

HESCOM

Preliminary Observations on the Applications filed by the HESCOM for APR for FY19 and approval of Revised ARR & Retail Supply Tariff for FY21 under MYT Framework

1. Capital Expenditure:

a) Capex for FY19:

As per the tariff application, HESCOM has incurred capex of Rs 977.86 Cores as against approved capex of Rs 1298.16 Cores for FY19. The Commission has made the following observations:

- i. The Commission, in the Tariff Order 2019, had directed HESCOM to maintain the physical as well as financial progress in respect of the works carried out under the Capex indicating timelines of completion, cost to benefit ratio, etc. and to furnish these details to the Commission as and when Commission directs. The Commission, during the course of Annual Performance Review for FY18, had directed HESCOM to submit the physical and financial progress of the said capex works for FY18.

The Commission directed that HESCOM should strictly follow the "Capital Expenditure Guidelines for ESCOMs" in which the capital investment planning process, prioritization and post-commissioning analysis to be adopted by the ESCOMs are elaborated. HESCOM was directed to furnish details as to whether it has carried out the works according to the above guidelines and directions issued by the Commission.

- ii. The Commission had also directed HESCOM to prioritize the works and incur expenditure within the approved capex and that it shall not incur the capex over and above the approved capex and shall not approach the Commission for approval of additional capex in the middle of the financial year. While prioritizing the works, HESCOM shall take up such work which ensure system improvement to enable quality and reliable power to the

consumers besides ensuring reduction of distribution losses in order to reduce the burden of losses to the consumers.

iii. The Commission had also directed the HESCOM to put in effective efforts towards achieving the following objectives while proposing schemes under capex, on a priority basis:

1. Reducing distribution losses;
2. Reducing the HT:LT Ratio;
3. Reduce Transformer failures;
4. Segregate the loads in the feeders;
5. Reduce Power theft;
6. Taking up programs for the awareness among the people on usage and conservation of energy;
7. Improve the sales to metered category to improve its cash flows;
8. Improve the Power factor of the IP set loads by installing switched capacitors of suitable capacity to the secondary of the transformers.

iv. The Commission notes that HESCOM has not furnished the feedback on the above and has not complied with the Commission's directives, till date. **HESCOM shall submit to the Commission, the compliance on the above as per the directions given in the Tariff Order 2019.**

v. HESCOM has stated that it has incurred capex of Rs 977.86 Cores as against approved capex of Rs 1298.16 Cores for FY19. As per the details filed in the tariff application HESCOM has not utilized any amount in respect of works related to replacement of more than 10-year-old electromechanical energy meters by static meters, replacement of 33kV lines Rabbit conductor by Coyote conductor, Smart City/Smart meters and underutilized the capex in respect of works related to DTC Metering. This clearly shows the lack of seriousness in reducing and analysing the technical and commercial losses and to improve the system. Also no capex is incurred in respect of works related to electrification of BPL households (Not covered under RGGVY), Maadari Grama (Model village) and underutilized the capex in respect of works related to Electrification of Habitations which are not covered under RGGVY, DDUGJY, RGGVY, Extension & Improvement, Nirantara Jyothi

Yojana, R-APDRP, which involves strengthening the distribution system and increasing the demand by providing reliable supply.

- vi. It is observed that HESCOM has incurred Rs.135.45 Crores towards replacement of failed distribution transformers as against an approved amount of Rs. 10 Crores. The Commission, in the MYT Order for FY16, had directed HESCOM to note that, the failed transformers should be replaced by repaired good transformers only and the expenditure thereon should be accounted under revenue expenditure. In case, the failed transformer is scrapped, it can be replaced by a new transformer, which has to be accounted under capital expenditure. HESCOM shall explain as to why the capex of RS. 135.45 Crores is spent on replacement of failed transformers and debited to capital expenditure despite clear direction in the matter.

Further, HESCOM in its filing has indicated 25204 number of distribution transformers have failed during FY19, which constitutes 11.68% of the total number of DTC's that existed in the Company as at end of FY19. The Commission notes that the failure rate of DTC's in HESCOM is abnormal as compared with the failure rates in other ESCOMs. HESCOM shall undertake necessary analysis and furnish the details on this issue along with the action plan proposed to reduce the failure rate of DTC.

HESCOM, shall also furnish the details of division-wise and capacity-wise transformers failed, repaired, repaired transformers issued to the field and failed transformers considered as not repairable, replacement of failed transformers with new transformers and the balance of transformers yet to be repaired during FY19 and also the status thereon upto 30.11.2019 during FY20.

- vii. HESCOM shall submit the details of approvals obtained from the Commission for carrying out NEF (REC) for replacing 11 KV OH feeders by UG Cables in Hubballi and Belgaum, Refurbishing works on HT/LT/DTC in O&M Divisions, with details of funding and present status.
- viii. HESCOM has mentioned that the delay in tendering process was the reason for non-utilization of capex for few works, HESCOM has to furnish the detailed reasoning for non-utilization and underutilization of the capex under different

schemes and also the details of grants lost, if any, by its non-utilization, as several works involve grants from the Government. Also, HESCOM shall furnish the effect of non-utilization and underutilization of capex on its AT&C losses, supply of reliable power to installations etc.,

- ix. HESCOM shall furnish comments on imprudent works and compliance to the observations and recommendations made, in respect of Final report on Prudence Check of Capital Expenditure incurred by HESCOM during FY17 and FY18, submitted by M/s PWC, as directed in the Commission in its letter dated 11th December 2019.

b) Capex proposal for FY21:

HESCOM in its filing has proposed the revised Capex of Rs.1205.51 Crores under different category of works as against the approved capex of Rs.1025.00 Crores by the Commission in the Tariff Order 2019, for FY21. HESCOM, in its filing as per Format-17, has indicated the capital expenditure of Rs1877.75 Crores for FY21. HESCOM shall furnish the reasons for indicating different capex figures.

The HESCOM shall explain the rationale behind submitting the proposal for incurring higher amounts than the amounts already approved for the current control period. The Commission has approved capital expenditure of Rs. 1200 Crores and Rs. 1025 Crores for FY20 and FY21 respectively in terms of the MYT Regulations and HESCOM has to comply with the approval as per Tariff Order 2019. Any additional amounts required shall be incurred through re-appropriations within the approved amounts.

- i. It is also to be stated here that HESCOM has filed application for APR of FY19 and ARR for FY21. **Hence the question of revised capex for FY20 will not arise in these proceedings. Any excess or short spending of capex for FY20 will be suitably dealt with in the APR of FY20.**
- ii. HESCOM has proposed Rs.100 Crores for Gankakalyana works, for FY21, Rs. 88 Crores for creating infrastructure for Unauthorized IP Sets and Rs.61 Crores for replacement of more than 10-year-old electromechanical energy meters

by static meters. HESCOM shall submit the total capex incurred during the last three financial years (FY17, FY18 and FY19) in respect of these works duly indicating completed works and balance no. of works. HESCOM has proposed Rs.50 Crores for enhancement of distribution transformers and Rs. 3 Crores for DTC metering. HESCOM shall submit the total capex incurred for the last three financial years (FY17, FY18 and FY19) in respect of these works and the reduction in distribution losses, percentage of DTC metering and the energy audit conducted in respect of DTCs which are metered and the results thereof, so as to justify the proposed expenses for FY21.

- iii. HESCOM shall also submit physical progress as well as the financial progress (Total amount for the year), in respect of all the schemes taken up by HESCOM in the format annexed to these observations, vide Annexure-1, 2 and 3.
- iv. HESCOM shall furnish the sources of funding each category of works proposed for FY21. HESCOM, by considering its present financial position and the current liabilities as per its audited Balance Sheet, the achievement of capex during the previous years and the proposed estimated revenue loss for FY21, is required to restrict its capex requirement limited to the approved capex keeping in view, its financial capability to meet the debt service obligations.

2. Sales:

A. Sales –other than IP sets:

I. Data inconsistency:

- a. The energy sales indicated for FY20 at page 117, does not tally with D-2 Format data. It is seen that FY21 sales figures are reproduced for FY20 also. This shall be rectified.
- b. At page-113, the sales to LT4c(ii) for FY21 is indicated as 0.88 MU, whereas at page 117 it is shown as 0.18 MU. The data shall be reconciled.

- c. The total number of installations as per d-21 Format should be 5516598(LT: 5512420+HT:4178) and not 551600 numbers. This shall be rectified.

II. Annual Performance Review for FY19:

- a. The Commission, in its Tariff Order,2018 dated 14.05.2018, had approved total sales to various consumer categories at 10702.41MU as against the HESCOM's proposal of 11187.02 MU, excluding sales to HRECS & SEZ. The actual sales of HESCOM as per the current APR filing, is 11760.01MU, indicating an increase in sales to the extent of 1057.60 MU as compared with the approved sales. The increase in sales is 257.35 MU in HT-categories and 800.25 MU in sales to LT-categories. It is noted that, as against approved sales [excluding HRECS sales and supply to SEZ] of 4750.18 MU to categories other than BJ/KJ and IP sets, the actual sales achieved by HESCOM is 4830.93 MU, resulting in the increase in sales to these categories by 80.75 MU. Further, HESCOM has sold 6929.08 MU to BJ/KJ and IP category as against approved sales of 5952.23 MU resulting in increased sales to these categories by 976.85 MU.
- b. The category-wise sales approved by Commission and the actuals for FY19 are indicated in the table below:

Sales in MU

Category	Approved	Actuals	Difference (Actuals-Approved)
LT-2a*	1601.86	1487.80	-114.06
LT-2b	21.42	19.33	-2.09
LT-3	481.88	464.86	-17.02
LT-4b	16.55	16.27	-0.28
LT-4c	1.24	0.72	-0.52
LT-5	327.49	328.55	1.06
LT-6	343.07	311.69	-31.38
LT-6	161.76	149.79	-11.97
LT-7	33.07	32.74	-0.33
HT-1	237.40	270.96	33.56
HT-2a	892.61	1160.05	267.44
HT-2b	130.02	129.88	-0.14
HT-2c	97.62	77.94	-19.68
HT-3a & b	350.35	336.90	-13.45
HT-4	15.39	14.43	-0.96
HT-5	38.44	29.02	-9.42
Sub total	4750.18	4830.93	80.75

BJ/KJ	189.62	199.94	10.32
IP	5762.61	6729.14	966.53
Sub total	5952.23	6929.08	976.85
Grand total**	10702.41	11760.01	1057.60

**Including BJ/KJ installations consuming more than 40 units/month*

***Excludes sale to HRECS and SEZ.*

From the above table it is noted that the major categories contributing to the increase in sales as compared with the estimate are HT-2a and IP sets. Further, the reduction in sales is mainly in LT-2a category.

HESCOM has stated that the variance in sales cannot be explained, in view of diversified geographical nature of area under HESCOM.

The Commission notes that, the increase in sales to HT-2a category, can be partially attributed to the increase in number of installations. Also, the sales to this category could have increased due to the special incentive scheme.

Hence, HESCOM shall analyse the impact of special incentive scheme and the corresponding increase in HT-2a sales shall be appropriately quantified.

Further, in the case of LT-2a, the decrease may be due to reduced specific consumption and use of energy efficient appliances like LED bulbs, EE fans etc. The Commission, in the previous Tariff Order had directed HESCOM to analyse the impact of DSM programs quantifying the energy and cost savings due to such programmes. **However, HESCOM has not furnished any details to explain the reduction in sales to LT-2a category. HESCOM analyse the same and furnish the reasons for reduction in sales to LT-2a category.**

c. Further to validate the sales, HESCOM shall furnish the following information:

In order to analyze reduction in HT sales, HESCOM shall furnish the breakup of sales data of HT2(a), HT2(b), HT 2(c) and HT-4 categories along with the consumption from open access / wheeling for the period 2017-18 to 2018-19 in the following format:

HT2A

Year	Sales by HESCOM	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2017-18				
2018-19				

HT2B

Year	Sales by HESCOM	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2017-18				
2018-19				

HT2C

Year	Sales by HESCOM	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2017-18				
2018-19				

HT4

Year	Sales by HESCOM	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2017-18				
2018-19				

III. Category-wise sales for FY21:

- a) The HESCOM, in their filing, have stated that the number of installations for FY20 & FY21, is estimated considering the growth in installations for the period from FY15 to FY19, except in the case of BJ/KJ and IP set installations. For BJ/KJ the number of installations has been retained at FY19 level.

Also, the Commission has noted that for energy sales estimate, CAGR for the period FY15 to FY19 is considered, except for BJ/KJ, LT-4, HT 2c (ii), HT3a(iii), HT-3b & HT-4 categories. Except BJ/KJ, the other categories have negative CAGR. For BJ/KJ, HESCOM has retained the sales at FY19 level.

- b) The observations of the Commission on sales forecast for FY20 are as follows:
1. In case of LT-4(b) & 4(c), HESCOM may consider estimating the sales based on specific consumption of FY19, as sales CAGR is negative.
 2. The table indicating the growth rates for the number of installations is furnished as below:

Category	Percentage Growth Rates			
	2013-14 to 2018-19 CAGR	2015-16 to 2018-19 CAGR	FY19 growth over FY18	Growth rate proposed by HESCOM for FY21
LT-2a	4.62%	4.90%	5.71%	4.71%
LT-2b	7.87%	7.39%	5.32%	7.86%
LT-3	5.29%	5.25%	4.71%	5.28%
LT-5	5.29%	5.16%	3.88%	5.22%
LT-6 WS	10.29%	11.65%	7.94%	10.06%
LT-6 SL	4.56%	5.65%	4.42%	4.92%
HT-1	12.50%	14.11%	14.47%	12.90%
HT-2 (a)	9.80%	11.00%	10.97%	10.35%
HT-2 (b)	6.55%	8.98%	8.82%	7.81%
HT-2 (c)	14.24%	9.88%	8.70%	11.05%
HT-3(a)&	10.60%	9.46%	7.34%	10.71%
HT-4	-3.58%	-1.09%	-6.25%	0.00%

It is noted that, the growth rate considered for LT-6-Water Supply installations is lower as compared with the normal growth rates. Therefore, HESCOM may consider revising the data for this category.

3. the growth rates for the energy sales are furnished in the following Table:

Category	Percentage Growth Rates			
	2013-14 to 2018-19 CAGR	2015-16 to 2018-19 CAGR	FY19 growth over FY18	Growth rate proposed by HESCOM for FY21
LT-2a	4.57%	2.38%	2.24%	3.82%
LT-2b	10.94%	9.81%	4.49%	9.01%
LT-3	6.47%	3.96%	3.83%	5.85%
LT-5	1.78%	1.59%	2.53%	0.99%
LT-6 WS	10.46%	12.97%	12.45%	11.28%
LT-6 SL	4.52%	5.15%	0.27%	2.99%
HT-1	7.93%	8.76%	15.79%	8.44%
HT-2 (a)	5.47%	7.63%	15.38%	5.79%
HT-2 (b)	4.07%	2.80%	6.63%	3.19%
HT-2(c)	19.90%	10.37%	5.13%	19.56%
HT-3(a)& (b)	18.01%	27.15%	31.67%	14.77%
HT-4	-2.48%	-0.46%	-1.10%	2.10%

It is noted that, the growth rate considered for LT-2b, LT-5, LT-6 SL and HT-3 is lower and for HT-4 it is higher, considering the CAGR. HESCOM may consider revising the data for these categories.

4. For HT2(a) category, the sales estimate based on the analysis of open access impact shall be considered. HESCOM should have computed the

growth rates considering the total energy sold to this category including OA/wheeling and should have estimated the sales considering the ratio of energy sold by HESCOM in FY19 to the total sales of FY19 including OA/wheeling sales. HESCOM may compute HT-2a sales on the above method and furnish the data.

5. To validate the sales, category wise information in the following format shall be furnished:

a. No. of Installations:

Category	2017-18 Actuals		2018-19 Actuals		2019-20	
	As on 30th Nov 2017	As on 31st March 2018	As on 30th Nov 2018	As on 31st March 2019	As on 30th Nov 2019	As on 31st March 2020 (Estimate)
LT-2a						
LT-2b						
LT-3						
LT-4 (b)						
LT-4 (c)						
LT-5						
LT-6						
LT-6						
LT-7						
HT-1						
HT-2 (a)						
HT-2 (b)						
HT2C						
HT-3(a)& (b)						
HT-4						
HT-5						
Sub Total (Other than BJ/KJ and IP)						
BJ/KJ<=40units/month						
BJ/kJ > 40 units/month.						
IP sets-LT-4a						
Sub Total (BJ/KJ and IP)						
Grand Total						

b. Energy Sales

Category	2017-18 Actuals		2018-19 Actuals		2019-20	
	1st April 2017 to 30th Nov 2017 (cumulative)	1st Dec 2017 to 31st March 2018 (cumulative)	1st April 2018 to 30th Nov 2018 (cumulative)	1st Dec 2018 to 31st March 2019 (cumulative)	1st April 2019 to 30th Nov 2019 (cumulative actuals)	1st Dec 2019 to 31st March 2020 (cumulative Estimate)
LT-2a						
LT-2b						
LT-3						
LT-4 (b)						
LT-4 (c)						
LT-5						
LT-6						
LT-6						
LT-7						
HT-1						
HT-2 (a)						
HT-2 (b)						
HT2C						
HT-3(a)&						
HT-4						
HT-5						
Sub Total (Other than BJ/KJ and IP sets)						
BJ/KJ<=40units/month						
BJ/kJ > 40 units/month						
IP sets LT 4a						
Sub Total (BJ/KJ and						
Grand Total						

IV. Sales to HRECS:

HESCOM has indicated the energy sold to HRECS for FY19 as 346.63 MU at page 71 of the filing. Though the HRECS in its filing has indicated the same as 346.63 MU, it has stated that the above includes energy requirement of

AEQUS also. For FY19 to FY-21, HRECS has considered the following quantum of purchase from HESCOM (including AEQUS sales):

	FY19	FY20	FY21
HRECS Estimate-MU	346.63	361.57	381.94

HESCOM shall confirm, whether the above quantum of sales to HRECS is considered, while arriving at the overall power purchase requirement for HESCOM.

B. Sales to IP sets:

1. Sales for FY19:

- a. The Commission, in the APR for FY18, vide its tariff order 2019 has approved the total sales to IP sets at 6,054.12 MU with a specific consumption of 8,905.36 units per IP set per annum for FY18. HESCOM, in its current filing, has indicated the sales to IP sets as 6,729.14 MU for FY19 with a specific consumption of 8,270.83 units per IP set per annum. The Commission notes that there is a decrease in the specific consumption by 634.53 units per IP set per annum for FY19 as compared to FY18 actuals due to huge increase in number of consumers by 2,33,904 (9,30,551 – 6,96,647). **The reasons for this abnormal increase in the no. of IP sets during FY19 over FY18 needs to be verified and explained. The Commission is of the view that there cannot be an addition of 2.34 lakhs installations (increase by 34%) in a year. There appears to be an error committed in arriving at the total no. of installations for FY19, which need to be rectified immediately.**

- b. The details of sales to IP sets for FY19 as approved by the Commission in its tariff order 2018 and the actual sales as furnished by HESCOM, in its Tariff Filing for FY21, are as follows;

Particulars	As approved by the Commission in ARR for FY19	As submitted by HESCOM for APR of FY19
Number of installations	7,15,686	9,30,551
Mid-year number of installations	6,99,007	8,13,599
Specific consumption in units / installation / annum	8,244	8,270.83
Sales in MU	5,762.61	6,729.14

- c. HESCOM has to furnish the reasons for, abnormal increase in number of consumers by 2,14,865 over and above the approved no. of IP sets for FY19, increase in specific consumption by 26.83 units / installation / annum and the increase in sales by 966.53 MU as compared with the approved figures.
- d. As per the month-wise data submitted by HESCOM in the Commission's prescribed format, the total sales to IP sets is stated to be 6,630.86 MU, whereas in the accounts and tariff application it is 6,729.14 MU, with a difference of 98.28 MU. HESCOM shall furnish the reasons for this variance.
- e. Distribution losses considered for assessment of sales to IP sets varies from 0.5% for on feeder to 79.32% in the month of April 2018 (which may include the consumption of energy by installations other than IP sets). The distribution losses considered in each month for FY19 are also different. HESCOM shall furnish the rationale for considering such inconsistent distribution losses for assessment of sales to IP sets for FY19 by clearly indicating the distribution losses in a separate column and the consumption of energy by installations other than IP sets, in a separate column.
- f. HESCOM shall furnish the reasons for huge variation in number of IP set installations, with reference to the DCB, month on month observed during FY19.
- g. HESCOM shall also furnish the Energy Audit details of all the feeders (urban and rural) coming in its jurisdiction.
- h. HESCOM has considered 1669 number of segregated agricultural feeders for assessment of sales to IP set installations in April 2018. Whereas, the number of segregated agricultural feeders considered for assessment of sales to IP set installations in March 2019 is 1799 feeders. HESCOM shall furnish the reasons for not considering all the segregated IP feeders throughout the year.
- i. HESCOM has not submitted the details of GPS survey of IP set installations taken up in its jurisdiction. The same shall be furnished.
- j. While furnishing the details of GPS survey, HESCOM shall clarify as to whether it has considered the deleted / defunct / not in use IP sets, for assessing the sales to IP set installation.
- k. HESCOM has to furnish, whether there is difference in number of consumers in the data as per GPS survey and the IP set data as per the DCB figures

along with the action taken to reconcile the details of number of consumers with DCB figures and the action taken to regularize the unauthorized IP installations, if any.

- i. As per the actual specific consumption for FY19 i.e., 8,270.83 units per IP per annum, the average consumption per IP per month should have been 689.23. From the month-wise, feeder-wise data submitted by HESCOM, it could be seen that, in some of the feeders, the average consumption per IP per month is as huge as 4672.20 in respect of KanchiNagalur feeder in Hanagal Subdivision in the month of April 2018. Reasons for such abnormal consumptions recorded throughout, shall be explained.
- m. Large degree of inconsistency in the feeder-wise, month-wise data is observed. HESCOM has to furnish consistent data in excel sheets in respect of assessment of sales to IP sets for FY19.
- n. Division-wise actual number of hours of supply provided to IP sets vis-à-vis the Government of Karnataka Orders for FY19 and up to September 2019 shall be furnished to the Commission.

Based on the above observations, HESCOM shall submit the data towards assessment of sales to IP sets for FY19, duly furnishing clarity on the data. In the absence of a consistent data, the Commission will not consider the data in its present form and the Commission would take necessary action as may be deemed appropriate, in the circumstances.

2. Projected sales to IP Sets for the FY21:

- i. For projecting the sales to IP sets for FY21, HESCOM has not considered the actual sales data from April to September, 2019. Instead, HESCOM has considered the CAGR based increase and has projected the number of installations for rest of FY20 and for FY21.
- ii. The reasons for difference in number of installations approved by the Commission for FY21, in Tariff Order 2019 and the projections considered in Tariff Filing by HESCOM are not substantiated with proper reasons.
- iii. **As already pointed out, HESCOM, in its tariff application for FY21 has not furnished total IP consumption for the period April to September 2019 and**

also has not submitted the month-wise break-up in the prescribed formats. Later, HESCOM has submitted the details by E-mail on 10.12.2019. In this regard the details submitted through email need to be re-examined in view of the Commission's above observations on the abnormal increase in the number of IP set installations and sales. In the absence of clear data, the Commission will not accept the enhanced consumption for FY21.

3. Power Purchase:

1. Power Purchases:

a) APR FY19:

1. As per Format D-1 HESCOM has furnished the details of power purchases from different sources. In this regard HESCOM shall clarify as to whether share of power purchase for FY19, is as per the Orders of the GoK vide No. EN 32 PSR 2018, Bangalore, dated:24.04.2018, (wherein ESCOM-wise allocation of power has been made). If not, the source-wise percentage of actual power purchase made during FY19 shall be furnished.
2. HESCOM, in its filing has not furnished any write up or explanation for the energy considered for FY19 as per D1 Format.
3. A separate statement showing the variable cost (for FY19), in the ascending order for the energy scheduled from different sources of power, shall be furnished. Any deviation from the merit order scheduling may be explained.
4. HESCOM in D-1 Format, has indicated the actual capacity charges of Rs. 92.63 Crores paid to BTPS unit-3 and Rs.219 Crores paid to YTPS unit-1, whereas the Commission had not approved any capacity charges for these stations in the Tariff Order for FY19. The Commission notes that a small quantum of energy of 57.97MU from BTPS unit-3 and 128.19MU from YTPS was supplied. The month- wise capacity utilization and the Computation of capacity charges for BTPS unit-3 and YTPS unit-1 shall be furnished along with necessary documents. Computation sheet for payment of capacity charges to BTPS unit-1, 2, UPCL and Kudagi shall be furnished.

5. The Commission in its Tariff Order dated 30th May,2019 has directed as follows:

“The Commission notes an abnormal contribution from the State towards payment of PGCIL transmission charges. Due to this there will be a substantial financial impact, resulting in an increase in the retail supply tariff to the end consumers. The Commission, therefore, directs ESCOMs/PCKL to take appropriate action immediately, to resolve the issues with the appropriate authorities regarding the PGCIL transmission tariff. Henceforth, ESCOMs/PCKL shall constitute a dedicated team, which studies the pros and cons of any methodologies/amendments proposed to PGCIL’s Transmission tariff or in any such other relevant matters, and shall effectively communicate the same to the concerned authorities, at the draft stage itself. The Commission will not allow such tariff in future, if it considers that the ESCOMs/PCKL have not taken effective and prompt steps to ensure that the PGCIL’s transmission tariff is fair and equitable to the State”

HESCOM shall furnish the details of action taken in the above matter.

6. The Source-wise consolidated reconciliation statement for the energy drawn for FY19 shall be furnished.
7. In respect of the following Hydro and thermal stations, as indicated in the D-1 Format, the per unit total cost paid to the generators is on a higher/lower side, as compared with the per unit rates paid by the BESCOM. The HESCOM shall examine the same and recover excess payments, if any, from the generators, under intimation to the Commission, besides explaining the reasons for the difference:

(per unit rate-in Rs.)

Particulars	BESCOM	HESCOM
Raichur Thermal Power Station-RTPS 1 to 7 (7X210)	3.46	3.33
Raichur Thermal Power Station-RTPS 8 (1x250)	3.34	3.57
Bellary Thermal Power Station-BTPS-1 (1x500)	3.87	4.00
Bellary Thermal Power Station-BTPS-2 (1x500)	3.61	4.00
Bellary Thermal Power Station-BTPS-3 (1x700)	3.51	3.12
YTPS	3.11	3.12
Sharavathy Valley Projects (10x103.5 + 2x27.5)	0.55	0.33
MGHE (4x21 + 4x13.2)	0.76	0.55
Gerusoppa_Sharavathi Tail Race_STR (4x60)	1.05	1.10
Kali Valley Project_KVP (2x50 + 5x150 +1x135)	0.52	0.41
Varahi Valley Project_VVP (4x115 + 2x4.5) 1 & 2		
Varahi Valley Project 3& 4	1.00	0.76
Almatti Dam Power House_ADPH (1x15 + 5x55)	1.00	0.43
Bhadra Hydro_BHEP (1x2+2x12)+(1x7.2+1x6)	3.56	3.42
Kadra Power House)KPH (3x50)	1.40	1.49
Kodasalli Dam Power House-KDPH (3x40)	1.09	
Ghataprabha Dam Power House-GDPH (2x16)	1.63	0.67

Shiva (4x4+6x3) & Shimsha (2x8.6)	0.85	0.27
Munirabad Power House (2x9 + 1x10)	0.68	2.19

- HESCOM shall explain the reasons for considering the fixed cost in respect of hydro stations along with the relevant calculation sheet and document thereon.

b) Power Purchase for FY21(ARR):

- A separate statement showing the variable cost in the ascending order from different sources of power shall be furnished.
- HESCOM shall furnish the basis and the documents relied upon to consider the fixed cost and the variable cost in respect of BTPS unit-3, YTPS- units 1 &2.
- HESCOM shall furnish the capacity and quantum of energy to be procured from RE projects for which it has executed the PPAs in the following format for FY21:

SI No	RE Sources	Commissioned Capacity in MW	Likely to be Commissioned Capacity in MW	Forecasted energy(in MU)	Total Cost Rs. Crs.	Remarks
1	Wind					
2	Hydro					
3	Co-gen					
4	Biomass					
5	Municipal Solid Waste					
6	Solar MW Projects					
7	Solar SRTPV Projects					

HESCOM shall also furnish the methodology for forecasting the RE energy for FY21.

4. RPO Compliance:

a. RPO for FY19:

The Commission notes that HESCOM has submitted the RPO data for both solar and non-solar compliance for FY19.

Excluding, hydro the input energy as per D1-format should be 11,431.87 MU FY19 [14581.54-3150.47(KPCL hydro) +18.39(Shimsha)-7.03 MU(TBHE)-10.56MU(Jurala)], whereas, HESCOM has indicated the same as 11470.19 MU at page 79 for RPO calculations. Also, TB dam share is indicated as 7.03 MU at page 71 and as zero in D-1 format. Further, as per D-1 Format, the energy purchased is 14245.65 against 14581.54 MU indicated at page-78. The data shall be reconciled. Also HESCOM shall indicate the hydro energy accounted in energy balancing separately.

As per the power purchase details furnished for FY19, it is noted that the total solar energy purchased including NTPC VVNL is 1367.78 MU [KPCL:2.66 MU, W & B 17.84 MU, total solar including NTPC VVNL & farmers scheme:1347.28 MU], whereas HESCOM has indicated it as 1407.15 MU for RPO. Also, as per D-1 Format, the solar energy purchased is 1360.68 MU. HESCOM shall reconcile the figures with audited data and resubmit the RPO statement.

Similarly, the Non-solar energy purchased would be 3219.87 MU [Wind energy 2234.39 MU, banked energy 141.78 MU, infirm energy 43.23, mini-hydel 32.65 MU, co-gen 767.82 MU], whereas HESCOM has indicated it as 3173.41 MU for RPO. Also, as per D-1 format the non-solar energy purchased is 3381.21 MU. HESCOM shall reconcile the figures with audited data and resubmit the RPO statement.

- b.** For validating the RPO compliance and to work out APPC, HESCOM shall furnish the data as per the format indicated below, duly reconciling the data with audited accounts for FY19:

Non-solar RPO:

No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase quantum from all sources excluding Hydro energy		
2	Non-solar Renewable energy purchased under PPA route at Generic tariff including Non-solar RE purchased from KPCL		
3	Non-solar Short-Term purchase from RE sources, excluding sec-11 purchase		
4	Non-solar Short-Term purchase from RE sources under sec-11		
5	Non-solar RE purchased at APPC		
6	Non-solar RE pertaining to green energy sold to consumers under green tariff		
7	Non-solar RE purchased from other ESCOMs		
8	Non-solar RE sold to other ESCOMs		
9	Non-solar RE purchased from any other source like banked energy purchased at 85% of Generic tariff		
10	Total Non-Solar RE Energy Purchased [No 2+ No.3+No.4+No.5 +No.7+No.9]		
11	Non-Solar RE accounted for the purpose of RPO [No.10- No.5-No.6-No.8]		
12	Non-solar RPO complied in % [No11/No1]*100		

Solar RPO:

No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase quantum from all sources excluding Hydro energy		
2	Solar energy purchased under PPA route at Generic tariff including solar energy purchased from KPCL		
3	Solar energy purchased under Short-Term, excluding sec-11 purchase		
4	Solar Short-Term purchase from RE under sec-11		
5	Solar energy purchased under APPC		
6	Solar energy pertaining to green energy sold to consumers under green tariff		
7	Solar energy purchased from other ESCOMs		
8	Solar energy sold to other ESCOMs		

9	Solar energy purchased from NTPC (or others) as bundled power		
10	Solar energy purchased from any other source like banked energy purchased at 85% of Generic tariff		
11	Total Solar Energy Purchased [No.2+ No.3+No.4+No.5+No.7+No.9+No.10]		
12	Solar energy accounted for the purpose of RPO [No.11- No.5-No.6-No.8]		
13	Solar RPO complied in % [No12/No.1]*100		

5. RPO for FY20 and FY21

HESCOM shall furnish the estimates for complying with the solar and non-solar RPO for the period FY 20 and FY21.

6. Wheeling Charges

HESCOM has proposed wheeling charges of 31.27 paise/unit and 72.97 paise/unit respectively for HT network and LT network respectively. Further, HESCOM has proposed technical losses of 6.09% for HT and 8.11% for LT network.

HESCOM has stated that the wheeling charges is applicable to all open access/wheeling transactions except for energy wheeled from NCE sources to the Consumers in the State. **However, HESCOM has not indicated, in its petition, the wheeling charges applicable to RE sources, if any. HESCOM may propose wheeling charges for RE sources also, if any, furnishing reasons thereof.**

7. Cross subsidy surcharge:

For FY21 HESCOM has proposed the following CSS:

(paise per unit)

Voltage level	HT-1	HT-2a	HT-2b	HT-2C	HT-4	HT-5
66kV & above	57.41	245.64	401.23	234.94	181.69	1044.65
HT-11kV or 33 kV	-33.92	154.32	309.91	143.61	90.37	953.33

HESCOM shall clarify as to whether the CSS has been computed as per the MYT Regulations wherein, the methodology specified in the Tariff Policy, 2016 is adopted. If not, HESCOM shall file CSS as per the above Regulations. Further, if the CSS computed is negative, it shall be made zero.

HESCOM has stated that CSS as per order dated 14.05.2018 in OP Nos 52/2017 to 56/2017 shall be continued.

The Commission notes that in the above order, the Commission has determined the Additional Surcharge and not CSS.

HESCOM is directed to submit computation of CSS in respect of LT categories also.

8. Additional Surcharge (ASC):

HESCOM has proposed that the uniform additional surcharge be continued and the same shall be worked out by the Commission, considering the total fixed costs of all ESCOMs.

The Commission directs HESCOM to compute the ASC, as per the methodology adopted in Tariff Order 2019 and submit the same along with working details.

9. Distribution Losses:

a. HESCOM, in its application filed for the approval of Annual Performance Review for FY 19, has indicated 14.62% as the actual distribution losses for FY19 as against the approved distribution losses of 14.90%. Thus, there is a reduction of 0.28% over the approved distribution losses for FY19. HESCOM has retained the Commission's approved distribution at 14.40% and 14.20%, for FY20 and FY21, a meagre reduction of 0.22% over the actual distribution loss of 14.62% of FY19 and further 0.20% reduction over the projected losses of FY 20.

Though the HESCOM has achieved the distribution loss of 14.62% during FY19 and has proposed the huge capex with the main objective to reduce the distribution losses and improve quality power supply to its consumers, the distribution losses proposed by the HESCOM with reference to the Commission approved loss levels for FY20 and FY21 are not justifiable. HESCOM need to re-look on the issue and re-assess and submit the revised projected distribution losses for FY20 and FY21.

- b. HESCOM in its filing has indicated the actual distribution losses in the range of 15.04% to 24% in respect of some of the towns/ cities, which is more than the actual distribution losses of 14.62% of the Company for FY19. HESCOM, in spite of investing huge capital expenditure during the previous years, the distribution losses in these cities/ towns are found to be abnormal. The reasons for the abnormal losses in these cities/ towns should be analysed by HESCOM and the action plan proposed for reduction of losses shall be furnished to the Commission.

10. Operation and Maintenance Expenses:

HESCOM in its filings, has projected the total O&M expenses of Rs.969.88 Crores for FY19, as against the approved O&M expenditure of Rs.835.77 Crores. This amount comprises of Rs.62.37 Crores towards R&M expenses, Rs.781.78 Crores towards Employees cost and Rs.125.73 Crores towards A&G expenses, which are the actual expenses as per the audited accounts for FY19. The actual employees cost also includes the terminal benefits, which is considered as an additional employees cost towards the contribution to Pension & Gratuity (P&G) Trust for Rs.174.96 Crores.

The Commission, in its Tariff Order 2019, while undertaking the APR for FY18, has allowed the provision of Rs.91.98 Crores, made for the arrears of revision of pay scale to the employees from 01.04.2017 to 31.03.2018, as an additional employees cost. HESCOM shall furnish the actual payment of arrears amount to its employees on account of pay revision for FY18 during FY19 and the additional contribution made to P&G Trust thereon.

Further, HESCOM shall furnish the actual employees cost incurred during FY19 by excluding the arrears of pay revision and contribution to P&G Trust thereon for the FY18.

HESCOM, has claimed an amount of Rs.37.13 Crores as an additional employee cost towards pay revision arrears of Physically Challenged Revenue Assistants / Junior Assistants, whose services were regularized with effect from 29.12.2010 as per KPTCL Order No. KPTCL/B16/4682 (III)/2006-07 dated 14.01.2019. HESCOM shall furnish the copy of the Order and the computation sheet for the claim and

the copy of the Journal entry passed to account the said expenditure in its book of accounts for FY19.

11. Terminal Benefits under O&M expenses:

HESCOM, in Format D-6, has claimed Rs. 174.96 Crores, Rs.193.83 Crores and Rs. 214.74 Crores towards Terminal Benefits for FY19 to FY21 respectively. HESCOM shall furnish the computation sheet for having claimed this amount with clear bifurcation of the amounts between the employees recruited prior to 31.3.2006 and after 31.3.2006.

12. Administration and General Expenses:

HESCOM, in its filing of APR for FY19, has claimed the following expenditure under A &G expenses:

Particulars	Rs. Crores		
	FY19 (Actuals)	FY20	FY21
Other Professional charges	52.79	58.48	64.79
Conveyance and Travelling charges	41.90	46.42	51.43
Remuneration to contract Agencies	10.62	11.77	13.03

As per the provisions of MYT Regulations, the O&M expenses are controllable expenditure and every ESCOM need to control the expenditure under this head by utilizing the available resources within its control in a prudent manner. HESCOM shall furnish the reasons for having incurred huge amount of expenditure under this head of account along with breakup details for FY19, besides re-examining the amount considered for FY21.

13. Fuel cost adjustment charges (FAC):

HESCOM, in its filing under Form - D2, has not considered the Fuel Cost Adjustment Charges (FAC) demanded from the consumers during FY19. HESCOM shall furnish the quarter wise details of FAC demand raised Vs FAC approved by the Commission for FY19.

14. Tariff Subsidy to IP set installations for FY 21:

HESCOM in its filing for FY21, has proposed increase in energy charges to irrigation pump sets up to 10 HP (LT4(a)) category by 45 paise per unit from the existing rate of Rs.6.49 per unit to Rs.6.94 per unit and has proposed subsidy of Rs.5267.62 Crores from the Government of Karnataka towards the proposed IP sets sales of 7589.53 MU for FY21, as against the approved energy sale 6619.47 MU and tariff subsidy of Rs.4296.04 Crores for FY20. As such, there is an increase in proposed IP sales by 970.06 MU and tariff subsidy by Rs.971.58 Crores over the approved figures for FY20. The proposed increase in subsidy accounts for 23% over subsidy for FY20. The Commission notes that, these installations are covered under tariff subsidy from Government of Karnataka. HESCOM shall furnish whether there is any commitment letter from the Government of Karnataka regarding the budgetary provisions to meet the subsidy for IP sets for FY21. If not, on the basis on which HESCOM has proposed the increase in the tariff subsidy needs to be explained. **In the absence of the commitment letter from the GoK, the Commission will not consider any enhanced consumption of IP sets for FY21.**

Further, HESCOM shall also furnish the details about the hours of power supply arranged to IP sets during FY19 and supplied / proposed to be supplied during FY20 and FY21 with reference to the GoK Orders issued in connection with hours of power supply to IP set installations.

15. Demand, Collection and Balance (DCB) for FY19:

HESCOM shall furnish the demand, collection and balance statement in the format annexed to the audited accounts for FY19.

16. Compliance to directives issued by the Commission:

No.	Directives Issued by the Commission	Observation made
1	Consumer interaction meeting at Subdivision level.	HESCOM was directed to conduct consumer interaction meetings at Subdivision level chaired by the SEE once in a quarter to redress the consumer complaints. HESCOM has submitted the summary of consumer interaction meetings conducted in all the subdivisions during 1 st & 2 nd quarter of the FY20 in its filing. The details of such meetings as desired in the

No.	Directives Issued by the Commission	Observation made
		<p>prescribed format shall be furnished for FY19 and till September 2019.</p> <p>As directed, the HESCOM is not furnishing the details of the CIMs conducted once in three months to the Commission. HESCOM has to confirm on, whether the proceedings of such meetings are hosted in its website.</p> <p>The HESCOM shall furnish compliance thereon.</p>
2	Directive on preparation of energy bills on monthly basis by considering 15 minute's time block period	HESCOM has furnished the month-wise details of number of open access consumers sourcing power from power exchange, open access, units scheduled / consumed in MU and illegally banked energy, if any, for FY19 and up to September 2019, but HESCOM has to furnish the details of revenue gain for the above periods.
4	Directive on implementation of Standards of Performance (SoP)	<p>The HESCOM was directed to display the SoP parameters in all its O&M Subdivisions and O&M Sections. Also directed the HESCOM to carry out effective supervision over the functioning of field offices particularly in rendering of services to the consumers, relating to restoration of supply of electricity and to submit the details of number of violations of SoP by officers, sub-division wise, month wise, amount of penalty levied on the officers and the amount paid to the consumers for any delay in service.</p> <p>Directed HESCOM to conduct awareness campaign at the Hobli levels for educating the public about the Standards of Performance prescribed by the Commission. HESCOM to conduct necessary orientation programme for all the field officers and the staff up to linemen to educate them on the SoP and the consequences of non – adherence to the SoP. Further, the Commission directed HESCOM to publish the "HAND BOOK" in Kannada on the SoP and arrange to distribute to all the staff and stake holders and submit the quarterly progress.</p> <p>But the HESCOM is not submitting the compliance periodically. It is said to have published the hand book on SoP, but has not enclosed the copy for information of the Commission. HESCOM has reported the conduct of awareness campaigns in the Hobli levels for educating consumers and orientation programs for educating the officers and field staff up to the level of lineman. HESCOM shall submit the compliance regularly.</p>
5	Directive on use of safety gear by linemen	<p>HESCOM is not submitting the quarterly compliance report to the Commission.</p> <p>As per the statistics furnished in the data for ESCOMs review meeting 2499 number of linemen and 19 number of linemen on contract basis has to be provided with the safety gear.</p> <p>HESCOM shall submit the statistics and the definite timeline for providing complete set of safety gear to all the lineman.</p>

No.	Directives Issued by the Commission	Observation made
6	Directive on providing Timer Switches to Street lights by ESCOMs	<p>The HESCOM has not submitted the quarterly compliance report in respect of installation of timer switches, to the Commission.</p> <p>As per the statistics furnished in the tariff filing in November 2018, 19,203 SL installations were required to be provided with timer switches. Whereas, as per the information furnished in November 2019, 19,982 number of SL installations are to be provided with the timer switches. This shows that, in spite of the directions of the Commission, HESCOM is servicing the SL installations without timer switches, thereby increasing the inventory of SL installations to be provided with timer switches.</p> <p>HESCOM has also not submitted the compliance as to whether LED / energy efficient lamps are being used while servicing of new streetlight installations.</p> <p>HESCOM shall submit the compliance on the same.</p>
7	Directive on Load shedding	<p>The HESCOM in its tariff filing has informed that it is making use of "URJA MITRA" app developed by MoP for the dissemination of SMS on outage information to citizens by field staff. However, the details of only 27.54 lakh consumer are uploaded in the Application out of 44.35 lakh consumers. HESCOM shall submit the action plan for updating the details of 100% of consumers in order to utilize the Application effectively.</p>
8	Directive on establishing a 24 X 7 fully equipped centralized consumer service centers	<p>HESCOM was directed to reduce the consumer downtime to address the complaints. HESCOM is directed to report the average time taken to attend to a complaint as at present and the efforts made to reduce the downtime further in future.</p> <p>The HESCOM shall furnish compliance in this regard. Comparison of the downtime analysis for FY18 and FY19 shall be furnished.</p>
9	Directives on Energy Audit	<p><u>Energy Audit of cities / towns</u></p> <p>The HESCOM is not furnishing the energy audit reports regularly to the Commission. HESCOM shall furnish details of feeder-wise energy audit along with the details of measures initiated to reduce loss levels wherever the same are above 15% up to September, 2019.</p> <p><u>DTCs Energy Audit:</u></p> <p>HESCOM was directed to furnish the details of energy audit conducted in respect of DTCs for which meters have been fixed and the remedial measures initiated to reduce losses in those DTCs every month to the Commission regularly.</p>

No.	Directives Issued by the Commission	Observation made
		<p>HESCOM is said to have conducted EA for only 18,500 to 27,000 number of DTCs, out of 64,241 number of metered DTCs.</p> <p>HESCOM shall submit the details of energy audit conducted for the metered DTCs and the timeline by which all the remaining DTCs will be metered and audited.</p> <p>Shall take necessary action to submit the audit reports of towns, DTCs and feeders on quarterly basis to the Commission.</p>
13	Prevention of Electrical Accidents	<p>As per the details of hazardous locations furnished, it is found that, as high as 48,938 number of hazardous locations are yet to be rectified as on October 2019. As per the statistics of accidents, number of accidents occurred during the period April 2019 to October 2019 is on the rise compared to FY19. In this regard, HESCOM shall furnish the stringent action plan for rectifying the hazardous locations.</p> <p>HESCOM has to furnish the summary of the analysis made on the reports submitted by Electrical Inspectorate for FY20 up to September, 2019, action taken to prevent such accidents in future.</p>

Annexure-1:

Physical and financial progress, in respect of the schemes taken up by HESCOM.

Sl. No.	Name of the Scheme	Total No. of works	Total Cost of Scheme (Rs in	Funding mechanism for the	Objectives of the	Scheduled date for completion of	No. of works completed till	Objectives achieved with	Total expenditure	Balance no. of works to be	Expected expenditure for completion of	Expected date of completion of balance works	Cost to Benefit
1	DDUGJY												
2	IPDS												
3	R-APDRP												
4	DAS												
5	Smart Grid												
6	Model Sub Division												
7	Model Village												
8	Any other schemes												

Annexure-2:

Year wise break up of no. of works completed and corresponding expenditure incurred from the first year of inception of the scheme to till FY19.

Sl. No.	Name of the Scheme	1 st year (ex: FY10)		2 nd year (FY11)			10 th year (FY19)	
		No. of works completed	Expenditure incurred (Rs in	No. of works completed	Expenditure incurred (Rs in	No. of works completed	Expenditure incurred (Rs in	Total no. of works completed	Total expenditure till FY19
1	DDUGJY								
2	IPDS								
3	R-APDRP								
4	DAS								
5	Smart Grid								
6	Model Sub Division								
7	Model Village								
8	Any other schemes								

Annexure-3:

Year wise break up of no. of balance works that will complete and corresponding expenditure for completion of balance works of the scheme from FY20 onwards.

Sl. No.	Name of the Scheme	FY20		FY21		FY22		
		Balance no. of works to be completed	Expenditure (Rs in Cr)	Balance no. of works to be completed	Expenditure (Rs in Cr)	Balance no. of works to be completed	Expenditure (Rs in Cr)	Balance no. of works to be completed	Expenditure (Rs in Cr)	Total no. of balance works to be completed	Total of the expected expenditure (Rs in Cr)
1	DDUGJY										
2	IPDS										
3	R-APDRP										
4	DAS										
5	Smart Grid										
6	Model Sub Division										
7	Model Village										
8	Any other schemes										
