden on State Government for the respective year/s.

* 1. **Categories proposed for the scheme**

Based on sales trend, ARR and present tariff rate, the following HT categories are proposed to be included in the scheme.

1. HT-2(a)(i) – Industrial Category in BBMP area.
2. HT-2(a)(ii)- Industrial Category in Non- BBMP area.
3. HT-2(b)(i)-Commercial Category in BBMP area.
4. HT-2(b)(ii)- Commercial Category in Non- BBMP area.
5. HT-2(c)(i)- Educational Institutes and Hospitals Category in BBMP area.
6. HT-2(c)(ii)- Educational Institutes and Hospitals Category in BBMP area.
	1. **How the scheme works (How Consumers and BESCOM are benefited from the scheme).**

An incentive rate i.e., price/kwh is arrived at, for HT Industrial/Commercial/Educational Institutes and Hospitals consumers consuming whose consumption exceeds 1/2 lakh and above consumption for HT-2a, 2c/HT-2b respectively. Additionally, actual consumption in a month for the FY-22 shall be 10% more than the average consumption of FY-21. BESCOM is imposing a discount rate at Rs. 6/unit for consumption over and above the average consumption of FY-21.

With these proposed incentive rates, the expected increase in sales and corresponding revenue is also worked out as shown in table below. The sales in these category increase from **10% per month,** which works out to around 452.6 MU (10% increase considered) for one year, results in incremental revenue of Rs. 272 Crores for one year. BESCOM is expecting incremental sales after enforcement of this scheme the additional demand will be catered by the surplus power available in the State.

**HT-2a:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Tariff cat.** | **Tariff description** | **Slab** | **Actual Sales (Mus) FY 22** | **Slab wise % of sales** | **Energy Charges rate (Rs./kwh)** | **Revenue as per appd. Tariff Rs. Crs.**  | **Increase in sales at 10% on actual sales in MU** | **Discount rate proposed (Rs./kwh)** | **Revenue as per discount tariff for incremental sales Rs. Crs.** |
| HT 2a(i) | Indl. BBMP area | First 1 lakh units | 1613.47 | 28 | 7.35 | 332.1 | 45.2 | 6.00 | 27.11 |
|   |   | Balance units |   | 65 | 7.65 | 802.3 | 104.9 | 6.00 | 62.93 |
|   | Indl. BBMP area(66kv & above) | First 1 lakh units |   | 2 | 7.35 | 23.7 | 3.2 | 6.00 | 1.94 |
|   |   | Balance units |   | 5 | 7.65 | 61.7 | 8.1 | 6.00 | 4.84 |
| HT 2a(ii) | Other than HT 2(a)i | First 1 lakh units | 1264.02 | 40 | 7.25 | 366.6 | 50.6 | 6.00 | 30.34 |
|   |   | Balance units |   | 59 | 7.45 | 555.6 | 74.6 | 6.00 | 44.75 |
|   | Other than HT 2(a)(i)-(66kv & above) | First 1 lakh units |   | 0.4 | 7.25 | 3.7 | 0.5 | 6.00 | 0.30 |
|   |   | Balance units |   | 0.6 | 7.45 | 5.7 | 0.8 | 6.00 | 0.46 |
| **Total of (HT-2a)** | **2877.49** |  |  | **2151.3** | **287.7** |  | **172.6** |

**HT-2b:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Tariff cat.** | **Tariff description** | **Slab** | **Actual Sales (Mus) FY 22** | **Slab wise % of sales** | **Energy Charges rate (Rs./kwh)** | **Revenue as per appd. Tariff Rs. Crs.**  | **Increase in sales at 10% on actual sales in MU** | **Discount rate proposed (Rs./kwh)** | **Revenue as per discount tariff for incremental sales Rs. Crs.** |
|
| HT 2b(i) | Indl. BBMP area | First 2 lakh units | 1298.84 | 35 | 9.15 | 415.95 | 45.46 | 6.00 | 27.28 |
| Balance units | 64 | 9.25 | 768.92 | 83.13 | 6.00 | 49.88 |
| Indl. BBMP area(66kv & above) | First 2 lakh units | 0.4 | 9.15 | 4.75 | 0.52 | 6.00 | 0.31 |
| Balance units | 0.6 | 9.25 | 7.21 | 0.78 | 6.00 | 0.47 |
| HT 2b(ii) | Other than HT 2(b)(i)  | First 2 lakh units | 92.40 | 39 | 8.95 | 32.25 | 3.60 | 6.00 | 2.16 |
| Balance units | 59 | 9.05 | 49.34 | 5.45 | 6.00 | 3.27 |
| Other than HT 2(b)(i)-(66kv & above) | First 2 lakh units | 1 | 8.95 | 0.83 | 0.09 | 6.00 | 0.06 |
| Balance units |   | 1 | 9.05 | 0.84 | 0.09 | 6.00 | 0.06 |
| **Total of HT-2b** | **1391.25** |  |  | **1280.09** | **139.12** |   | **83.47** |

**HT-2c:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Tariff cat.** | **Tariff description** | **Slab** | **Actual Sales (Mus) FY 22** | **Slab wise % of sales** | **Energy Charges rate (Rs./kwh)** | **Revenue as per appd. Tariff Rs. Crs.**  | **Increase in sales at 10% on actual sales in MU** | **Discount rate proposed (Rs./kwh)** | **Revenue as per discount tariff for incremental sales Rs. Crs.** |
| HT 2c(i) | Indl. BBMP area | First 1 lakh units | 130.12 | 28 | 7.10 | 25.87 | 3.64 | 6.00 | 2.19 |
| Balance units | 65 | 7.50 | 63.43 | 8.46 | 6.00 | 5.07 |
| Indl. BBMP area(66kv & above) | First 1 lakh units | 2 | 7.10 | 1.85 | 0.26 | 6.00 | 0.16 |
| Balance units | 5 | 7.50 | 4.88 | 0.65 | 6.00 | 0.39 |
| HT 2c(ii) | Other than HT 2(c)(i)  | First 1 lakh units | 127.56 | 40 | 8.10 | 41.33 | 5.10 | 6.00 | 3.06 |
| Balance units | 59 | 8.50 | 63.97 | 7.53 | 6.00 | 4.52 |
| Other than HT 2(c)(i)-(66kv & above) | First 1 lakh units | 0.4 | 8.10 | 0.41 | 0.05 | 6.00 | 0.03 |
| Balance units | 0.6 | 8.50 | 0.65 | 0.08 | 6.00 | 0.05 |
| **Total of HT-2c** | **257.68** |  |  | **202.39** | **25.77** |   | **15.46** |

* **Impact of scheme on BESCOM’s future tariff:**

Through this incentive scheme, BESCOM is attempting to generate additional revenue from HT consumers by encouraging them to consume over and above the average twelve months consumption of FY-21 by offering a concessional tariff rate. In case the consumers get attracted to this scheme, HT sales may go up, which would in-turn help BESCOM to come closer to achieving the HT sales target approved by the Commission for the year. This will have a positive impact on the cross subsidy generation also, which in-turn could reduce the subsidy burden on State Government for the respective year/s.

As far as the MYT application for the next control period and the tariff application for the ensuing year is concerned, BESCOM would like to mention here that, it will have to take in to account the projected gap of the respective year/s in to account and propose for tariff increase/rationalization wherever necessary, as implementation of HT incentive scheme alone will not address all the financial issues of the Company. However, it is to be stated that if this scheme is well received by the consumers, it could mitigate BESCOM from one burning issue i.e. improving HT sales and revenue.

Hon’ble Commission is requested to consider and approve the above proposal so that BESCOM can implement the scheme from April 2021.

* **Terms and Conditions for HT Incentive Scheme during monsoon period :**
* This scheme will be applicable only when SLDC confirms that there is surplus power situation during monsoon period
* HT consumers availing this scheme are not eligible for open access
* HT consumers can avail any one of the incentive schemes.
* ToD tariff will not be applicable during the incentive scheme.
1. **Separate HT tariff for 1 MW and above consumers**

# The Electricity Act 2003 envisaged competition in retail supply of electricity by introducing the concept of ‘Open access in phased manner. As per the definition of the ‘Open Access’ means the non-discriminatory provisions for use of transmission line or distribution system or associated facilities with such line or system any licensee or consumer or a person engaged in generation in accordance with the regulations specified by the Appropriate Commission.

# Subsequently the State Commission notified Open Access Regulations which facilitated procurement of power through the Open Access route.

# The introduction has been largely successful in promoting competition with the distribution licensees by providing consumers access to alternate sources of power. However, a number of issues have come up in the operationalization of Open Access impacting Distribution Licensee and non-open access retail supply consumers of distribution licenses.

**Issues:**

# Frequent shifting of Open Access Consumers: BESCOM unable to manage power procurement efficiently due to frequency of shifting of Open access consumers between BESCOM and other source of power.

# Cross Subsidy Surcharge: Cross subsidy surcharged calculated by the State Commission and its recovery is insufficient to recover the entire loss of cross subsidy on account of consumers procuring power through the Open Access route.

# Group captive consumers: The number of HT consumers under group captive has increased over the years. The consumers of group captive power scheme are exempted from paying cross subsidy surcharges and additional surcharge. The actual consumption by each of the captive user is only calculated at the end of the year. Even if the captive user does not comply with the conditions of group captive he enjoys the benefit till the end of year. This results in financial loss to the Company.

# Although two part tariff has been introduced, the structuring of fixed and variable components of tariff is not reflective of the actual proportion of fixed and variable cost liability of BESCOM.

* Revenue expenditure can be divided into two parts
	+ Fixed expenditure contributing 50% of the total cost and
	+ Variable expenditure contributing 50% of the total cost.

# Breakup of Fixed and variable charges approved and actual as per accounts for FY-20 is tabulated below:

|  |  |  |
| --- | --- | --- |
| **Particulars** | **Approved** | **Actual** |
| **Fixed** | **Variable** | **Total** | **Fixed** | **Variable** | **Total** |
| Generation | 4208.09 | 11509.87 | 15717.96 | 4186.51 | 11570.4 | 15756.92 |
| Transmission | 2582.45 |   | 2582.45 | 3388.45 |   | 3388.45 |
| Distribution | 3366.4 |   | 3366.4 | 3776.54 |   | 3776.54 |
| Total | 10156.94 | 11509.87 | 21666.81 | 11351.5 | 11570.4 | 22921.91 |
| Sales in Mu |   |   | 28858.33 |   |   | 27834.60 |
| **Composition per unit cost Rs./unit** | **3.52** | **3.99** | **7.51** | **4.08** | **4.16** | **8.24** |
|  | **47%** | **53%** | **100%** | **50%** | **50%** | **100%** |

* On the contrary under Revenue earned from tariff Fixed cost collected is at the rate of 18% and Variable cost collected is at the rate of 82% of the total receipt.

# Breakup of fixed/demand charges and Energy charges received for FY-20 is tabulated below:

|  |  |
| --- | --- |
| **Particulars** | **FY-20** |
| **Fixed/ Demand charges** | **Energy charges** | **Total** |
| LT-Consumers | 2237.96 | 10339.51 | 12577.46 |
| HT-Consumers | 1517.34 | 5915.15 | 7432.49 |
| Misc. |   | 1160.77 | 1160.77 |
| **Total** | **3755.30** | **17415.43** | **21170.73** |
|   | 18% | 82% | 100% |

* In majority of categories recovery of variable charges are not even at the Commission determined first slab rate. This may be due to inbuilt rebate such as voltage class rebate and incentive for Time of the Day tariff.
* Since the contribution of fixed charges is only 18% of the average realization rate the balance i.e. 32% (50%-18%) is concealed in the energy charges. Hence, the energy charge seems to be on a higher side. This is foremost reason for tapping HT consumers by generators. If the Demand/Fixed charges which is masked in the energy charges are separated then the variable cost can be reduced. Hence, it is proposed for increasing the fixed charges for HT consumers.
* Change in the approved sales mix also affects the cross subsidy level.
* If there is any reduction in sales under HT tariff, loss on account of fixed charges is at the larger extent i.e., -32%, and this will further worsen the cross subsidy level.
* Tariff determination does not consider the inbuilt rebate.

In order to reflect the actual share of fixed cost in the revenue requirement of Distribution licensees, there is need to enhance recovery through fixed charges. The fixed charge shall be so set that it leads to recovery of 100% of the fixed costs of Distribution Licensees.

The above concern of BESCOM is also highlighted in the recently issued Draft Amendments to Tariff Policy, 2018, which reads as below:

 *“In order to reflect the actual share of fixed cost in the revenue requirement of Distribution licensees, there is need to enhance recovery through fixed charges. The fixed charge shall be so set that it leads to recovery of at least 50% of the fixed costs in case of Domestic and Agriculture categories and at least 75% recovery of fixed costs in case of other categories progressively over next three years. The SERCs and JERCs shall lay down a roadmap to achieve the same.”*

Since the fixed charges are inadequate, BESCOM has to borrow some amount to meet its working capital requirements to discharge its fixed liabilities. Increasing tariff by increasing energy charges instead of fixed/ demand charges would result into steep fluctuations in revenue with varying consumption over time. It would also affect BESCOM ability to meet the fixed charges obligation.

#  Calculations are as under: Proposed Demand charges per KVA per month.

#  Existing based on FY-20:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Tariff** | **No. of Consumers** | **Load in KVA** | **Consumption in MU** | **Rate** | **Demand charges** | **Energy Charges** | **Total** | **ARR** | **Energy Charges Rs./Unit** |
| HT1 | 268 | 225413 | 762.04 | 220/KVA | 48.28 | 390.19 | 438.47 | 5.75 | 5.12 |
| HT2A | 7419 | 3440946 | 4173.06 | 230/KVA | 689.78 | 3015.96 | 3705.74 | 8.88 | 7.23 |
| HT2B | 7521 | 2432060 | 2345.62 | 250/KVA | 687.43 | 2099.34 | 2786.76 | 11.88 | 8.95 |
| HT2C | 833 | 194234 | 331.52 | 220/kVA | 47.31 | 252.66 | 299.98 | 9.05 | 7.62 |
| HT3 | 59 | 50871 | 58.42 |   | 9.18 | 9.69 | 18.88 | 3.23 | 1.66 |
| HT4 | 412 | 50309 | 78.30 | 140/KVA | 8.65 | 52.46 | 61.11 | 7.80 | 6.70 |
| HT5 | 1413 | 327575 | 89.48 | 275/HP | 26.69 | 94.85 | 121.53 | 13.58 | 10.60 |
| **Total** | **17925** | **6721408.9** | **7838.44** |  | **1517.34** | **5915.15** | **7432.46** |  |   |
| % of Recovery of Fixed and Energy components  |   |   | 20% | 80% | 100% |   |   |

# Tabulation of expected proposition of fixed charges (50%) and Energy charges (50%) as per actual expenditure incurred:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Tariff** | **No. of Consumers** | **Load in KVA** | **Consumption in MU** | **Demand charges** | **Energy Charges** | **Total** | **ARR** | **Per kVA** | **Energy Charges Rs./Unit** |
| HT1 | 268 | 225413.24 | 762.04 | 219.23 | 219.23 | 438.47 | 5.56 | 810.49 | 5.75 |
| HT2A | 7419 | 3440945.72 | 4173.059 | 1852.87 | 1852.87 | 3705.74 | 8.4 | 448.73 | 8.88 |
| HT2B | 7521 | 2432060.36 | 2345.62 | 1393.38 | 1393.38 | 2786.76 | 10.92 | 477.43 | 11.88 |
| HT2C | 833 | 194234.04 | 331.52 | 149.99 | 149.99 | 299.98 | 8.63 | 643.50 | 9.05 |
| HT3 | 59 | 50871.16 | 58.42 | 9.44 | 9.44 | 18.88 | 3.05 | 154.61 | 3.23 |
| HT4 | 412 | 50309.32 | 78.3 | 30.55 | 30.55 | 61.11 | 7.02 | 506.12 | 7.80 |
| HT5 | 1413 | 327575.09 | 89.48 | 60.76 | 60.76 | 121.53 | 12.9 | 154.58 | 13.58 |
| **Total** | **17925.00** | **6721408.93** | **7838.44** | **3716.23** | **3716.23** | **7432.46** |  |  |  |
| % of Recovery of Fixed and Energy components  |   | 50% | 50% | 100% |   |   |   |

# Hence, it is proposed to revise the demand charges for the consumers of 1 MW and above consumers to avoid the loss of fixed charges, if the consumers opt for open access.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Tariff** | **No. of Consumers** | **Load in KVA** | **Consumption in MU** | **Demand charges** | **Energy Charges** | **Total** | **ARR** | **Proposed** |
| **Per KVA** | **Per unit** |
| HT2A | 7419 | 3440945.72 | 4173.06 | 1852.87 | 1852.87 | 3705.74 | 8.40 | 448.73 | 4.44 |
| HT2B | 7521 | 2432060.36 | 2345.62 | 1393.38 | 1393.38 | 2786.76 | 10.92 | 477.43 | 5.94 |
| HT2C | 833 | 194234.04 | 331.52 | 149.99 | 149.99 | 299.32 | 8.63 | 643.50 | 4.52 |

# Commission requested to increase the demand charges at least for the consumers of 1 MW and above. This will not only helping BESCOM to charge reflective proportion of fixed cost but also helps in developing the competence to participate in the open market to catch the consumers.

The following table compares Demand Charges for HT Industrial category consumers among some of the States. BESCOM submits that the fixed charges in the neighboring states are relatively higher than those approved for BESCOM. Such charges eventually lead to appropriate fixed charge recovery for these States.

**Madhya Pradesh:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sub-Category of consumer** | **Monthly Fixed Charge (Rs./kVA of billing demand per month)** | **Energy Charge for consumption up to 50% load factor (paise/ unit)** | **Energy Charge for consumption in excess of 50% load factor (paise /unit)** |
| **Industrial** |
| 11 kV supply | 340 | 700 | 600 |
| 33 kV supply  | 560 | 690 | 590 |
| 132 kV supply  | 650 | 650 | 550 |
| **Non-Industrial** |
| 11 kV supply | 320 | 730 | 640 |
| 33 kV supply  | 460 | 710 | 620 |
| 132 kV supply  | 550 | 670 | 560 |
| **Shopping malls** |
| 11 kV supply | 330 | 710 | 635 |
| 33 kV supply  | 380 | 700 | 600 |
| 132 kV supply  | 510 | 650 | 580 |
| **Power intensive industries** |
| 33 kV supply  | 560 | 530 | 530 |
| 132 kV supply  | 660 | 510 | 510 |

**Tamil Nadu:**

|  |
| --- |
| **HT INDUSTRIES(HT-1A) Rs./kVA** |
| Fixed charges | 350/kva/month |
| Energy charges  | 6.35 |
| **Railway traction** |
| Fixed charges | 300/kva/month |
| Energy charges  | 6.35 |
| **Govt. Educational institution** |
| Fixed charges | 350/kva/month |
| Energy charges  | 6.35 |
| **Pvt. Educational institution** |
| Fixed charges | 350/kva/month |
| Energy charges  | 6.35 |
| **HT commercial** |
| Fixed charges | 350/kva/month |
| Energy charges  | 8.00 |

**Andhra Pradesh:**

|  |  |  |  |
| --- | --- | --- | --- |
| **HT-I(A): General** |  | **Fixed/Demand Charges in/ Month** | **Energy Charges /Unit** |
| 132 KV and above | kVAh | 475 | 5.44 |
| 33 KV | kVAh | 475 | 5.87 |
| 11 KV | kVAh | 475 | 6.33 |

**Kerala:**

|  |
| --- |
| **HT-1(A)-Industries** |
| Demand Charges Rs. /Unit | 300 |
| Energy Charges Rs. /Unit | 5.50 |

**Telangana:**

|  |  |  |  |
| --- | --- | --- | --- |
| **HT-I(A): Industries** |  | **Fixed/Demand Charges in/ Month** | **Energy Charges Rs. /Unit** |
| 132 KV and above | kVAh | 390 | 6.65 |
| 33 KV | kVAh | 390 | 6.15 |
| 11 KV | kVAh | 390 | 5.65 |

**Maharashtra (Mahadiscom)**

|  |  |  |
| --- | --- | --- |
| **HT industrial** |  |  |
| **Consumer Category** | **Demand Charge (Rs/ kVA/ month)** | **Energy Charge (Rs/kWh)** |
| HT I: HT – Industry  |  |  |
| HT I (A): Industry - General  | 411 | 7.02 |
| HT I (B): Industry - Seasonal | 411 | 7.28 |
|  |  |  |
| **HT Commercial** |  |  |
| **Consumer Category** | **Demand Charge (Rs/ kVA/ month)** | **Energy Charge (Rs/kWh)** |
|  All Units  | 411 | 11.47 |

BESCOM has proposed increase in Demand Charges and uniform tariff rates for all units Consumed.

1. **Continuation of Special Incentive Scheme:**

The Hon’ble Commission in its Tariff Order 2020, dtd 04.11.2020 had decided to continue the HT incentive scheme for one year with effective from 01.04.2020 for FY-21 in an attempt to bring back the EHT/HT consumers who are availing power through open access.

In the said incentive scheme, rebate of Rs.1/unit for the consumption over and above the base consumption during 10:00 hrs to 18:00 hrs and rebate of Rs.2/unit during 22:00 hrs to 06:00 hrs is extended. Further, during 10:00 hrs to 18:00 hrs if the SIS consumer’s consumption during 10:00 hrs to 18:00 hrs does not exceed the base consumption, still rebate of Rs.2/unit is extended during 22:00 hrs to 06:00 hrs.

At the end of October-2020, **118** HT/EHT Consumer have opted for Special Incentive Scheme, out of which more than 35 installations have not reached the base consumption but still BESCOM is extending rebate of Rs.2/unit.

In order to encourage HT consumers to consume more BESCOM power, it is requested to continue the above said scheme for coming financial year.