

## CHAPTER -7

### NEW PROPOSALS

#### **I. Reduction of fixed charges to domestic consumers below 5 KW.**

The fixed charges for domestic consumers LT-2a (i) upto 1kW is Rs.85 per kW. Even if the consumer has sanctioned load between 240 watts to 1 KW the billing demand is for 1 kW. i.e. the consumers with sanctioned load between 240 watts to 750 watts, then they have to pay fixed charges equivalent to 1 kW. This increases the average realization rate of consumers with sanctioned load less than 1 kW, this can be seen in the table below:

<b>Tariff Category</b>	<b>Type of installation</b>	<b>Sanctioned load</b>	<b>Estimated units</b>	<b>Fixed charges</b>	<b>Energy charges</b>	<b>Total</b>	<b>ARR</b>
<b>LT 2(a)(i)</b>	Applicable to areas coming under Bruhat Bangalore Mahanagar apalike (BBMP), Davanagere city Municipal Corporation and all urban Local Bodies Domestic/ Non Domestic Non-commercial lighting only	240 watts	11	85	45	130.10	<b>11.83</b>
		241 -500 watts	23	85	94	179.30	<b>7.80</b>
		501-750 watts	34	85	139	224.40	<b>6.60</b>
		751-1000 watts	45	85	185	269.50	5.99
		1001-1250 watts	56	108.75	238	347.05	6.20
		1251-1500 watts	68	132.5	305	437.40	6.43
		1501-1750 watts	79	156.25	366	522.20	6.61
		1751-2000 watts	90	180	427	607.00	6.74
		3KW	135	275	731	1006.00	7.45
		4KW	180	370	1051	1420.50	7.89
		5KW	225	465	1396	1861.25	8.27
		50kW	2250	4740	17900	22640.00	10.06
		60kW	2700	6240	21568	27807.50	10.30
		100kW	4500	12240	36238	48477.50	10.77

The average realization rate for 240 watts consumer is Rs.11.83/unit which is higher than the ARR for domestic consumers with greater than 1kW sanctioned load. Similarly, the average realization rate of 241-500 watts and 501-750 watts consumer is more than the 1kW consumer. Hence, it is proposed to reduce the fixed charges of consumers below 1 kW and increase the fixed charges of consumers above 1 kW.

The domestic tariff of Delhi is shown in the below table:

**Delhi:**

**BSES RAJDHANI POWER LIMITED:**

		<b>0-200 units</b>	<b>201-400 units</b>	<b>401-800 units</b>	<b>801-1200 units</b>	<b>&gt;1200 units</b>
upto 2 kW	Rs. 20/kW/month	Rs. 3.00 /kW	Rs. 4.50 /kW	Rs. 6.50 /kW	Rs. 7.00 /kW	Rs. 8.00 /kW
>2 kW and <=5 kW	Rs.50/kW/month					
>5 kW and <=15 kW	Rs.100/kW/month					
>15 kW and <=25 kW	Rs.200/kW/month					
>25 kW	Rs.250/kW/month					

**BSES YAMUNA POWER LIMITED:**

		<b>0-200 units</b>	<b>201-400 units</b>	<b>401-800 units</b>	<b>801-1200 units</b>	<b>&gt;1200 units</b>
upto 2 kW	Rs.20/kW/month	Rs. 3.00 /kW	Rs. 4.50 /kW	Rs. 6.50 /kW	Rs. 7.00 /kW	Rs. 8.00 /kW
>2 kW and <=5 kW	Rs.50/kW/month					
>5 kW and <=15 kW	Rs.100/kW/month					
>15 kW and <=25 kW	Rs.200/kW/month					
>25 kW	Rs.250/kW/month					

**TATA POWER DELHI DISTRIBUTION LIMITED:**

		<b>0-200 units</b>	<b>201-400 units</b>	<b>401-800 units</b>	<b>801- 1200 units</b>	<b>&gt;1200 units</b>
upto 2 kW	Rs.20/kW/ month	Rs. 3.00 /kW	Rs. 4.50 /kW	Rs. 6.50 /kW	Rs. 7.00 /kW	Rs. 8.00 /kW
>2 kW and <=5 kW	Rs.50 /kW/ month					
>5 kW and <=15 kW	Rs.100/kW/ month					
>15 kW and <=25 kW	Rs.200/kW/month					
>25 kW	Rs.250/kW/ month					

**DELHI MUNICIPAL COUNCIL:**

		<b>0-200 units</b>	<b>201- 400 units</b>	<b>401- 800 units</b>	<b>801- 1200 units</b>	<b>&gt;1200 units</b>
upto 2 kW	Rs.20/kW/ month	Rs. 3.00 /kW	Rs. 4.50 /kW	Rs. 6.50 /kW	Rs. 7.00 /kW	Rs. 8.00 /kW
>2 kW and <=5 kW	Rs.50/kW/ month					
>5 kW and <=15 kW	Rs.100/kW/ month					
>15 kW and <=25 kW	Rs.200/kW/ month					
>25 kW	Rs.250/kW/month					

The new Fixed charges for domestic category consumers under tariff schedule LT-2a (i) and LT-2a (ii) proposed by BESCOM is shown in the below table.

**LT-2a1**

	<b>Existing</b>		<b>Proposed</b>	
	Fixed Charges per month	For the first KW	Rs. 85 per KW	For the first KW
For every additional KW up to and inclusive of 50 KW		Rs. 95 per KW	For every additional KW above 1 kW up to and inclusive of 5 KW	RS. 100 per KW
			For every additional KW above 5 kW up to and inclusive of 10 KW	RS. 200 per KW
			For every additional KW above 10 kW up to and inclusive of 50 KW	RS. 250 per KW
For every additional KW above 50 KW		150 paise/KW	For every additional KW above 50 KW	RS. 285 per KW

**LT-2a2**

	<b>Existing</b>		<b>Proposed</b>	
	Fixed Charges per month	For the first KW	Rs. 70 per KW	For the first KW
For every additional KW up to and inclusive of 50 KW		Rs. 85 per KW	For every additional KW above 1 kW up to and inclusive of 5 KW	RS. 90 per KW
			For every additional KW above 5 kW up to and inclusive of 10 KW	RS. 180 per KW
			For every additional KW above 10 kW up to and inclusive of 50 KW	RS. 225 per KW
For every additional KW above 50 KW		Rs. 140 per KW	For every additional KW above 50 KW	RS. 250 per KW

## **II. Proposal to increase Demand charges for HT 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 by 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 of Open Access has been largely successful in promoting competition with the distribution licensees 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:**

#### **1. Frequent shifting of Open Access Consumers:**

BESCOM not able to manage power procurement efficiently due to frequency of shifting of Open access consumers between BESCOM and other source of power.

#### **2. 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.

#### **3. 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 payment of cross subsidy surcharges and additional surcharge. The actual consumption by

each of the captive user is calculated only at the end of the year. Even if the captive user does not comply with the conditions of group captive, the consumer enjoys the benefit till the end of year. This results in financial loss to the Company.

#### 4. Two-part Retail power tariff not reflective of actual components:

Although retail power tariff is based on two-part tariff principles, the same is not reflective of actual components of fixed and variable cost being incurred by BESCOM. As the fixed/demand charges is substantially less and energy charges is more, many HT Consumers are moving away from grid and opting for Open Access.

**Details of HT Consumer opted for Open Access/Captive Power/Group Captive power 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
<b>FY-18</b>	231	1020.97	400	1294.73	163	1238.33	794	3554.04
<b>FY-19</b>	182	1040.23	444	2752.22	96	468.35	722	4260.80
<b>FY-20</b>	202	1157.22	448	3068.23	46	378.83	696	4604.28
<b>FY-21</b>	203	1006.34	501	2978.08	40	305.87	744	4290.29

#### HT Sales Vs Open Access Sales:

Year	Open Access		HT sales	
	No of consumer	Consumption in MU	No of consumer	Consumption in MU
<b>FY-18</b>	563	2533.06	14920	8204.96
<b>FY-19</b>	540	3220.57	16336	8210.56
<b>FY-20</b>	494	3447.06	17925	7838.44
<b>FY-21</b>	541	3283.95	18928	6274.01

Under the two-part tariff mechanism, the total expenditure of distribution Company can be divided into two parts viz., Fixed Cost and Variable Cost. The Marginal Costing principles which envisage two part cost bifurcation envisages recovery of fixed cost in full at the first instance (which is termed as contribution) followed by recovery of variable cost. Accordingly, the loss area, break-even point, profit area and margin of safety are computed to ascertain the performance and its impact.

The Fixed expenditure of **BESCOM** is contributing **51%** of the total cost and Variable expenditure contributing **49%** of the total cost.

Breakup of Fixed and variable charges approved and actual as per accounts for FY-21 is tabulated below:

**(Cost in Rs. Crs.)**

Particulars	Approved			Actual		
	Fixed	Variable	Total	Fixed	Variable	Total
Generation	7366.68	8237.44	15604.1	3186.96	10727.4	13914.4
Transmission	2930.77		2930.77	3406.68		3406.68
Distribution	5836.97		5836.97	4540.55		4540.55
<b>Total</b>	<b>16134</b>	<b>8237.44</b>	<b>24372</b>	<b>11134</b>	<b>10727.4</b>	<b>21862</b>
Sales in MU			29950.5			25262.93
Composition per unit cost Rs./unit	4.74	2.75	7.49	4.41	4.25	8.65
	<b>66%</b>	<b>34%</b>	<b>100%</b>	<b>51%</b>	<b>49%</b>	<b>100%</b>

The revenue realization through retail power tariff should have been in the above proportion. However, the Revenue earned by BESCOM (based on approved tariff) from tariff comprise of Fixed cost recovery at 17% and Variable cost collected is 83% of the total receipt.

**Breakup of fixed/demand charges and Energy charges received for FY-21 is tabulated below:**

Particulars	FY-21		
	Fixed/Demand charges	Energy charges	Total
LT-Consumers	1,736.52	10,450.44	12,186.96
HT-Consumers	1,691.99	4,514.71	6,206.70
Misc.		1,287.24	1,287.24
<b>Total</b>	<b>3,428.51</b>	<b>16,252.38</b>	<b>19,680.89</b>
	17%	83%	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 17% of the average realization rate the balance i.e. 34% (51%-17%) 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 private generators. If the Demand/Fixed charges which is masked in the energy charges are separated then the variable cost can be reduced.

This composition of cost recovery also has an impact on cross subsidy amount. If there is any reduction in sales under HT category, the loss on account of fixed charges is to a larger extent i.e., -34%, and this will further worsen the cross-subsidy level. Change in approved sales mix also affect the cross-subsidy level. Tariff determination does not consider the inbuilt rebate. Hence, it is proposed for increasing the fixed charges for HT consumers.

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 recovered 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 in steep fluctuations in revenue with varying consumption over time. It would also affect BESCOM ability to meet the fixed charges obligation.

**Proposed Demand charges per KVA per month:**

**Existing based on FY-21:**

Tariff	No. of Consumers	Load in KVA	Consumption in MU	Rate	Demand charges	Energy Charges	Total	ARR	Energy Charges Rs./Unit
HT1	278	237868	796.61	220/KVA	53.38	419.23	472.61	5.93	5.26
HT2A	7702	3527548	3505.08	230/KVA	811.68	2547.92	3359.6	9.58	7.27
HT2B	7843	2517517	1466.98	250/KVA	640.45	1285.65	1926.1	13.13	8.76
HT2C	904	203544	243.04	220/kVA	45.68	189.83	235.5	9.69	7.81
HT3	65	58021	95.38	80/HP	7.85	21.40	29.25	3.07	2.24
HT4	465	53122	79.15	140/KVA	5.8	54.75	60.55	7.65	6.92
HT5	1671	80468	87.75	275/HP	26.55	96.53	123.08	14.03	11.00
<b>Total</b>	<b>18928</b>	<b>6678089</b>	<b>6274.01</b>		<b>1691.99</b>	<b>4514.71</b>	<b>6206.7</b>		
% of Recovery of Fixed and Energy components					27%	73%	100%		

**Tabulation of expected proposition of fixed charges (51%) and Energy charges (49%) 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	278	237868	796.61	241.03	231.58	472.61	5.93	844	2.91
HT2A	7702	3527548	3505.08	1713.40	1646.20	3359.6	9.58	405	4.70
HT2B	7843	2517517	1466.98	982.31	943.79	1926.1	13.13	325	6.43
HT2C	904	203544	243.04	120.11	115.40	235.5	9.69	492	4.75
HT3	65	58021	95.38	14.92	14.33	29.25	3.07	214	1.50
HT4	465	53122	79.15	30.88	29.67	60.55	7.65	484	3.75
HT5	1413	80468	87.75	62.77	60.31	123.08	14.03	650	6.87
<b>Total</b>	<b>18670</b>	<b>6678089</b>	<b>6274.01</b>	<b>3165.41</b>	<b>3041.28</b>	<b>6206.7</b>			
% of Recovery of Fixed and Energy components				51%	49%	100%			

Hence, it is proposed to revise the demand charges for the HT consumers of 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	Per kVA	Energy Charges Rs./Unit
<b>HT2A</b>	7702	3527548	3505.08	1713.40	1646.20	3359.6	9.58	405	4.70
<b>HT2B</b>	7843	2517517	1466.98	982.31	943.79	1926.1	13.13	325	6.43
<b>HT2C</b>	904	203544	243.04	120.11	115.40	235.5	9.69	492	4.75

Hon'ble Commission is requested to increase the demand charges at least for the HT consumers. This will not only help BESCOM to charge reflective proportion of fixed cost but also helps in developing the competence to participate in the open market to attract the consumers.

To substantiate the proposed change in structure of tariff, BESCOM has collected the details of demand charges prevailing in other States. The following table indicate the Demand Charges for HT Industrial category consumers prevailing in other States.

BESCOM submits that the fixed/demand charges in the neighboring/Other States are relatively higher than those approved for BESCOM. Such charges eventually lead to appropriate fixed charge recovery for these States.

**Madhya Pradesh:**

<b>Sub-Category of consumer</b>	<b>Monthly Fixed Charge (Rs./kVA of billing demand per month)</b>	<b>Energy Charge for consumption up to 50% load factor (paise/ unit)</b>	<b>Energy Charge for consumption in excess of 50% load factor (paise /unit)</b>
<b>Industrial</b>			
11 kV supply	347	710	610
33 kV supply	570	705	600
132 kV supply	660	662	565
220/400kV supply	660	620	520
<b>Non-Industrial</b>			
11 kV supply	327	745	655
33 kV supply	470	725	630
132 kV supply	560	680	570
<b>Shopping malls</b>			
11 kV supply	336	725	650
33 kV supply	388	715	610
132 kV supply	520	665	590
<b>Power intensive industries</b>			
33 kV supply	580	540	540
132 kV supply	710	517	517
220 kV supply	710	510	510

**Tamil Nadu:**

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

**Andhra Pradesh:**

<b>HT-I(A): General</b>		<b>Fixed/Demand Charges in/ Month</b>	<b>Energy Charges /Unit</b>
132 KV and above	kVAh	475	5.40
33 KV	kVAh	475	5.85
11 KV	kVAh	475	6.30

**Kerala:**

<b>HT-1(A)-Industries</b>	
Demand Charges Rs. /Unit	340
Energy Charges Rs. /Unit	5.75

**Telangana:**

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

**Maharashtra (Mahadiscom)**
**HT industrial**

<b>Consumer Category</b>	<b>Demand Charge (Rs/ kVA/ month)</b>	<b>Energy Charge (Rs/kWh)</b>
HT I: HT – Industry		
HT I (A): Industry - General	432	6.96
HT I (B): Industry - Seasonal	432	7.22

**HT Commercial**

<b>Consumer Category</b>	<b>Demand Charge (Rs/ kVA/ month)</b>	<b>Energy Charge (Rs/kWh)</b>
All Units	432	11.20

**Gujrat (Dakshin Gujrat Vij Company Limited)**

<b>Sl. no.</b>	<b>Particulars</b>	<b>Fixed Charges (in Rs. per kVA per Month)</b>	<b>Energy Charges (in Rs. per unit)</b>
a	Upto 499 kVA of billing demand	150	4.00
b	For billing demand above 499 kVA and upto 2500 kVA	260	4.20
c	For billing demand above 2500 kVA	475	4.30
d	For billing demand in excess over the contract demand	555	As above

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

### III. Special Incentive Scheme:

The Hon'ble Commission in its Tariff Order 2021, dtd 09.06.2021 had decided to continue the HT incentive scheme for one year with effective from 01.04.2021 for FY-22 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 September-2021, **155** HT/EHT Consumer have opted for Special Incentive Scheme. Out of which only 5 consumers are open access consumers.

Total Consumers as on 30.09.2021	OA consumers	Non-OA consumers	Total Consumers > 500 KVA	Total Consumers < 500 KVA	Base Consumption in MU	Total Consumption in MU	Consumption at 10.00 to 18.00 over and above the base under SIS in MU	Consumption at 22.00 to 06.00 (Night) all consumption under SIS in MU
155	5	150	105	50	11.91	133.21	9.96	41.35

The Commission in the Tariff Order-2021, dtd:09.06.2021 had reduced the Time of Day tariff for the period from December to June and for the period from July to November no Time of Day tariff as the state has surplus power situation.

BESCOM is proposing increase in Demand charges, for HT consumers, simultaneously reducing the Energy charges, the proposed charges are very competitive. The Hon'ble Commission is requested to consider the increase in the

fixed charges and decrease in the energy charges for all HT consumers and to discontinue the Special Incentive Scheme.

#### **IV. Discounted Rate Energy Scheme:**

The Hon'ble Commission in its Tariff Order 2021, dtd 09.06.2021 had introduced Discounted Energy rate Scheme for HT consumers for the period of six months from July-2021 to December-2021 in an attempt to bring back the EHT/HT consumers who are availing power through open access as the state is has power surplus situation.

At the end of September-2021, **100** HT/EHT Consumer have opted for the Scheme. Out of which 21 consumers are open access consumers. The statistics are as below:

	<b>No. of Consumers</b>	<b>Actual Consumption of a month (kWh)</b>	<b>Consumption Over and above base (kWh)</b>
<b>OA/ Wheeling consumers</b>	21	53.51	43.86
<b>Non-OA/ Wheeling consumers</b>	79	14.65	4.35
<b>Total</b>	<b>100</b>	<b>68.15</b>	<b>48.20</b>

This Discounted Energy rate Scheme is beneficial to HT consumers who are sourcing their energy from private generators and not to HT consumers who are purchasing energy from BESCOM. This is due to the fact that the HT consumers is allowed discount rate of Rs.6/unit on the energy above the average/base consumption. If the beneficiary is consuming only the BESCOM energy and is not procuring energy from outside agencies, then the base consumption is not beneficial to loyal BESCOM consumers. Hence the Discount Energy Rate Scheme is not very beneficial.

One HT installation – HAL, Bangalore, bearing R.R.No. S3HT-2 had applied for Short term open access during FY-22. When BESCOM approached the said consumer asking him to avail DERS, it was seen that the savings from the DERS

scheme was minimal when compared to purchasing power from private generators. Also it was learnt that the C&AG in its report had directed HAL to purchase power from other sources to reduce the Company's electricity cost and in turn the expenditure. This is the situation of HT consumers with the Contract Demand above 1000 kVA.

BESCOM is proposing increase in Demand charges, for HT consumers, simultaneously reducing the Energy charges, the proposed charges are very competitive. The Hon'ble Commission is requested to consider the increase in the fixed charges and decrease in the energy charges for all HT consumers and to discontinue the Discounted Energy Rate Scheme.