

### **Observations/remarks/objections on the proposal** for determination of tariff for FY-21 for



submission during public hearing to



Friday, February 7, 2020 Bengaluru



# **BESCOM's performance shows downward trend on all key metrics over 4 years**



Particulars	FY 16	FY 17	FY 18	FY 19	
Power Purchase in MU	NA	30799.09	31157.11	32960.38	
Energy at interface point in MU	27893.40	29700.18	29907.00	31742.35	
Percentage transmission losses in %	NA	3.7	4.18	3.7	
Sales in MU	24538.17	26239.23	25967	27762.47	-
Percentage distribution losses in %	12.03	13.19	13.17	12.54	(
Distribution losses in MU	3355.58	3460.95	3940.00	3979.88	
Revenue from Sale of Power (INR crs)	13821.62	15861.15	18042.05	19538.74	
Power Purchase Cost including cost of transmission (INR crs)	12600.53	13672.98	15123.21	18714.60	
Margin (INR crs)	1221.08	2188.17	2918.84	824.14	
Margin in %	8.83%	13.80%	16.18%	4.22%	
% PPC to Revenue	91.17%	86.20%	83.82%	95.78%	-
Total O&M cost (INR crs)	1183	1197.68	1396.67	1805.68	
% of O & M (INR crs)	8.56%	7.55%	7.74%	9.24%	
Depreciation (INR crs)	366.27	374.37	429.86	530.18	
% Depreciation to Revenue	2.65%	2.36%	2.38%	2.71%	
Average Realization Rate	5.8	6.04	6.94	7.03	
	4.32	4.35	4.84	5.68	_
Average Power Purchase Cost	4.32	1.55			
Average Power Purchase CostAverage Cost of Supply	6.01	6.18	6.95	7.78	
Average Cost of Supply	6.01	6.18	6.95 6.5	7.78 7.6	

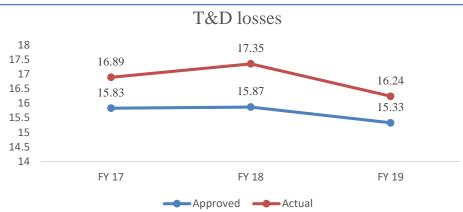
#### Between FY 16 – FY 19,

- i. The sale in MU has gone up only by 13 % while the revenue has increased by 41%
- ii. The percentage of PPC to revenue worsened from 91.17 % to 95.78 %
- iii. The Average Power Purchase Cost has increased by 31 %
- iv. The distribution loss has increased from 12.03% to 12.54 %
- v. Energy sold to HT has fallen by 2 %, while the installations have increased by 19 %

07-02-2020

### **T&D** losses show no improvement in FY 19





### BESCOM has never met the Commission approved levels of T&D

#### 25 20 15 10 20.57 5 0 Tumkur CSD Bangarapete Hiriyur Shidlagatta

Variations in T&D

4 towns and sub divisions have T&D losses above 15.33%. These losses should not be passed on to consumers.



07-02-2020

# 20 % increase in actual PPC over approved leading to a loss of Rs. 3058 crs



		Approved			Actuals			Variation	
Source of power	Energy in	Cost in	Per unit	Energy in	Cost in Rs.	Per unit	Energy in	Cost in Rs.	Per unit
	MU	Rs. Crs	cost in Rs	MU	Crs	cost in Rs	MU	Crs	cost in Rs
KPCL Thermal	11145.65	4789.09	4.30	8452.32	4787.22	5.66	-2693.33	-1.87	1.37
KPCL Hydel	714.09	91.43	1.28	776.17	89.53	1.15	62.08	-1.90	-0.13
CGS Energy	9995.81	3808.30	3.81	11306.10	4831.31	4.27	1310.29	1023.01	0.46
UPCL	4381.93	2085.80	4.76	3188.38	1965.18	6.16	-1193.55	-120.62	1.40
Renewable Energy	6043.46	2066.70	3.42	7679.50	3288.71	4.28	1636.04	1222.01	0.86
Other State Hydel	22.08	8.33	3.77	12.33	5.61	4.55	-9.75	-2.72	0.78
Short Term	494.10	201.59	4.08	67.89	207.26	30.53	-426.21	5.67	26.45
Medium Term	463.94	223.81	4.82	1477.69	655.61	4.44	1013.75	431.80	-0.39
SLDC and Transmission charges		2303.47			2806.41			502.94	
Total	33261.06	15578.52	4.68	32960.383	18636.84	5.65	-300.68	3058.32	0.43

Poor planning by BESCOM ! BESCOM should have optimised product mix with use of low cost source of power to stay within Commission approved rates.

Starting FY 15, BESCOM's power purchase cost has been overshooting the approved limits of the total power purchase cost set by KERC.

Power Purchase Cost	FY-15	<b>FY-16</b>	<b>FY-17</b>	<b>FY-18</b>	FY-19	Trend
Approved (INR crs)	11922.1	11840.2	12954.2	13624.3	14457.1	
Actuals (INR crs)	11917.4	12600.5	13700.8	15123.2	15908.3	
Gap	-4.67	760.38	746.64	1498.9	1451.2	

# BESCOM plans 7% increase in PPC in FY 20 over FY 19

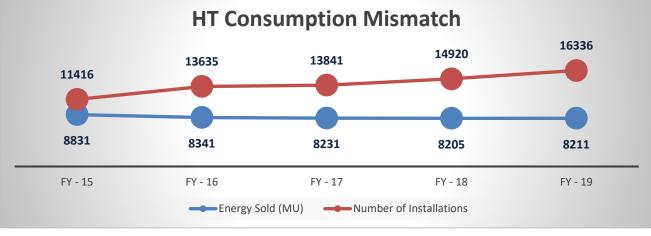


	Projections for FY 19-20			Projections for FY 20-21			Variation		
Source of Power			Per unit cost in	Energy in	Cost in Rs	Per unit	Energy in	Cost in Rs	Per unit
	Energy in MU	Cost in Rs crs	Rs	MU	crs	cost in Rs	MU	crs	cost in Rs
KPCL Hydel	766.29	67.33	0.88	827.50	91.66	1.11	8.0%	36.1%	26.1%
KPCL Thermal	9378.33	5477.41	5.84	11591.53	8128.81	7.01	23.6%	48.4%	20.1%
CGS Energy	10976.28	4952.80	4.51	10746.12	6547.04	6.09	-2.1%	32.2%	35.0%
UPCL	2825.71	1972.32	6.98	2527.87	1760.39	6.96	-10.5%	-10.7%	-0.2%
Renewable Energy	8449.64	3602.00	4.26	9376.75	3739.14	3.99	11.0%	3.8%	-6.5%
Other State Hydel	58.31	32.35	5.55	98.55	33.11	3.36	69.0%	2.3%	-39.4%
Short Term/Medium Term	575.00	296.64	5.16	593.04	309.04	5.21	3.1%	4.2%	1.0%
SLDC and Transmission charges		3495.92			1464.75		(	-58%	
Total	33029.56	19896.78	6.02	35761.36	22073.94	6.17	8.3%	10.9%	2.5%

### BESCOM has shown no improvement in managing cost in FY 20 and FY 21

For FY 21, BESCOM has understated the procurement from KPCL Hydel (increase of 61 MU only). BESCOM should have **emphasized on procuring higher units of power from KPCL Hydel and** reduced the projected power purchase from other categories

# HT Sales Continue to decline because of high cost!



Industries and Commercial establishments under HT category are not procuring power from BESCOM !

Let's Be Better

### **Cross Subsidy**

		Appr	oved	ARR in	Level of	Act	uals	ARR in	Level of
Category Description	Category	Sales in	Revenue	Rs per	Cross	Sales in	Revenue	Rs per	Cross
		MU	Rs.	Kwh	Subsidy in	MU	Rs. Crores	Kwh	Subsidy in
			Crores		% with ref				% with ref
					to ACS				to ACS
					6.8				7.84
Educational Institutions	LT 2 (b) (i)	46.83	37.65	8.04	15.42%	44.97	39.44	8.77	10.60%
	LT 2 (b) (ii)	5.54	3.87	6.99	2.72%	6.60	5.48	8.31	5.66%
Commercial	LT 3 (i)	2021.64	1821.50	9.01	24.53%	1894.08	1842.94	9.73	19.42%
	LT 3 (ii)	169.13	145.11	8.58	20.75%	189.57	168.34	8.88	11.71%
Industrial	HT 2 (a) (i)	2370.82	1856.35	7.83	13.15%	2639.87	2304.61	8.73	10.19%
	HT 2 (a) (ii)	2558.12	2210.22	8.64	21.30%	1873.09	1485.36	7.93	1.13%
Commercial	HT 2 (b) (i)	2398.12	2414.91	10.07	32.47%	2271.72	2496.62	10.99	28.66%
	HT 2 (b) (ii)	226.22	239.79	10.60	35.85%	176.69	178.81	10.12	22.53%

Industries, Educational Institutions, Commercial categories are cross subsiding domestic/ agricultural categories.

### **Diversion of Agricultural Power**



Electricity in MU	1970-71	1980-81	1990-91	2000-01	2010-11	2016-17	2017-18
Total Generation	4833	6389	12431	21985	47112	64227	64830
Total Consumption	3187	5189	12182	17860	37202	61956	54273
Industrial Consumption	2488	3864	5429	4882	8425	9720	9764
Agricultural Consumption	179	384	4486	7350	12802	18962	19946
Domestic Consumption	217	696	1803	3909	7893	11243	12478
Agriculture	1970-71	1980-81	1990-91	2000-01	2010-11	2016-17	2017-18 (P)
Net Area Swon in Ha	10248	9899	10381	10140	10523	9855	10840.5
Gross Cropped Area in Ha	10887	10660	11759	12284	13062	11779	12956.9
Gross Irrigared Area in Ha	1584	1676	2598	3271	4279	3548	3902.8
Gross Irrigated Area to Gross Cropped Area %	14.55%	15.72%	22.09%	26.63%	32.76%	30.12%	30.12%
Unit of power (in MU) consumption per net area swon in Ha	0.02	0.04	0.43	0.72	1.22	1.92	1.84
Unit of power (in MU) consumption per gross irrigated Area in Ha	0.11	0.23	1.73	2.25	2.99	5.34	5.11
	-	-					

Disproportionate increase in the agricultural power consumption as compared to the gross irrigated crop area in hectares over the last four decades.

### No control over IP sets installations



Year	FY 16	FY 17	FY 18	FY 19
No of Consumers	809170	841228	872229	904463
Total MU consumed	6189.9	7285.47	6289.04	7202.3
Specific Consumption	7846.70	8828.70	7340.80	8107.60
% change in no of consumers		4.0%	3.7%	3.7%
% change in total MU consumed		17.7%	-13.7%	14.5%
% change in specific consumption		12.51%	-16.85%	10.45%

**BESCOM's submission of number of IP sets is unrealistic.** 

		FY 19		
	Number of Installations	Energy Sold (MU)	Revenue (Rs in Crs)	ARR
Domestic	78,88,029.00	6919.35	4356.61	6.30
IP Sets	9,04,463.00	7202.3	2632.8	3.7

The specific consumption per domestic consumption is 877.20 units in comparison to 8107 units per IP sets per annum.

Projected subsidy for IP sets - FY 21	
(all numbers are projections based on BESCOM's submis	ssion)
Number of installations	969204
Number of units consumed by IP sets	7711.25
Average Power Purchase Cost for FY 21 (INR/unit)	6.29
Total Power Purchase Cost for IP set consumption (INR crs)	4850.4
Specific Consumption (IP set/annum)	7956.27
Commission Determined Tariff (CDT) for FY 21	6.9
Subsidy to be received by BESCOM from GoK (per IP set/annum) (INR)	54898.27
Total Subsidy for FY 21 (INR crs)	5320.76
07-02-2020	

The total subsidy amount for FY 21 is estimated at INR 5320.76 crs. This amounts to 5% of Karnataka State's Budgeted Revenue for FY 2019.

# **Fall in Collection efficiency of BESCOM**



Particulars	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20 (Until Sept 2019)	FY 21 (P)
Revenue from Operations	13479.6	14226.85	15861.15	18042.06	19538.75	22335.74	23268.98
		Trade	e Receivables				
Particulars	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20 (Until Sept 2019)	FY 21 (P)
Receivables against Sale of Power	4371.30	5659.86	7178.60	6090.65	7194.85	7641.56	8106.94
Loans and Advances	664.10	811.99	1216.94	1435.92	1469.18	1586.71	166.05
Sundry Receivables	2742.28	2170.07	1817.36	2264.88	3646.47	4575.63	4415.80
Total Receivables	7777.68	8641.92	10212.90	9791.45	12310.50	13803.91	12688.79
Monthly Revenue	1123.30	1185.57	1321.76	1503.50	1628.23	1861.31	1939.08
No of Sales months Outstanding	6.92	7.29	7.73	6.51	7.56	7.42	6.54

BESCOM has not shown any vision to bring down doubtful debts and receivables!

FY - 21							
Sl. No	Particulars	Rs in cr					
1	Recievables against	8106.94					
	Sale of Power						
2	Loans and advances	1666.05					
3	Sundry recievables	4415.80					
4	Total (1+2+3)	14188.79					
5	Revenue	23268.98					
07_02_	2020						

In FY 21, the total receivables make 61% of the sales

### **Our Prayer to the Commission**



- 1. We request the Commission to disallow the variation in distribution loss and transmission loss of 0.91% (252.63 MU) amounting to an excess loss of INR 177.60 crs
- 2. We request the Commission to disallow the increase in power purchase cost of INR 1460.48 for truing up for FY 19.
- 3. The Commission should direct BESCOM to submit realistic projections and also bring discipline in procuring power at low cost.
- 4. The Commission should bring down the tariff for HT industrial and commercial to FY 14 rates at (Rs. 7.41/unit Rs. 7.91/unit) as it creates employment.
- 5. We request KERC to advice Government on formulating a direct remittance of subsidy policy to farmers.
- 6. We request the Commission to direct BESCOM to bring down the percentage of PPC to revenue to 80 % or below and not allow any further increase in the ARR for FY 20-21.

### **Our Prayer to the Commission**



- 7. We request the Commission direct BESCOM in projecting the correct power requirement from the power generators and arrange a mechanism where both Generator and Distributor are not at loss. **BESCOM should not pass this increase in power purchase cost to the consumers by requesting an increase in tariff.**
- 8. BESCOM should not charge CSS from Educational Institutions and Hospitals who have opted for Open Access since they provide public good and emergency services.
- 9. All ESCOM to give clarity on the doubtful debts written off in every financial year. The same should be submitted to Commission and made available to public on BESCOM's website.
- 10. Consumer protection is one of the primary objectives of the KERC, we urge KERC to take notice of our data-based insights and not allow BESCOM to pass the burden of its inefficiencies on citizens through its FY-21 tariff increase proposal. BESOCM already has been realizing higher margins over and above the approved limits set by the KERC.



### **THANK YOU**

Bangalore Political Action Committee (B.PAC) # 4/6, Ground Floor, Millers Road, Opposite to Vikram Hospital, Bengaluru – 560052 Contact Number: 080 – 41521797 Email: forbangalore@bpac.in



07-02-2020