

CHAPTER – 5

ANNUAL REVENUE REQUIREMENT FOR FY21

5.0 Annual Revenue Requirement (ARR) for FY21:

GESCOM in its application dated 29th November, 2019, has sought approval of the Commission for the revised ARR for the FY21 and the revision of retail supply tariff for FY21. The summary of the proposed ARR of FY21 is as follows:

TABLE – 5.1

Proposed ARR for FY21

Particulars	Amount in Rs.Crores
	FY 21
Energy at Energy at Generating Bus- in MU	9328.34
Transmission Losses in %	3.13%
Energy at Interface in MU	9036.36
Distribution Losses in %	14.05%
Sales in MU:	
Sales to other than IP & BJ/KJ	4033.25
Sales to BJ/KJ	245.46
Sales to IP	3488.04
Total Sales	7766.75
Revenue at existing tariff and Misc. Charges:	
Revenue from tariff and Misc. Charges	3141.95
Tariff Subsidy to BJ/KJ	172.31
Tariff Subsidy to IP	2068.41
Total Existing Revenue including Miscellaneous Revenue	5382.67
Expenditure:	
Power Purchase Cost	4229.02
Transmission charges of KPTCL and SLDC charges	442.55
POSO and PGCIL charges	3.13
Power Purchase Cost including cost of transmission	4674.70
Employee Cost	612.96
Repairs & Maintenance	53.03
Admin & General Expenses	143.22
Total O&M Expenses	809.21
Depreciation	204.44
Interest & Finance charges	
Interest on Capital Loans	164.70
Interest on Working capital loans	117.83
Interest on belated payment on PP Cost	0.00

Particulars	FY 21
Interest on consumer security deposits	30.58
Other Interest & Finance charges	0.00
Less: interest & other expenses capitalized	-5.75
Total Interest & Finance charges	307.36
Other Debits	10.00
Net Prior Period Debit/Credit	0.00
Return on Equity	58.64
Funds towards Consumer Relations/Consumer Education	0.00
Other Income	-60.30
ARR	6004.05

GESCOM has requested the Commission to approve the Annual Revenue Requirement of Rs.6004.05 Crores for FY21, without carried forward the surplus of Rs.19.34 Crores as projected under APR FY19. GESCOM has projected the deficit of Rs.621.37 Crore for FY21.

Considering the estimated revenue of Rs.5382.67 Crores from sale of power to the consumers, at the existing retail supply tariff, including the miscellaneous revenue and without considering surplus of Rs.19.34 Crores for FY19, GESCOM has projected a revenue gap of Rs.621.37 Crores for FY21. In order to bridge the revenue gap of Rs.602.03 Crores for FY21, the GESCOM has proposed the average increase in retail supply tariff by 80 paise per unit in respect of all the category of consumers, including BJ/KJ and IP set consumers for FY21.

5.1 Annual Performance Review for FY19 & FY20:

As discussed in the preceding chapter of this Order, the Commission has carried out the Annual Performance Review for FY19 based on the audited accounts and other relevant records furnished by GESCOM. Accordingly, a **surplus of Rs.215.04 Crores of FY19, is required to be carried forward to the ARR of FY21.**

As regards APR for FY20, it is noted that the financial year 2020 is yet to be completed and the hence the audited accounts for FY20 are yet to be

finalized. Therefore, the Commission decides to take up the APR of FY20, while taking up the revision of ARR / Retail Tariff, if any, for FY22.

5.2 Annual Revenue Requirement for FY21:

5.2.1 Capital Investments for FY21:

GESCOM Proposal:

The GESCOM, in its Tariff application, has proposed capex Rs.1215.62 Crores and Rs.733.23 Crores FY20 and FY21 respectively as below:

TABLE - 5.2
GESCOM's Capex Proposal

Sl. No.	Particulars	Capex budget proposed for FY 2019-20 (Amount in Rs in Crores)	Capex budget proposed for FY 2020-21 (Amount in Rs in Crores)
1	GKS-SC	140.53	135.00
2	GKS-ST		
3	GKS-BC		
4	GKS-Min		
5	GKS-Vishwakarma		
6	Water Works.	16.63	20.00
7	25 kVA Additional DTCs.	35.55	28.00
8	63 kVA Additional DTCs.		
9	100 kVA Additional DTCs.		
10	250KVA Additional DTCs.		
11	25kVA to 63kVA DTC Enhancement.	13.88	16.50
12	63kVA to 100kVA DTC Enhancement.		
13	100KVA to 250KVA DTC Enhancement.		
14	Shifting of existing DTC to load center.	2.11	1.55
15	LT Line Conversion of 1 Ph 2 wire or 1 Ph 3 wire to 3Ph 5 Wire (Including providing ABC,UG cable etc).	7.33	10.00
16	Providing SMC Box to DTCs.	0.00	0.00
17	Replacement of Damaged poles	17.21	10.00

18	Energization of IP Sets under General category	3.90	6.41
19	Energization of IP Sets under General category (Shigra Samparka Yojane)	7.20	5.00
20	Service Connection works other than IP/BJ/KJ/Water works.	11.73	9.00
21	Sub Stations.	65.45	50.00
22	Stations Augmentation		
23	Providing 33kV new link Lines for bifurcation load and Express Feeder		
24	Providing 11kV new link Lines for bifurcation load and Express Feeder	13.74	34.80
25	Nirantara Jyoti Yojana	10.76	0.00
26	RAPDRP Part-A	1.20	0.00
27	RAPDRP Part-B	1.04	0.00
28	Un Authorized IP Sets	43.41	6.00
29	Providing meters to IP Sets above 10 HP	0.74	1.73
30	Providing meters to BJ/KJ	1.54	2.00
31	Providing meters to Street Lights and Water Supply.	5.44	1.00
32	Replacement of Faulty / MNR energy meters other than BJ/KJ/ Street Light.	6.52	4.00
33	Replacement of EM meters by Static meters	9.18	7.74
34	DTC Metering of RAPDRP	1.09	1.25
35	DTC Metering of non RAPDRP	19.45	1.75
36	Replacement of 33kV Line Rabbit Conductor by Coyote Conductor	7.83	10.00
37	11kV Re-Conductoring	22.29	25.00
38	LT Re-Conductoring		
39	IT Initiatives, Automation and Call Centers	4.79	17.00
40	Establishing ALDC & SCADA	0.20	1.50
41	Distribution Automation System (DAS)	15.00	0.00
42	DSM	0.30	8.00
43	Replacement of failed Distribution Transformers by New Transformer by Scraping failed Transformer which is beyond Repair.	31.70	36.00

44	Replacement of Power Transformers	4.00	4.00
45	Replacement of Old and failed equipment and other works of existing 33kV Stations & Lines.	9.69	10.00
46	Preventive measures to reduce the accidents (Providing intermediate poles, Re-stringing of sagging lines, providing guy and stud, guarding, shifting of lines, fencing of DTCs)	20.00	25.00
47	Safety Materials	3.00	1.50
48	Civil works	33.03	12.00
49	SCP/TSP	12.01	25.00
50	SDP works	76.55	70.00
51	DDUGJY	286.56	80.00
52	IPDS	121.72	15.00
53	HT Conductor by 11KV AB Cable	3.09	2.50
54	T&P Materials i) Furniture	2.08	2.00
55	Computer and Printers (T & P materials)		
56	Shifting of meter from I to O	22.66	0.00
57	Creation of Electrical Infrastructures for conversion of Existing various villages to Model villages	5.80	10.00
58	R&M to Stations	0.00	6.00
59	Soubhagya scheme	77.69	5.00
60	Rehabilitation of Flood affected villages (Special Programme).	0.00	15.00
61	CWIP-Capital expenditure booked for restoration of infrastructure in flood affect areas	20.00	0.00
62	Electric Vehicle Charging (EVCS) Station	0.00	1.00
Total		1215.62	733.23

The GESCOM has submitted the salient features of requirement of capex for FY 20-21 as follows:

a) Ganga Kalyan Schemes: These schemes include energization of IP sets of beneficiaries belonging SC/ST, Backward Caste and Minority Communities. These are sponsored by various Corporations of GoK as below:

- Scheduled Caste: Dr. Ambedkar Development Corporation Ltd.
- Scheduled Tribes: Karnataka Scheduled Tribes Development Corporation Ltd.
- Backward Caste: Devraj Urs Development Corporation Ltd., Minority: Minority Development Corporation Ltd.

Now during FY20 it is targeted for electrification of about 8000 number of bore wells. Hence a budget of Rs.140.53 Crores and Rs.135.00 Crores for FY20 and FY21 is earmarked in the Capex of GESCOM. Out of this Rs.140.53 Crores Rs.35 Crores would be the grants from GOK and Rs.105.53 Crores would be the internal resources. Total asset categorization is expected to be Rs.98.37 Crores.

b) Water supply works: These works are taken up for arranging power supply to rural drinking water supply schemes sponsored by local ZP authorities. For FY20 a sum of Rs.16.62 Crores is earmarked for energizing of 1200 Nos. of schemes. This would be capital grants from GOK. Total asset categorization is expected to be Rs.11.63 Crores

c) DDUGJY Works: 'Deendayal Upadhyaya Gram Jyothi Yojana' (DDUGJY) was approved by MoP, GoI vide Official Memorandum F. No. 44/44/2014-RE. Further guidelines were issued by MoP New Delhi in which REC would be the Nodal Agency for implementation of DDUGJY in Rural areas of the country. As per these guidelines, DDUGJY was launched for the rural areas with the following components:

- i. Separation of agriculture and non-agriculture feeders.
- ii. Strengthening of augmentation of sub-transmission & distribution (ST&D).
- iii. Rural electrification.
- iv. Consumer metering and DTC's metering.

Based on the recommendation of the State Level Standing Committee (SLSC) of GoK, MoP has approved the following amounts for implementation of SAGY Scheme in GESCOM:

(Amount in Rs. Crores)

Sl. No.	Name of the District	Metering	SAGY		Access to RHHs	System Strengthening	Feeder Separation	Total Cost	PMA charges	Total Cost incl. PMA Charge
			Nos	Cost						
1	Bellary	27.94	1	0.07	1.47	14.13	35.98	79.59	0.40	79.99
2	Bidar	14.13	1	0.11	0.65	13.44	54.82	83.15	0.42	83.57
3	Gulbarga	30.77	1	0.28	0	15.84	86.06	132.95	0.66	133.61
4	Koppal	15.46	0	0	0.65	8.42	26.17	50.70	0.25	50.95
5	Raichur	22.23	2	0.67	2.45	7.36	30.48	63.19	0.32	63.51
6	Yadgir	10.28	1	0.21	2.03	7.72	67.00	87.24	0.44	87.68
GESCOM TOTAL		120.81	6	1.34	7.25	66.91	300.51	496.82	2.48	499.31

The financial support under the scheme shall be as follow:

Agency	Nature of support	Quantum of support (% of project cost)
Govt. of India	Grant	60%
Utility/State Contribution	Own fund	10%
Loan (Fls/Banks)	Loan	30%
Additional Grants from Gol on achievement of prescribed milestones	Grant	50% of total loan component (30%) i.e., 15%
Maximum Grant by Gol (including additional grant on achievement of prescribed milestones)	Grant	75%

Under DDUGJY during the FY17 and FY18 works worth Rs.551.69 Crores have been awarded and out of which the expenditure incurred so far is Rs.269.51 Crores. The balance works cost of Rs.286.56 Crores is provided in the capex for FY20. Out of this, Rs.214.92 Crores will be the Grants from GOI, Rs.71.63 Crores would be borrowings in the form of loan. An amount of Rs.272.22 Crores is expected to be categorised out of the allocated Capex for FY20.

d) IPDS Works: Integrated Power Development Scheme' (IPDS) was approved by MoP, Gol vide Official Memorandum No. 26/1/2015-APDRP(Vol-II) dated 24-8-2015. Further guidelines were issued by MoP New Delhi in which PFC would be the Nodal Agency for implementation of IPDS in Urban/Semi-urban areas of the country. As per these guidelines, IPDS was launched for the Urban/semi-urban areas which includes:

- a. Strengthening of Sub-transmission and distribution network.

- i. Creation of new Sub-stations including GIS, DTs, HT & LT lines.
 - ii. Augmentation of Sub-stations, DTs, HT & LT lines.
 - iii. Installation of Capacitors.
 - iv. Renovation & Modernization of existing Sub-stations & lines.
 - v. HVDS & ABC.
 - vi. Laying of UG cables in density populated areas and areas of tourism and religious importance.
 - vii. IT applications and customer care services.
- b. Metering includes input points, feeders, DTs and all categories of consumers for existing un-metered connections, replacement of faulty meters and electro mechanical meters, prepaid/smart meters, AMI also included.
 - c. Providing Roof Top Solar PV Panels.

Based on the recommendation of the State Level Distribution Reforms Committee (SLDRC), the Monitoring Committee of MoP has sanctioned the Circle-wise DPRs of GESCOM for providing Roof Top Solar PV Panels as below:

Sl. No.	Name of the Circle	Amt. Rs. in Crores
1	Bidar	43.89
2	Kalaburagi	50.53
3	Raichur	41.99
4	Bellary	47.00
Total		183.41

The financial support under the scheme shall be as follows:

Agency	Nature of support	Quantum of support (% of project cost)
Govt. of India	Grant	60%
Utility/State Contribution	Own fund	10%
Loan (FIs/Banks)	Loan	30%
Additional Grants from Gol on achievement of prescribed milestones	Grant	50% of total loan component (30%) i.e., 15%
Maximum Grant by Gol (including additional grant on achievement of prescribed milestones)	Grant	75%

Under IPDS during the FY17 works have been awarded circle wise in GESCOM and awarded cost is Rs.220.43 Crores out of which the expenditure incurred is Rs.104.94 Crores

To meet the balance work, a budget of Rs.121.72 Crores is provided for in FY20. Total Rs.110.03 Crores would be the Grants from GOI, Rs.73.35 Crores would be borrowings in the form of loan. An asset of Rs.115.63 Crores expected to be created in GESCOM out of the allocated Capex.

e) Additional DTCs and enhancement of capacity of existing DTCs:

Additional DTCs of various capacities such as 25 KVA, 63KVA, 100KVA etc. along with associated 11KV lines/LT lines are added to the system to improve the voltage regulation and to ease out loads on the existing DTCs. Hence for the FY20 a budget allocated Rs.35.55 Crores **is provided for and** out of this Rs.17.77 Crores will be capital grants from GOK and Rs.3.55 Crores will be from internal resources and Rs.14.22 would be borrowings in the form of loan. The asset categorization is expected to be Rs.21.33 Crores.

Enhancement of existing DTCs to higher capacities is necessary wherever the load is in excess of its capacity. Here existing 25KVA transformer is replaced by next higher capacity 63KVA, for existing 63 KVA is replaced by 100KVA and so on. Hence for FY20, a budget allocation of is Rs.13.87 Crores is provided and out of this Rs.6.93 Crores would be the capital grants from GOK and Rs.1.38 Crores would be borne by GESCOM Rs.5.55 Crores would be borrowings in the form of loan. the asset categorization is expected to be Rs.10.40 Crores.

f) Energization of IP Sets other than GKS: Under this head, energization of IP set under general category and Shigra Samparka Yojane are to be taken up. Now during FY20 it is targeted to energize about 750 Nos. Towards this an outlay of Rs.11.10 Crores is proposed. Out of this Rs.9.65 Crores would be equity from GOK and Rs.1.44 Crores will be borne by GESCOM. Total asset categorization expected to be Rs.5.55 Crores.

g) Construction of 33KV sub stations and associated lines, Station augmentation and providing 33KV new link lines for bifurcation of load and express feeders: Out of 12 Nos. of previously awarded 33KV substations, 07 Nos were commissioned during FY19 (Namely Kamlapur, Sugur, Baddepalli, Gunda, Rupangudi, Wadegaon and Karur-Motsugur) and 05 Nos of Substations (Namely 33/11 kV Kudidarga, Lingadalli, Hiremyageri, Kadechur, and 33/11 kV Mamandoddi) are ready for commissioning.

Further apart from ongoing 10 Nos. of substations it is also proposed to take up 5 Nos. of new sub-stations during FY20 to improve the voltage conditions and reduce losses. Augmentation in existing stations and providing 33KV new link lines for bifurcation of load and express feeders will also be taken up out of this budget. For these works the total required budget is estimated at Rs.65.45 Crores. Rs.52.36 Crores would be availed as loans and Rs.13.09 Crores would be GESCOM internal funding. An asset of Rs.45.81 Crores is expected to be created in GESCOM.

h) Creating Infrastructure to UAIP Sets Regularized: For the FY20 it is proposed to invite fresh tender for creating infrastructure for regularization of 4962 Nos UAIP sets for which budget requirement indicated is Rs.43.41 Crores. Rs.34.72 Crores would be availed as loans and Rs.8.68 Crores would be GESCOM internal funding. An asset of Rs.21.70 Crores is expected to be created in GESCOM.

i) Reconductoring of 11KV and LT lines: With a view to avoid damage to life/property of common public and also for healthy and reliable distribution system it is necessary to carry out replacement of age old conductors, tightening of loose span, replacement of poor quality conductor by new and improved quality. Hence a sum of Rs.22.29 Crores is earmarked for this purpose, out of which Rs.17.83 Crores would be utilized out of GOK capital grants and Rs.4.45 Crores would be borrowings in the form of loan. It is expected to create an asset of **Rs.6.68 Crores** in FY20.

j) Establishing GIS: Under this scheme it is proposed to take up the construction of 33 KV Sub Transmission Ring System within Gulbarga City and establishing five numbers of 33/11 KV, 2x5 MVA, Gas Insulated Substations (GIS) in the premises of the 1) Service station 44, 2) Near Shanti agar, 3) KHB complex, 4) Near KCT Gate and 5) General hospital compound in Gulbarga city. Out of the above, 03 Nos. of GIS sub substations were commissioned during the above financial year.

For the above works a budget allocation of Rs.30.00 Crores was made during FY19 and the expenditure incurred was Rs.14.89 Crores, two Nos. of GIS sub substations (KCT Gate and Shantinagar) works are under progress. Hence allocations of Rs.15 Crores is made for FY20 in which, Rs12.0 Crores would be availed as loans and Rs.3.0 Crores would be GESCOM internal funding. An asset of Rs.12.00 Crores is expected to be created in GESCOM.

k) Preventive measures to reduce the accidents (Providing intermediate poles, Re-stringing of sagging lines, providing guy and stud, guarding, shifting of lines, fencing of DTCs): These works are taken up where the sites/locations have been identified as hazardous to the general public, and to prevent loss of life and property. the budget requirement for FY20 is projected as Rs.20 Crores, and in which Rs.16.00 Crores would be equity from GOK and Rs.4.00 Crores would be funded by GESCOM. An asset worth Rs.20.00 Crores will be created out of this budget.

l) Civil Engineering Works: For FY20, the major ongoing works such as construction of the Zonal office building at Kalaburagi, Circle office building at Raichur and Division office building at Sindhanur and newly proposed work of Construction of Hospet Rural, Circle and Division office building at Koppal. For these works the budget requirement for FY 19-20 is shown as Rs.33.03 Crores The entire Budget amount would be funded by GESCOM and expected asset of Rs.23.12 Crores for GESCOM would be created.

m) Special Development Program: Special Development Program is an initiative by the GOK, to take up various system strengthening works in

GESCOM. Various works under SDP for FY20 to be taken up are categorized as follows.

- 1) Reconductoring.
- 2) 11KV Link line
- 3) Providing intermediate poles.
- 4) Providing additional DTC
- 5) Rectification of Hazardous locations.
- 6) Phase conversion.

For FY20 a provision of Rs.76.54 crores is made under SDP. GESCOM will get equity of entire Rs.76.54 Crores from GoK. This will create an asset of Rs.76.54 Crores in GESCOM.

n) CWIP-Capital expenditure booked for restoration of infrastructure in flood

affected areas of GESCOM: In order to cope up with damages caused to the GESCOM infrastructure due to natural calamity like floods, earth quakes etc. GESCOM spares some budget. For the FY20 in order to restore electrical infrastructure in flood effected areas of GESCOM like, Yadgir, Raichur, Ballari, Hospet and Kalaburagi sum Rs. 20.0Crores is proposed in the Capex for FY20.

Out of this Rs.20 Crores, Rs.18 Crores would be equity from GOK and Rs.2.00 Crores would be GESCOM funding. This will result in asset categorization of Rs.20 Crores in GESCOM.

- o)** Provisions are also made in the annual budget for FY20 for, conversion of LT 1-ph, 2-wire to 3-wire/5-wire system, metering of BJ/KJ installations, service connections, replacement of damaged poles, augmentation of 33KV S/s, replacement of EM meters by static meters, conducting of 33KV/11 KV/LT lines, IT initiatives, T&P materials, etc.

The Commission notes that in the table above no provision was found in respect of Gas Insulated Substations as mentioned in the salient features.

Commission's Analysis and decision:

As per the Tariff application, GESCOM has proposed Capex of Rs.1215.62 Crores and Rs.733.23 Crores for FY20 and FY21 respectively as against the original capex of Rs.1032.75 Crores and Rs.663.53 Crores proposed under

MYT filings for the same period. Further, GESCOM has projected the expected capital expenditure of Rs.969.18 Crores and Rs.603.74 Crores for FY20 and FY21. In the preliminary observations, GESCOM was directed to explain the rationale behind submitting the proposal for incurring capital expenditure of Rs.1215.62 Crores and Rs.733.23 Crores FY20 and FY21 respectively, as against the Commission approved capital expenditure of Rs.700.00 Crores and Rs.531.33 Crores respectively for these years, in the Tariff Order 2019.

The GESCOM, in its compliance has stated that, for FY20, GESCOM Board has approved a Capex of Rs.1195 Crores after thorough verification of the proposed works to be taken up in FY20 and also spilled over works of FY19, with a view to give quality and reliable power supply to consumers, strengthen the distribution network to meet the load growth in future and to take up social obligatory works like Ganga Kalyana works. During FY20 Gol schemes like DDUJGY and IPDS are in final closing stage. Budget is required for settlement of claims. The details of budget required and expenditure booked for DDUGJY, IPDS are as per the following table:

(Amount in Rs. Crores)

Sl. No	Name of the Scheme	Awarded Amount	Expenditure Booked up to 31.03.2019	Expenditure Booked from 01.04.2019 to 20.12.2019	Expected Expenditure to be Booked from 21.12.2019 to 31.03.2020
1	DDUGJY	558.027	249.92	142.13	165.98
2	Saubhagya	91.78	13.13	17.68	60.97
3	IPDS	220.43	97.06	58.37	65.00

GESCOM has stated that, due to heavy flood in several areas of GESCOM coming under the belt of rivers like Bhima, Krishna and Tungabhadra, heavy damage to the electrical infrastructure has occurred. GESCOM has spent Rs.20 Crores for restoration of electrical infrastructure in various flood affected areas. Provision for natural calamity was not made under approved Capex approved by the Board for FY20. However, the same is very much essential.

GESCOM has submitted necessary reasons and explanation/ justification for incurring the capex during FY20 and has requested the Commission to consider the justification and reasoning for FY21 as well.

It is to be stated here that GESCOM has filed application for APR of FY19 and approval of revised ARR and retail supply tariff for FY21. The Commission after taking into consideration various issues has approved the reasonable capex for FY20 in its Order dated 30.05.2019. GESCOM is required to incur the expenditure within the approved capex. Hence the question of approval of revised capex for FY20 will not arise in these proceedings. The truing up of capex for FY20 would be taken up during the Annual Performance Review for FY20 in the next tariff proceedings.

The Government of India, under National Disaster Response Fund that includes funding for Government of Karnataka, has released/releasing funds to the flood affected areas. The same shall be utilized by GESCOM to meet the capital budget incurred/to be incurred for restoration of power supply and reconstruction of distribution network in the flood affected areas. Hence, the capex for FY20 may be incurred within the already approved amount by making suitable appropriation/ re-appropriation within the approved amount. **Further, GESCOM is hereby informed that the consequential cost towards capex incurred without the approval, will not be considered for being passed on to the consumers in the retail supply tariff.**

The GESCOM, in its filing as per Format D-17, has indicated capital expenditure of Rs.715.80 Crores and Rs.535.75 Crores for FY20 and FY21 respectively. However, GESCOM has not furnished the reasons, in its compliance for indicating different capex figures.

With regard to funding, GESCOM has stated that it is expecting to generate the internal cash flows required for funding the projected capex for FY20 and FY21 through Govt. Equity, increase in security deposits and grants. The balance funding will be availed through borrowing from various financial institutions. In FY21 GESCOM intends to establish EV charging stations in

major cities in its jurisdiction, to promote e-mobility, as per the guidelines from the GOK and GOI.

In compliance of the Commission's direction in the preliminary observations to submit the total capex incurred during the last three financial years (FY17, FY18 and FY19) in respect of Ganga Kalyana works, creating infrastructure for Unauthorized IP Sets, Metering which includes providing meters to IP sets of above 10 HP, to BJ/KJ, Street light & water supply, replacement of faulty meters and electromechanical meters by static meters, duly indicating completed works and balance no. of works, GESCOM has submitted the following:

TABLE – 5.3
Scheme-wise Capex incurred by GESCOM during the last 3 years

Amount in Rs. Crores

Sl. No.	Nomenclature of the Work	Budget FY 17		Budget FY 18		Budget FY 19	
		Approved	Utilized	Approved	Utilized	Approved	Utilized
1	Ganga Kalyan works	25.00	66.01	20.00	56.26	50.00	79.12
2	Un authorized IP set	60.00	10.41	35.00	2.93	25.00	6.23
3	Providing meters to IP Sets above 10 HP	1.00	0.00	1.00	0.01	0.50	0.2
4	Providing meters to BJ/KJ		0.32		0.00		0.00
5	Providing meters to Street Lights and Water Supply.		3.8		0.04		0.00
6	Replacement of EM meters by Static meters	1.00	1.09	2.00	0.30	0.50	2.08
Note: - 1) For Ganga Kalyana works there is an over utilization of Capex, since the number of applications to be serviced are variable and cannot be predicted and needs to be serviced as and when received. 2) In respect of UAIP delay in finalization of tender has resulted in underutilization. However works are awarded during FY 2017-18 for 6000 Nos of UAIP beneficiaries cumulatively.							

As seen from the above Table, GESCOM has not furnished the information on completed works and balance no. of works. **The Commission directs**

GESCOM to furnish these details to the Commission within 60 days from issuance of this Tariff Order.

In compliance of the Commission's direction in the preliminary observations to submit the total Capex incurred during the last three financial years (FY17, FY18 and FY19) in respect of providing additional DTCs, for enhancement of existing DTCs, for replacement of failed distribution transformers which are beyond repair by new one, capex towards Stations Augmentation, providing 33kV new link lines for bifurcation of load and express feeder, for providing 11kV new link lines for bifurcation of load and express feeder, towards reconductoring and DTC metering and the corresponding reduction in distribution losses, percentage of DTC metering and the energy audit, GESCOM has submitted the following:

(Amount in Rs. Crores)

Sl. No.	Nomenclature of the Work	Budget FY17		Budget FY18		Budget FY19	
		Approved	Utilized	Approved	Utilized	Approved	Utilized
1	Additional DTCs	5.00	21.75	4.00	11.78	5.00	16.20
2	DTC Enhancement	3.00	12.67	2.00	3.85	10.00	4.72
3	Replacement of failed Distribution Transformers	12.00	53.93	10.00	67.03	20.00	31.70
4	Stations Augmentation	0.00	0.00	0.00	0.62	0.00	0.00
5	Providing 33kV new link Lines for bifurcation load and Express Feeder	1.00	6.40	1.00	3.33	1.00	1.48
6	Providing 11kV new link Lines for bifurcation load and Express Feeder	15.00	5.00	10.00	3.54	10.00	4.80
7	11kV Re-Conductoring	5.00	4.92	4.00	1.53	10.00	1.04
8	LT Re-Conductoring	0.00	4.75	4.00	3.87	20.00	2.87
9	DTC Metering of RAPDRP	45.00	0.29	2.00	0.00	0.00	0.09
10	DTC Metering of non RAPDRP		0.00		0.00	5.00	0.00

Percentage of DTC metering is as follows. (Other than IP set DTC):

Sl. No.	Type of Feeder	Metered-Nos.	Un-metered Nos.	Total Existing Nos.	Percentage of Metering
		1	2	3	$4=1/3*100$
1	Industrial	1845	862	2706	68.16%%
2	NJY	8700	679	9380	92.76%
3	Rural	4940	10592	15531	31.81%
4	Urban	11261	6160	17421	64.64%
5	Water Supply	458	421	879	52.09%
Total		27205	18716	45918	59.25%

Reduction in distribution losses for the last three financial years is as follows:

FY	Reduction in Distribution Loss
2016-17	17.33%
2017-18	16.39%
2018-19	14.41%

Further, GESCOM has stated that the DTC-wise energy audit carried out by GESCOM is being submitted regularly in A to F Format.

It is observed that the percentage of DTC metering is very poor and there is no information on the conduct of energy audit. **Therefore, GESCOM is directed to provide its compliance on DTC metering and conducting energy audit within three months from issuance of this Tariff Order.** It has been observed by the Commission that while capex is being planned for DTC metering but after incurring the expenditure, the post commissioning analysis and the results of energy audit is not being analysed. Thus the very purpose of the expenditure on DTC metering is not being served. **The Commission, therefore directs GESCOM to analyze the post commissioning performance of the DTC metering and ensure that an effective system of energy audit is put in place and take follow up action in the areas where the Technical and commercial losses are beyond the permissible limits and initiate suitable remedial action to minimize such losses in the interest of the finances of GESCOM.**

In response to the Commission direction in the preliminary observations, to submit the total Capex incurred during the last three financial years (FY17, FY18 and FY19) towards preventive maintenance and safety materials along with the reduction in no. of accidents, so as justify the proposed expenses for FY21 GESCOM has submitted the following:

Amount in Rs. Crores

Sl. No.	Nomenclature of the Work	Budget FY 17		Budget FY 18		Budget FY 19	
		Approved	Utilized	Approved	Utilized	Approved	Utilized
1	Preventive measures to reduce the accidents (Providing intermediate poles, Re-stringing of sagging lines, providing guy and stud, guarding, shifting of lines, fencing of DTCs)	5.00	11.55	3.00	5.39	9.00	4.57
2	Safety Materials	0.00	0.23	0.00	0.34	2.00	0.13

It is submitted that GESCOM, through safety audit, has taken up identification of hazardous locations and their rectification, especially locations at the schools, colleges and hostels are given more emphasis and that 1006 hazardous locations are identified in various schools, colleges, and hostels in GESCOM jurisdiction and a sum Rs.25 Crores under Capex has already been utilized. Also during FY20 so far, GESCOM has spent Rs.1.62 Crores for purchase of safety materials like helmets, Earthling rods, Hand gloves, Tool kit, LED torch and Line testers, to ensure safety to its workmen.

The GESCOM however did not furnish the details of reduction in no. of accidents. **The GESCOM is directed to submit these details within 60 days from the date of issue of this Tariff Order.**

The GESCOM's previous years' achievement of capex vis-à-vis the approved capex is shown in the following table below:

TABLE – 5.4
Approved and Actual Capex incurred

(Amount in Rs. Crores)

Approved and Actual Capex incurred – GESCOM							
Particulars	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Capital investment filed	466.67	552.50	515.00	545.81	1810.00	698.00	911.15
Capital investment approved by the Commission	466.67	552.50	515.00	376.00	500.00	698.00	846.00
Actual capital investment incurred as per audited accounts *	293.17	364.19	330.28	299.70	437.77	304.75	691.57
Percentage of actual capital investment to the approved capital investment	62.82%	65.92%	64.13%	79.71%	87.55%	43.66%	81.75%
*without considering capital investment disallowed under prudence check							

The Commission, based on the previous years' achievements and the break-up of capex furnished by GESCOM, recognizes the capex proposal of GESCOM at Rs.733.23 Crores for FY21. However, the Commission by considering the various proposed works to be executed with capital grants, consumer contribution and internal resources, decides to reckon the expected capital expenditure of Rs.603.74 Crores for the purpose of determination of Tariff for FY21.

The Commission directs GESCOM to maintain the physical as well as financial progress in respect of the works carried out under Capex, indicating the timelines of completion, cost to benefit ratio, etc. These details shall be furnished to the Commission as and when Commission directs.

The Commission directs GESCOM to take concrete measures to complete and capitalize the works in the prescribed time schedule, so that, the benefits of capex are passed on to the consumers effectively and capitalize the works proposed, as far as possible, during each financial year.

The Commission directs the GESCOM to put sincere efforts towards achieving the following objectives of the proposed schemes under capex on due priority:

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. Bring programs for the awareness among the people on usage and conservation of energy.
7. Improve the sales to metered category.
8. Improve the Power factor of the IP set loads by installing switched capacitors of suitable capacity to the secondary of the transformers.

5.2.2 Energy Sales for FY21:

I. Sales- Other than IP sets:

GESCOM Approach:

GESCOM in its filing has estimated energy sales for FY21 as 7766.75 MU. Further, GESCOM has submitted that it has adopted the following approach in estimation of number of installations and sales by GESCOM for the FY21:

- i) 5-year CAGR for the period FY15 to FY19 is adopted for estimating the number of installations and sales for FY20 and the CAGR for the period FY16 to FY20 for estimating FY21 figures.
- ii) For LT6b, HT-1 & HT-3 growth rate of installations is inconsistent and therefore, 1% growth rate is considered for LT6b & HT1 and 5% for HT-3.
- iii) For sales to HT2a category, it is stated that nominal growth is considered in view of OA consumption.
- iv) In case of LT4b, it is submitted that there are only 995 live installations and the consumption is worked out only for these installations.
- v) The Commission's preliminary observations on the sales forecast for the FY21, the replies furnished by the GESCOM and the Commission's view thereon are discussed below:

- a. The Commission had noted that FY20 data, which is an estimated figure by itself, cannot be considered for computing CAGR, and therefore, the CAGR considered for FY21 needs to be reviewed.

GESCOM's Reply:

The CAGR formula is adopted to estimate the growth in number of installations.

- b. The growth rate estimated for number of installations for HT2c & HT4 is higher and is lower for HT1, HT2a & HT3 as compared to normal growth rates. The Commission suggested to GESCOM to reconsider revising its estimates for these categories.

GESCOM's Reply:

The installation growth rate is calculated based on 5-year CAGR from FY15 to FY19 for FY20 and from FY16 to FY20 for FY21. The 5-year CAGR from FY16 to FY20 is 22.08% for HT-2c and 0.16% for HT-4. Hence, GESCOM has requested to consider the number of installations as per D2 format of the filing.

- c. The growth rate for energy sales considered for LT5, HT2b & HT2c is higher and for LT2b, LT6WS, LT6 SL, HT1 & HT2a the growth considered is lower, as compared with the normal growth rates. The Commission suggested to GESCOM to reconsider revising its estimates for these categories.

GESCOM's Reply:

The Sales estimate is not based on CAGR. It is based on average consumption per installation, considering the mid-year number of installations. Hence, the estimates submitted by GESCOM is normal and needs no revision.

The Commission notes that GESCOM has reiterated its submissions made in the original filing and has not replied satisfactorily on the issues raised at Sl. No. i to iii above.

d. To validate the sales, GESCOM was directed to furnish the category-wise sales information in the specified format.

GESCOM's Reply:

GESCOM has furnished the above information.

vi) The GESCOM was directed to furnish the breakup of BJ/KJ installations consuming less than or equal 40 units and above 40 for FY20 and FY21.

GESCOM has furnished the following details:

Particulars	FY20		FY21	
	No. of Installations	Consumption in MU	No. of Installations	Consumption in MU
Installations Consuming less than or equal to 40 Units	589528	233.48	589810	227.53
Installations consuming more than 40 units and build under LT 2a	8147	11.93	7865	17.93

vii) The Commission notes that at page -27 of the replies to the preliminary observations, GESCOM has submitted that the sales to Installations Consuming less than or equal to 40 Units is 237.47 MU and to those Installations consuming more than 40 units is 7.93 MU, which is considered as filed by GESCOM for FY20.

Commission's Approach:

The approach of the Commission in estimating the number of installations and energy sales is discussed in the following paragraphs:

1) No. of Installations:

While estimating the number of installations (excluding BJ/KJ and IP), the following approach is adopted:

- a. The Commission has validated both the number of installations and energy sales to various categories considering the actuals as on 30th November, 2019 and has estimated the number of installations and sales for the remaining period reasonably. Accordingly, the base year estimation has been revised which has an impact on the estimates on the number of installations and sales for the FY21.
- b. Wherever the number of installations estimated by the GESCOM for the FY 21 is within the range of the estimates based on the CAGR for the period FY14 – FY19 and for the period FY16 - FY19, the estimates of the GESCOM are retained.
- c. Wherever the number of installations estimated by the GESCOM for the FY21 is lower than the estimates based on the CAGRs for the period FY14 – FY19 and for the period FY16 - FY19, the estimates based on the lower of the CAGRs for the period FY14 – FY19 and for the period FY16 - FY19 are considered.
- d. Wherever the number of installations estimated by GESCOM for the FY21 is higher than the estimates based on the CAGRs for the period FY14 – FY19 and for the period FY16 - FY19, the estimates based on the higher of the CAGRs for the period FY14 – FY19 and for the period FY16 - FY19 are considered.
- e. For LT-7 & HT 2c categories, the number of installations as estimated by GESCOM is retained.
- f. For HT-5 category, the estimates as per CAGR is considered, as the number of installations estimated by GESCOM is less than the number of installations existing as on 30.11.2019.

Based on the above approach, the total number of installations (excluding BJ/KJ consuming ≤ 40 units/month and IP installations) estimated by the Commission for the FY21 is indicated in the table below:

Approved Number of installations

FY21	
Filed	Approved
2353258	2353002

2) Energy Sales:

(i) For categories other than BJ/KJ and IP sets, generally the sales are being estimated, considering the following approach:

a. The base year sale for FY20 as estimated by the GESCOM has been validated, duly considering the actual sale upto November, 2019 and modified suitably as stated earlier.

b. Wherever the sale estimated by the GESCOM, for the for FY 21, is within the range of the estimates based on the CAGR for the period FY14 –FY19 and for the period FY16 - FY19, the estimates of the GESCOM are considered.

c. Wherever the sales estimated by the GESCOM for the FY21 is lower than the estimates based on the CAGRs for the period FY14 to FY19 and for the period FY16 to FY19, the estimates based on the lower of the CAGRs for the period FY14 to FY19 and for the period FY16 to FY19 are considered.

d. Wherever sale estimated by GESCOM for FY21 is higher than the estimates based on the CAGRs for the period FY14 to FY19 and for the period FY16 to FY19, the estimates based on the higher CAGRs for the period FY14 to FY19 and for the period FY16 to FY19 are considered.

e. LT-4b, LT-4c and LT-6 water supply, the sales are estimated based on FY19 specific consumption.

f. For LT-7 & HT-2c estimates of GESCOM is retained.

g. For HT-4 and HT-5 categories, the estimates of FY20 are retained, as there are no additions to installations during FY21.

Based on the above approach, the sales (excluding BJ/KJ consuming \leq 40 units/month and IP sales) estimated by the Commission, for the FY21, is indicated in the following table:

Approved Energy Sales*

FY21	
Filed	Approved
7766.75	7647.04

in Million Units

(ii) Sales to BJ/KJ:

The break-up of sales to BJ/KJ installations considered for FY19 is as indicated below:

Particulars	No. of Installations	Consumption in MU	Specific consumption per installation per month (kWh)
Installations consuming less than or equal to 40 units	588710	237.48	33.62
Installations consuming more than 40 units and billed under LT2(a)	8965	7.93	73.71

The Commission notes that, the specific consumption works out to 33.62 units /installation/month for BJ/KJ installations consuming less than or equal to 40 units per month and 73.71 units /installation/month for BJ/KJ installations consuming more than 40 units per month.

Since, the GESCOM has not proposed any additional installations during FY21, as there is no GoK policy to extend the benefit of free power to any new BJ/KJ installations, the number of BJ/KJ installations consuming less than or equal to 40 units per month and more than 40 units per month is retained as proposed by GESCOM for FY21. Thus, the sales approved for FY21 is as indicated in the following Table:

Particulars	Million Units	
	No. of Installations	Sales-MU
Installations consuming less than or equal to 40 units	589810	237.95
Installations consuming more than 40 units and billed under LT2(a)	7865	6.96

II. Sales to IP sets – projections for ARR FY21;

GESCOM Proposal:

GESCOM, in its tariff application, has projected IP sets consumption of 3,488.04 MU against 4,02,324 number of IP installations for FY21. GESCOM, as per D-2 Format, has reported actual consumption of 3,514.97 MU against 3,81,097 number of IP set installations for FY19. GESCOM, in its replies to the preliminary observations has stated that, 7,000 to 7,500 IP set installations are being added under the Ganga Kalyana scheme, as per the targets given by the Government of Karnataka and 3,000 to 4,000 IP installations are being added under regular IP sets service programmes. In view of the above, GESCOM has considered an addition of 13,338 number of IP installations for FY20 and an addition of 7,889 number of IP installations for FY21, thereby a total of 21,227 number of IP set installation is shown as addition to the IP set installations that existed in FY19.

Commission's Analysis and Decision:

- While verifying the estimates for FY21, it is found that, the actual sales to IP set installations for FY19 works out to 3,514.97 MU (as detailed in Chapter-4 Sales portion). Based on the actual sales to IP sets, the Commission has arrived at the specific consumption of 9,594 units per installation per annum for the FY19, by considering the mid-year installations of 3,66,362 numbers.
- From the data of previous five years, as furnished by GESCOM, the Commission has found that an average addition of 17,444 number of IP installations has been made every year. As per the submissions made by

GESCOM, it is observed that, GESCOM has considered the addition of 13,338 number of IP installations for FY20 and an addition of 7,889 number of IP installations for FY21. As the proposal of GESCOM is found to be reasonable and based on the said proposal, the number of installations for FY21 are projected. The number of installations for FY20 is 3,94,435 (3,81,097 + 13,338) and for FY21 is 4,02,324 (3,94,435 + 7,889).

- c. The actual sales to IP sets for FY20, till November 2019, as reported by GESCOM, in its replies to preliminary observations, is 1,841.52 MU against 3,95,628 number of IP installations. The actual specific consumption per IP set per month for FY19 on the basis of revised sales estimates works out to 799.5 units per IP per month. By considering this approved specific consumption for FY19 and actual sales till November 2019, sales for the remaining four months i.e., December 2019 to March 2020 have been estimated. The specific consumption for the revised sales for FY20 is worked out and the same is applied for projecting the sales to IP sets for FY21. The Commission has decided to consider the data of actual sales to IP sets for FY20, till November 2019, only provisionally for making the estimates for FY21.
- d. Based on the estimated number of installations and consumption for FY20 and by considering the revised specific consumption for FY19, the details of energy sales projections to IP set consumers for FY21, are as indicated below;

Particulars	FY21		
	As approved by the Commission in TO 2019	As submitted by GESCOM in its Tariff Application	As approved by the Commission (Revised)
No. of Installations	4,08,609	4,02,324	4,02,324
Mid-year number of Installations	3,99,112	3,98,380	3,98,380
Specific consumption in units/installation/annum	8,964	8,756	7,947
Sales in MU	3,577.61	3,488.04	3,165.94

Accordingly, the Commission approves 3,165.94 MU as energy sales to IP-sets as against the projections of GESCOM of 3,488.04 MU, for the FY21. The number of installations approved for FY21 is 4,02,324. This approved IP set consumption for FY21 is with the assumption that the Government of Karnataka would release full subsidy to cover the approved quantum of IP-sales. However, if there is any reduction in the subsidy allocation by the GoK, the quantum of sales to IP sets of 10 HP and below, shall be proportionately regulated by restricting the hours of supply based on the subsidy allocation from the Government. The Commission will not consider any quantum of energy supplied (for computation of subsidy), over and above the numbers of hours for which the Government of Karnataka has extended free power to the IP sets. The Government of Karnataka may also issue suitable instruction to the ESCOMs, in this regard.

- e. The Commission notes that, the sales to all the other categories of consumers except BJ/KJ and IP Set categories is indicating a reducing trend, whereas the sales to IP set installations is showing an increasing trend. The Commission took note of the sales figure of GESCOM and the methodology followed in arriving at the figure therein. Even after segregation of the IP feeders with huge investment, the Commission has observed that the power supply to the IP Set category is not being arranged as per the hours of supply stipulated in the Government Orders and thus the sales under IP sets category is increasing year on year. **The Commission has further observed that the month-wise IP set sales figures submitted earlier during FY19 differs from the figures submitted by the GESCOM in the present application.** By considering all these aspects, the Commission decides that, if discrepancies are continued in computation of IP set sales figures submitted by the ESCOMs, the Commission may take up third party verification of the DTC meter readings and the meter reading of the IP set feeders for establishing the correctness of computation of IP Set sales figures.
- f. The Commission notes that in view of the increase in the IP set sales, the sales and subsidy amount to IP Set installations payable by the Government is increasing year on year and the amount of subsidy receivable from the GoK

towards the outstanding subsidy is also increasing, which is affecting the finances of ESCOMs. **Thus, the Commission directs the GESCOM to restrict its sales to IP Set installations to the level of sales approved by the Commission. For any increase in consumption without establishing the increase in the number of installations or specific approval from the Government for giving enhanced hours of supply, GESCOM itself would be responsible and that the consequent additional financial burden would not be considered for the purpose of any additional subsidy payable by GoK. In such cases the Commission would, besides disallowing the excess consumption will also consider levy of penalty for the increased distribution losses.**

- g. **The Government of Karnataka is requested to issue necessary directions to the ESCOMs in this regard, so as to ensure that the IP set consumption is regulated as per the subsidy made available by Government to the ESCOMs.**
- h. The Commission notes that GESCOM had taken up GPS survey of IP-sets to identify the defunct / not in use / dried up installations in the field and to arrive at the correct number of IP-sets by deducting such defunct / not in use / dried up IP-set installations from its account, on the basis of GPS survey results. GESCOM has not submitted the data of GPS survey with clarity giving details of working and defunct / not in use / dried up installations. From the data of GPS survey furnished by GESCOM, it is observed that there is difference in number of installations as compared to the number of IP installations in the DCB Statement and the accounts. Thus, there is inconsistency in the GPS survey data furnished by GESCOM and hence the Commission is unable to accept the same.
- i. As the quality of data relating to GPS survey of IP-sets, as furnished by GESCOM is not satisfactory, the number of installations reckoned for FY19 and estimates for FY21 are subject to change based on the GPS survey results. Accordingly, after furnishing the GPS survey data and finalization of the report, GESCOM shall furnish the correct number of IP set installations, duly deducting the number of installations not in use / dried up / defunct IP sets from the total number. Thereafter, any variation in the sales due to

change in the number of installations would be trued up during the Annual Performance Review for the FY20 and FY21.

- j. While assessing the sales to IP sets for FY19, the Commission had observed abnormal average consumption per IP set installation per month in some of the segregated agricultural feeders. Hence, the feeder-wise, month wise-data of assessment of IP sets for the period from April 2019 to November 2019, has been considered provisionally for the purpose of projecting the sales for FY20 and FY21. The Commission would consider revision of the same, based on the GPS survey data. **Hence, GESCOM is directed to submit the final survey Report within 3 (three) months from the date of this Order. The survey data should be reconciled with the DCB Statement data and thereafter report the total IP-set consumption to the Commission, month-on month regularly, as per the format prescribed in the previous tariff orders of the Commission.**

Based on the above discussions, the category-wise approved number of installations for the FY21 vis-à-vis the estimates made by GESCOM is indicated in the following Table:

TABLE – 5.5
Category wise approved number of installations

Tariff Category	Description	As filed by GESCOM	As Approved by the Commission
LT-1 (a)	Bhagya Jyoti < =40 units	589810	589810
LT-1 (a)	Bhagya Jyoti>40	7865	7865
LT-2a	Domestic	1877209	1877023
LT-2b	Pvt. Institutions	5791	5740
LT-3	Commercial - Applicable to areas coming under VPs	306372	306372
LT-4 (a)	IP sets - Less than 10 HP	402324	402324
LT-4 (b)	Irrigation Pump sets - More than 10 HP	2565	2335
LT-4 (c)	Private Horticulture Nurseries, Coffee & Tea Plantations	521	511
LT-5	Lt Industries	70153	70140
LT-6	Water Supply	29210	29210
LT-6	Street Lights	13137	13222
LT-7	Temporary Power Supply	37443	37443
LT Total		3342400	3341995

HT-1	HT Water Supply	149	161
HT-2 (a)	HT Industries	1640	1741
HT-2 (b)	HT Commercial	434	434
HT-2(c)	HT Hospitals and Educational Institutions	282	282
HT-3(a) & (b)	HT Irrigation & LI Societies	422	456
HT-4	Res. Apartments	33	34
HT-5	Temporary	32	33
HT Total		2992	3141
Grand Total		3345392	3345136
*Categories other than IP sets and BJ/KJ consuming less than or equal to 40 units/month/installations		2353258	2353002
IP sets and BJ/KJ consuming less than or equal to 40 units/month/installations		992134	992134

*Includes BJ/KJ consuming more than 40 units/installation/month

Accordingly, the category wise approved sales for the FY21 vis-à-vis the estimates made by GESCOM is indicated in the following Table:

TABLE – 5.6

Category wise approved Energy Sales

Million Units

Tariff Category	Description	As filed by GESCOM	As Approved by the Commission
LT-1 (a)	Bhagya Jyoti < =40 units	227.53	237.95
LT-1 (a)	Bhagya Jyoti>40	17.93	6.96
LT-2a	Domestic	1260.26	1260.26
LT-2b	Pvt. Institutions	14.69	16.65
LT-3	Commercial - Applicable to areas coming under VPs	372.79	376.74
LT-4 (a)	IP sets - Less than 10 HP	3488.04	3165.94
LT-4 (b)	Irrigation Pump sets - More than 10 HP	11.59	10.94
LT-4 (c)	Private Horticulture Nurseries, Coffee & Tea Plantations	1.25	1.25
LT-5	Lt Industries	187.96	180.23
LT-6	Water Supply	380.07	446.99
LT-6	Street Lights	279.37	284.90
LT-7	Temporary Power Supply	27.12	27.12
LT Total		6268.60	6015.93
HT-1	HT Water Supply	118.22	130.51
HT-2 (a)	HT Industries	1106.87	1227.88
HT-2 (b)	HT Commercial	84.01	81.15
HT-2(c)	HT Hospitals and	38.74	38.74

Tariff Category	Description	As filed by GESCOM	As Approved by the Commission
	Educational Institutions		
HT-3(a) & (b)	HT Irrigation & LI Societies	124.75	124.75
HT-4	Res. Apartments	15.10	15.29
HT-5	Temporary	10.46	12.78
HT Total		1498.15	1631.10
Grand Total		7766.75	7647.04
	*Categories other than IP sets and BJ/KJ consuming less than or equal to 40 units/ month/ installations	4051.18	4243.15
	IP sets and BJ/KJ consuming less than or equal to 40 units/ month/installations	3715.57	3403.89

*Includes BJ/KJ consuming more than 40 units/installation/month

5.2.3 Distribution Losses for FY21:

GESCOM's Submission:

GESCOM in its filing has proposed to achieve distribution loss levels of 14.05% during FY21.

Commission's Analysis and Decisions:

The Commission notes that GESCOM has proposed the distribution loss level of 14.05% for FY21. The Commission in its preliminary observation, had opined that distribution losses of 14.25% and 14.05% as proposed by GESCOM for FY20 and FY21 respectively, are not justifiable in view of a huge capex proposed by the GESCOM for FY20 and FY21. Therefore, GESCOM was directed to re-submit the distribution loss percentages for FY20 and FY21, accordingly.

GESCOM in its reply, submitted that the entire capex proposal is not linked with the reduction in T&D losses. A part of capex proposed is towards works like Ganga Kalyan, Water Works, E&I, etc., for maintaining reliable and quality Power Supply and also to meet the future load growth.

Further, the Commission had also noted that GESCOM has computed the distribution and transmission loss percentage for FY21 considering the interface energy for the months of March, 2020 to February, 2021 and energy at generation bus and sales figures for the period April, 2021 to March, 2021. GESCOM was directed to clarify the same and was also directed to re-compute the losses considering the energy at Interface points from April, 2021 to March, 2021.

GESCOM in its reply to the preliminary observation, has submitted that consumption for the month of March will be reflected in April month sales as the billing for various categories of installation starts from 1st of every month and continues up to 15th and gets reflected in next month DCB.

The Commission has noted the replies furnished by GESCOM. The performance of GESCOM in achieving the loss targets set by the Commission in the past six years is as follows:

TABLE – 5.7
Approved & Actual Distribution Loss-FY13 to FY19

Particulars	Figures in Percentage						
	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Approved Distribution losses	19.50	20.00	18.50	16.50	17.00	16.00	15.00
Actual distribution losses	18.97	17.77	18.93	18.10	17.33	16.39	14.41

The Commission notes that, in the past six years (with base year as FY13), GESCOM has been able to achieve overall loss reduction of 4.56% percentage point.

It is observed that, the Commission has been allowing capital expenditure as incurred by the GESCOM and it has also allowed the substantial capex for FY21 for strengthening of its distribution network aimed at further reduction of loss levels. Most of the capex spent on the works like E&I work, NJY, DTC Metering, RAPDRP system improvement etc., should enable the GESCOM, not only to strengthen its infrastructure, increase in reliability and quality of power supply but also to reduce the distribution losses considerably.

Hence, in view of such investment, and the reduction of distribution losses achieved during the previous years, the loss reduction of 0.36 percentage point for FY21 as compared to FY19, as proposed by GESCOM, is very minimum. In the light of the above discussion and based on the loss targets achieved by the GESCOM during the previous years, the capex incurred so far and the approval of the proposed capex for FY21, the Commission decides to fix the following distribution loss targets for GESCOM for FY21.

TABLE – 5.8
Approved Distribution Losses for FY21

Particulars	Figures in % Losses
	FY21
Upper limit	14.25
Average	14.00
Lower limit	13.75

The Commission further directs the GESCOM to put in maximum efforts to further reduce the distribution losses during FY21, by drawing a detailed plan action of within, two months from the date of this Order and submit the same to the Commission.

5.2.4 Power Purchase for FY21

The ESCOMs, in their tariff applications have submitted the D-1 Format, wherein the requirement of power purchase for the FY21 has been furnished. The consolidated statement showing the energy requirement for FY21, is shown hereunder:

TABLE – 5.9
Requirement of Energy as filed by ESCOMs

ESCOMs	Energy requirement for FY21 (in MU)
BESCOM	35120.40
MESCOM	6453.45
CESC	8151
HESCOM	16312.64
GESCOM	9328.34
Total	75365.83

GESCOM's submission:

The GESCOM has submitted its power purchase requirement for the year FY21 based on the projected sales, as follows:

TABLE – 5.10
Energy Requirement as filed by GESCOM

Particulars	FY21
Sales (MU)	7766.75
Distribution losses (%)	14.05%
Energy at IF point (MU)	9036.36
Transmission Losses (%)	3.13%
Energy Required to meet the sales of GESCOM (MU)	9328.34

5.2.5 Sources of Power:**GESCOM's submission;**

The GESCOM, in its tariff application, has furnished the sources of power from which it plans to meet the requirement of Power, for FY21.

GESCOM has submitted the basis for considering the availability of power from different sources, as follows:

- (i) The availability/ power procurement from KPCL Thermal and Hydel stations is on the basis of Power Purchase Agreement dated 22.05.2010, based on norms approved by the State Commission vide its order dated 03.08.2009.
- (ii) Availability of power from Central Generating Stations (CGS) is as per the Ex-Bus generation details furnished by the CGS to the CEA, for preparation of LGBR.
- (iii) In respect of Major IPPS, RE and other sources such as UPCL, RE generators and others sources such as Jurala Power & TB Dam Power etc., the availability is reckoned based on the contracted capacity.

(iv) The Capacity of the existing sources and the envisaged additional sources vis-à-vis the energy requirement for the entire State, the fixed charges and variable charges are indicated in the tariff application of GESCOM. The same are shown in the following Tables:

TABLE - 5.11
Power purchase requirement of GESCOM for FY21

SOURCES	FINANCIAL YEAR 20-21		
	Energy in MU	Cost in Rs Crores	Avg. cost Rs./unit
KPCL Hydrel Energy	1773.97	164.59	0.93
KPCL Thermal Energy	1370.27	945.97	6.90
CGS Energy	2409.71	1175.31	4.88
UPCL	375.12	261.23	6.96
Renewable Energy/Bundled power	3289.30	1346.90	4.09
Other State Hydrel	22.10	7.43	3.36
Medium Term	181.37	94.51	5.21
PGCIL & POSOCO Charges	-	275.48	
KPTCL Transmission & SLDC	-	445.68	
Allocation to other ESCOMs	-93.50	-42.39	4.53
TOTAL	9328.34	4674.70	5.011

Commission's analysis and decisions

The energy requirement of the ESCOMs, including GESCOM, is being met by the following sources, through long-term Power Purchase Agreement (PPAs) with:

- a) Karnataka Power Corporation Limited (KPCL) Generating stations;
- b) Central Generating Stations (CGS);
- c) Major Independent Power producers (IPPs) and
- d) RE sources.

To arrive at the available quantum of energy and power for the year FY 21, the Commission has considered the availability as furnished by KPCL for KPCL Generating Stations and availability as furnished by the SRPC in respect of

Central Generating Stations. The availability in respect of CGS stations is based on the share of Karnataka, as notified from time to time.

In the case of availability from the Renewable Energy sources and Medium Term Power Purchases, the actual generation capacity contracted by the ESCOMs, as indicated in D-1 Format and as per the contracted PPAs, has been considered. The availability from the other sources such as Jurala Hydel Station and TB dam Power Stations of Telangana State has been considered based on Karnataka's share in the installed capacity and as per the contracts executed with these generators.

The availability as furnished by the KPCL in respect of Yelahanka Combined Cycle Power Plant (YCCPP), having a capacity of 350 MW respectively has not been considered, as the said generating station is yet to be synchronized with the grid and the Commercial Operation Date (COD) is yet to be declared.

The availability of New NLC Plant Thermal Power Project has been considered based on Karnataka's share, as furnished by the PCKL, duly limiting the quantum of energy as per the requirement of ESCOMs, to meet the sales targets., The plant has since been synchronized and supplying power to the grid.

Based on the above availability criteria, the energy requirement for the State, with reference to the sales target approved for FY21, is given in the following Table.

TABLE – 5.12
ABSTRACT OF POWER PURCHASE REQUIREMENT OF THE STATE
FOR THE YEAR FY21

SOURCES	FINANCIAL YEAR 20-21		
	Energy in MU	Total Cost in Rs Crs.	Avg. cost per unit Rs./unit
KPCL Hydel Energy	11567.04	992.71	0.86
KPCL Thermal Energy	15193.60	9462.99	6.23
CGS Energy	19948.10	9339.82	4.68
UPCL	3600.00	2448.00	6.80
Renewable Energy:	17628.37	6700.75	3.80

Other State Hydel	183.60	61.70	3.36
Bundled Power	3698.57	1459.31	3.95
Medium Term (Co Gen)	1285.06	669.52	5.21
PGCIL & POSOCO Charges		1774.37	
KPTCL Transmission & SLDC		4318.30	
TOTAL	73104.34	37227.47	5.092

5.2.6 GESCOM's Power Purchase Cost & Transmission charges for FY21:

GESCOM's Submission

GESCOM has submitted the Power Purchase requirement along with the cost including the transmission charges and SLDC charges, in D-1 Format. GESCOM has sought approval of the Commission for purchase of power to an extent of 9328.34 MU at a cost of Rs.4674.70 Crores, which includes transmission and SLDC charges, for the year FY21

As regards the cost of power, the GESCOM has submitted that, same is considered as per the norms defined in contracts (PPAs)/ Regulations and based on the tariff indicated by KPCL for its Stations and the tariff determined by the CERC in respect of Central Generating Stations, DVC Stations and UPCL stations.

Commission's analysis and decisions:

After a detailed analysis of the power purchase costs claimed by the GESCOM, the Commission has arrived at the power purchase quantum and cost, to be allowed in the ARR for FY21. The basis for computation of power purchase quantum and cost for the year FY21 is as indicated below:

1. Quantum of Power: Based on the approved sales and the allowable distribution losses, the requirement of Power for the GESCOM, for the year FY 21, is worked out as detailed below:

TABLE – 5.13

**Power Purchase requirement for the
GESCOM for the year FY 21**

Particulars	FY21
Sales (MU)	7647.04
Distribution losses (%)	14.00
Energy at IF point (MU)	8891.91
Transmission Losses (%)	3.039
Energy at generation bus Required to meet the sales target of GESCOM (MU)	9170.602

2. While approving the cost of power purchase, the Commission has determined the quantum of power from various sources in accordance with the principles of merit order dispatch based on the ranking of all approved sources of supply.
3. The rates considered in respect of the KPCL stations are based on the Commission's order dated 03.08.2009 for hydel stations, except for Shivasamudram, Shimsha, Munirabad & MGHE, for which separate rates, as per Order dated 25th February 2015, are applicable.
4. The variable costs of State thermal stations and UPCL, are considered based on the recent power purchase bills passed by the GESCOM and also based on the recent landed cost of fuel and other variable components.
5. The fixed charges and the variable charges in respect of the Central Generating Stations, UPCL Stations and the DVC Stations have been considered based on the Tariff determined by the CERC as per the CERC norms. However, the energy has been considered from these units by limiting the quantum of energy as per the requirement of ESCOMs, to meet the sales target on the basis of Merit Order Despatch. **It is expected that any surplus energy available from tied up sources of energy would be traded by the ESCOMs through PCKL on commercial principles. Similarly, any requirement over and above the quantum approved in this Tariff Order, shall be procured from the contracted/ tied up sources only.**

6. The variations, if any, in the costs allowed now will be considered during the FAC exercise / Annual Performance Review of FY21.
7. The Commission has allowed the KPTCL transmission charges and SLDC charges to be **paid by the ESCOMs in the Power Purchase Cost and is as detailed below:**

TABLE-5.14**Transmission charges and SLDC Charges payable by ESCOMs**

Name of ESCOM	KPTCL Transmission Charges in Rs. Crores	SLDC Charges in Rs. Crores
BESCOM	2179.288	11.923
MESCOM	319.224	1.996
CESC	466.272	2.815
HESCOM	806.902	5.032
GESCOM	521.183	3.665
Total	4292.869	25.430

8. In reply to the Commission's observation that the ESCOMs are paying the PGCIL transmission charges at exorbitant rates, GESCOM has stated PGCIL is raising the PoC charges as per CERC Order/PPA and GESCOM is admitting the same. In this regard the Commission notes that the draft CERC (Sharing of Inter State Transmission Charges and Losses) Regulations does not specify the POC charges applicable for Karnataka State. Further, the Commission notes that the final notification of the Regulation has been issued by the CERC. The GESCOM shall intimate the Commission the changes in the existing POC charges and the applicability of period along with the POC charges.
9. Based on the requirement of energy allowed and the power allocation given by the Government of Karnataka, the Power Purchase quantum and its costs are approved in the ARR of GESCOM for the year FY21, as shown in Annexure- 1 & 2.
10. The consolidated power purchase cost for the year FY21, as approved by the Commission, is shown in the following Table:

TABLE -5.15**ABSTRACT OF POWER PURCHASE APPROVED
FOR GESCOM FOR THE YEAR FY21**

SOURCES	FINANCIAL YEAR 20-21		
	Energy in MU	Cost in Rs Cr	Per unit Cost
KPCL Hydel Energy	1645.47	183.74	1.12
KPCL Thermal Energy	1039.12	650.85	6.26
CGS Energy	2596.14	1177.43	4.54
UPCL	396.00	269.28	6.80
Renewable Energy:	2731.46	1043.63	3.83
Other State Hydel	22.94	7.71	3.36
Total Bundled Power	558.11	219.99	3.94
Medium Term (Co Gen)	181.37	94.49	5.21
PGCIL & POSOCO Charges		478.72	
KPTCL Transmission & SLDC		524.848	
TOTAL	9170.602	4650.69	5.07

Thus, the Commission hereby approves power purchase quantum of 9170.602 MU at a cost of Rs.4650.688 Crores, for FY21. The breakup of source-wise Power and the cost thereon, is shown in Annexure- 1 and 2 of this Order.

The GESCOM shall regulate the quantum and cost of power as per the above approval of the Commission. However, since the power purchase costs are uncontrollable, any excess quantum or cost will be tried up in Annual Performance Review for FY21.

5.2.7 Renewable Purchase Obligation (RPO) target for FY21:

The Commission, vide the KERC (Procurement of Energy from Renewable Sources) (Sixth Amendment) Regulations, 2018, has notified the Non-Solar and Solar RPO targets of 8% and 8.5% for FY21, respectively.

The Commission, in its preliminary observation, had directed GESCOM to furnish the estimates for complying with solar and non-solar RPOs for FY20 and FY21.

GESCOM, in its reply to the preliminary observation, has submitted only the targets and not the action plan for meeting the same. Thus, GESCOM has not furnished satisfactory reply to the Commission's observations.

The Commission, however, directs GESCOM to take all necessary measures to meet the above RPO targets. In case, there is any need to buy RECs to fully meet the RPO, the cost thereon would be factored in the APR of FY21.

5.2.8 O & M Expenses for FY21:

GESCOM's Proposal:

GESCOM in its petition has submitted Rs.612.96 Crores as expenses towards employee cost for FY21. The detailed breakup of the employee cost for FY21 is as follows:

TABLE – 5.16

Detailed break-up of employee cost- GESCOM's submission

Amount in Rs. Crores

Sl. No	Particulars	FY 21
1	Salaries & Wages	388.24
2	Contribution to provident and other funds	106.43
3	Bonus & Ex-gratia	5.83
	Sub-Total (1 to 3)	500.49
4	Earned Leave Encashment	31.91
5	Staff Welfare expenses	16.77
6	Arrears towards P&G Trust Contribution	63.79
	Sub-total (4 to 6)	112.47
	Grand Total	612.96

GESCOM in its application has submitted that, it has claimed the salary and wages of Rs.388.24 Crores with an annual increment rate 2.89% on the basic salary, other allowances on 2.12% on basic salary, other allowances at 2.12% on basic pay plus dearness allowance based on the FY19 proportions, staff welfare expenditure at 1% increase over the previous year actual expenditure. The arrears of Rs.20.01 Crores for FY18 towards P&G contributions are computed as per P&G Trust Order dated 30.10.2019, The

arrears of Rs.23.41 Crores for FY19 and Rs.20.36 Crores payable for FY21 (Total works out to Rs.63.79 Crores). GESCOM has claimed the additional employees cost of Rs.6.22 Crores towards recruitment of 397 new employees during FY21. GESCOM has reckoned the inflation index at 7.22% by factoring the WPI and CPI data from 2008 to 2021.

Further, GESCOM has submitted that the R&M and A&G expenses are calculated at 7.22% increase over the values of FY20 for Rs.53.03 Crores and Rs.143.22 Crores respectively for FY21.

The GESCOM in its application has sought approval of following O & M expenses for FY21:

TABLE-5.17

O&M Expenses for FY21- GESCOM's Submission

Particulars	Amount in Rs. Crores	
	FY21	
R&M cost	53.03	
Employee cost	612.96	
A&G expenses	143.22	
Total O&M cost	809.21	

Commission's analysis & decision:

The Commission takes note of the O&M expenses of Rs.809.21 Crores, claimed by the GESCOM for FY21.

As per the norms specified under the MYT Regulations, the O&M expenses are controllable expenses and the distribution licensee is required to regulate these expenses, within the permissible values.

The Commission, in its preliminary observations, had noted that GESCOM has claimed an amount of Rs.6.22 Crores as an additional employee cost towards the recruitment of new employees under different groups for FY21. GESCOM was directed to furnish the present status of recruitment of the new employees. GESCOM, in its reply, has submitted the status of recruitment and informed that at present test for Junior Line Men's endurance has been

conducted and the notifications for conducting examination for various posts will be issued after directions from KPTCL.

The Commission notes that GESCOM in its filing, has claimed Rs.106.43 Crores towards Terminal Benefits for FY21. GESCOM was directed to furnish the computation sheet for claiming this amount with clear bifurcation of the amounts between the employees recruited prior to 31.3.2006 and after 31.3.2006. Further, GESCOM also claimed Rs.63.79 Crores as arrears towards P&G contributions for FY21. GESCOM was directed to furnish the copy of the Order and the computation sheet for the claims.

GESCOM in its reply to the observation, submitted the following:

Nature of Transaction	FY21 (In Crs)
Terminal Benefits (P&G) Contribution (Employees joined prior 01.04.2006)	71.68
Terminal Benefits (NDCPS) Contribution (Employees joined after 01.04.2006)	34.75
Arrears towards pension contribution (from 01.04.2017 to 31.03.2019)	63.79
Total	170.22

GESCOM has submitted that the NDCPS contribution has increased due to new recruitment during FY19 and increase in the board contribution to 14% from 10%. Further, there is an increase in the P&G contribution in FY21 over FY20, due to increase in Pension contribution to the P&G Trust from 42.53% to 57.30% with effect from 1st April, 2017.

The Commission notes that the A&G expenses are increasing year on year. As per the provisions of MYT Regulations, the O&M expenses are controllable and every ESCOM need to control this expenditure by optimally utilizing the available resources, within its control in a prudent manner. GESCOM was directed to furnish the reasons for incurring the huge amount of expenditure under this head of account along with breakup details for FY19, besides re-examining the amount considered for FY21.

GESCOM, in its reply to the preliminary observation, has submitted that based on the actual expenditure incurred towards Remuneration to

contract Agencies and Conveyance and Travelling charges during FY19, the projected expenditure for the year FY20 and FY21 has been estimated on a nominal increase of 7% per year which is in line with the annual inflation.

The Commission has noted the actual O&M expenses as per the audited accounts of GESCOM for FY19. The Commission notes that the actual O&M expenses are Rs.696.33 Crores for FY19, which also include the contribution towards P&G Trust and the amount on account of revision of pay along with the other employee cost, Repair & Maintenance expenses and A&G expenses.

The Commission, notes that, the inflation index of 7.22% considered by GESCOM by reckoning the WPI and CPI data of 2007 to 2021 is not in line with the data considered by the CERC in its Notification No.EcoT1/2019 – CERC dated 02.04.2019 and adopted by the Commission in its earlier Tariff Orders, in terms of the provisions of MYT Regulations, has considered the three-year CAGR towards consumer growth and inflation rate index (CPI) and (WPI) based on the methodology followed by the CERC.

The Commission has computed the O&M expenses for FY21, duly considering the actual O & M expenses of FY19 as per the audited accounts (being the latest data available as per the audited accounts) to arrive at the O & M expenses for base year i.e. FY20. Considering the Wholesale Price Index (WPI) as per the data available from the Ministry of Commerce & Industry, Government of India and Consumer Price Index (CPI), as per the data available from the Labour Bureau, Government of India and adopting the methodology followed by CERC with CPI and WPI in the ratio of 80:20, in line with the methodology followed by the Commission, in its earlier Tariff Order, the allowable inflation rate for FY21 is computed as follows:

TABLE – 5.18
Computation of Inflation Index for FY21

Year	WPI	CPI	Composite Series	Yt/Y1=Rt	Ln Rt	Year (t-1)	Product [(t-1)* (LnRt)]
2007	73.6	130.8	119.36				
2008	80	141.7	129.36	1.08	0.08	1	0.08
2009	81.9	157.1	142.06	1.19	0.17	2	0.35
2010	89.7	175.9	158.66	1.33	0.28	3	0.85
2011	98.2	191.5	172.84	1.45	0.37	4	1.48
2012	105.7	209.3	188.58	1.58	0.46	5	2.29
2013	111.1	232.2	207.98	1.74	0.56	6	3.33
2014	114.8	246.9	220.48	1.85	0.61	7	4.30
2015	110.3	261.42	231.196	1.94	0.66	8	5.29
2016	110.3	274.3	241.5	2.02	0.70	9	6.34
2017	114.1	281.2	247.78	2.08	0.73	10	7.30
2018	118.9	294.8	259.62	2.18	0.78	11	8.55
A= Sum of the product column							40.16
B= 6 Times of A							240.97
C= (n-1) *n*(2n-1) where n= No of years of data=12							3036.00
D=B/C							0.08
G (Exponential factor) = Exponential (D)-1							0.0826
e=Annual Escalation Rate (%) =g*100							8.2604

For the purpose of determining the normative O & M expenses for FY21, the Commission has considered the following:

- The actual O & M expenses incurred as per the audited accounts for FY19, inclusive of pay revision amount and contribution to the Pension and Gratuity Trust to determine the O & M expenses for the base year FY20 and FY21.
- The three-year compounded annual growth rate (CAGR) of the number of installations considering the actual number of installations as per the audited accounts upto FY19 and as projected by the Commission for FY21 at 4.33% for FY21.
- The weighted inflation index (WII) at 8.2604% as computed above.
- Efficiency factor at 2% has been considered.

The above parameters are computed duly considering the same methodology as is being followed in the earlier orders of the Commission and the relevant Orders of the Commission on various Review Petitions filed by the ESCOMs.

As per the decision of the Commission in the earlier Tariff Orders, the distribution licensees are required to justify any employees cost to commensurate the increase in real employee productivity. Hence, the Commission reiterates that with increase in emolument, the improved productivity of the employees would be reflected in terms of increased sales reduction of losses and improved revenue collections.

Accordingly, the normative O & M expenses for FY21 are as follows:

TABLE – 5.19
Approved O & M expenses for FY21

Particulars	Amount in Rs. Crores	
	FY21	
No. of Installations	3345136	
Consumer growth rate as per actuals / projections (3 Year CAGR) in %	4.33%	
Inflation Index in %	8.2604%	
Base year O&M expenses for FY19	696.33	
O&M Expenses: $O\&M\ Index = O\&M\ (t-1) * (1+WII+CGI-X)$	851.19	
Total allowable O&M	851.19	

Since, the base year O&M expenses includes the O&M expenses inclusive of contribution to the P&G Trust and pay revision amount, the Commission has not considered allowing contribution to the P&G Trust and pay revision arrears separately. Regarding the GESCOMs claims for additional employee cost of Rs.6.22 Crores towards the recruitment of 397 new employees, the Commission decides to consider the same on incurring the actual expenditure while undertaking the APR for FY21.

Thus, the Commission decides to approve O&M expenses of Rs.851.19 Crores for FY21.

5.2.9 Depreciation:

GESCOM's Proposal:

The GESCOM has claimed an amount of Rs.204.44 Crores for FY21, as the net depreciation after deducting the amount of depreciation on the assets

created out of consumer contributions / grants for FY21, as per the norms specified under the MYT Regulations. The details of the claim are as under:

TABLE – 5.20
Depreciation-FY21- GESCOM's Proposal

Amount in Rs. Crores	
Particulars	FY21
Buildings	3.53
Plant & Machinery	40.82
Towers and poles	217.34
Vehicles	0.67
Furniture	0.48
Office Equipment	0.54
Total Depreciation	263.38
Less: withdrawals of depreciation on assets created out of consumer contribution/grants	58.94
Net Depreciation	204.44

Commission's analysis and decision:

In accordance with the provisions of the MYT Regulations and amendments thereon, the Commission has determined the depreciation for FY21 considering the following:

- a) The actual rate of depreciation of category-wise assets has been determined by considering the amount of depreciation and the gross block of opening and closing balances of fixed assets, as per the audited accounts for FY19.
- b) This actual rate of depreciation is considered on the gross block of average of projections of opening and closing balance of fixed assets considering the capex and the categorization of assets thereon, as approved by the Commission for FY20 and FY21.
- c) The depreciation on account of assets created out of consumers' contribution / grants has been considered (deducted) based on the average of opening and closing balance of such assets duly considering the addition of assets and projections made by the Commission for FY20 and FY21, at the weighted average rate of depreciation, as per actuals in FY19.

Accordingly, the total depreciation for FY21 is arrive at as follows:

TABLE – 5.21
Approved Depreciation for FY21

Amount in Rs. Crores

Particulars	Rate of Depreciation
Buildings	3.16
Other Civil works	0.17
Plant & Machinery	33.87
Line, Cable Network	198.41
Vehicles	0.32
Furniture	0.32
Office Equipment	0.46
Total	236.70
Less: Depreciation withdrawn on the assets created out of consumers contribution / Grants	-64.60
Net Depreciation Allowed	172.10

Accordingly, the Commission decides to approve an amount of Rs.172.10 Crores towards net depreciation for FY21.

5.2.10 Interest on Capital Loans:

GESCOM's proposal:

GESCOM, in its filing, has claimed the interest on Capital loan of Rs.164.70 Crores for FY21. GESCOM in its application has requested the Commission to approve the interest on capital loans for FY21 as per Format D-9 as follows:

TABLE – 5.22

Interest on Capital Loans– GESCOM's Submission

Amount in Rs. Crores

Particulars	FY-21
Opening Balance of loans	1344.69
Add: New Loans	262.67
Less: Repayments	131.80
Closing Balance of loans	1475.56
Interest on Capital Loan	164.70

Commission's analysis and decision:

As discussed in the preceding paragraphs of this Chapter, the Commission has taken note of the proposed capex with source of funding and the capital loans proposed by GESCOM for FY21,

The Commission notes that GESCOM, in its filing has not furnished details for both the capital loans/working capital loans against the loans availed / proposed to be availed for FY19 to FY21. As such, GESCOM was directed to furnish loan-wise details against the proposed capex for the remaining period during FY20 and for FY21. GESCOM in its replies, has furnished the details as desired by the Commission.

The Commission notes the various capital works proposed under capex and the source of finance through grants from GoI / GoK under various schemes, the availability of internal resources and the works to be executed by consumer contributions during FY21.

As per the audited accounts and as per the APR of FY19, the GESCOM had incurred interest on capital loan at the weighted average rate of interest of 9.96% per annum. This rate of interest is considered for the existing loan balances for which interest has to be factored during FY20. Further, for FY21, the weighted average rate of interest of the preceding year has been considered on the existing loan balances. The Commission has considered the requirement the new capital loan by reckoning the availability of capital grants for the works proposed under various schemes of GOI / GoK, the internal resources and the consumer contributions as estimated by the GESCOM in the proposed capex for FY21.

The Commission, while approving the ARR for the control period FY20 to FY22, in its MYT Order dated 30th May, 2019 had approved a capex of Rs.833.17 Crores and Rs.531.33 Crores for FY20 and FY21 respectively. As against this, GESCOMs has proposed capex amount of Rs.1215.62 Crores and Rs.733.23 Crores for FY20 and FY21, against which it is expecting to incur capital expenditure of Rs.603.74 Crores during FY21. After deducting the amounts covered under capital grants from the GOI / GoK, and the availability of internal resources and the consumer contributions towards capital works on the proposed capital works under various category of works, the

expenditure likely to be met by the GESCOM by raising capital loan as per Format D-9 is proposed at Rs.262.67 Crores for FY21.

The Commission has observed that GESCOM has not achieved its own proposed capex in the past. Thus, the Commission after considering all the above aspects and also availability of funds through capital grant from GoK/Gol, internal resources and contribution from consumer towards the proposed capital works, to avoid front loading of the interest on loan component in the retail supply tariff, decides to reckon the capital expenditure of Rs.603.74 Crores as capex for the purpose of determination of ARR ad retail supply tariff for FY21. However, as discussed in pre-para, after considering the availability of Gol / GoK grants internal resources and consumer contribution, the Commission decides to consider the new loans at Rs.250.00 Crores for FY21, against the approved capex. The Commission has considered new loans, in accordance with the debt equity ratio of 70:30, as per the MYT Regulations.

GESCOM has proposed the interest on the average of both existing loan balances and on the new loans at the rate of 11.68% for FY21. The Commission notes that, the interest rates proposed by GESCOM on the capital loans are comparatively on a higher side as compared with the actual weighted average interest rate of 9.96% for FY19. GESCOM needs to initiate financial prudence measures, so as to avail loans at comparatively lower rates and reduce the interest burden on the consumers.

The Commission notes the capital loan portfolios of GESCOM for FY19 and up to September, 2020 and observed that it has availed the majority of the capital loan from REC and PFC at the interest rate of 9% to 12% which are on higher side.

The Commission further notes that the present interest rate being charged by the commercial banks and financial institutions are on the basis of Marginal Cost of fund-based Lending Rates (MCLR). These rates are comparatively lower than the bank rates considered earlier. Further in the current economic conditions favorable for investments, it is observed that there is a downward

trend in the MCLR and the interest rates. Hence, in such a situation, the Commission is of the view that, the GESCOM can avail capital loan at a competitive rate, which would be lesser than the interest rate proposed by the GESCOM.

The Commission notes that, the present SBI MCLR rate for capital loan with tenure of 3 years is 8.15%. Considering the present MCLR, the Commission, as per the provision of MYT Regulations, decides to allow an interest rate of 10.15% per annum for the existing loans and 11% per annum for the new capital loan borrowings for FY21. It shall be noted that, the rate of interest now considered by the Commission, on the new capital loans is subject to review during the APR and revision of ARR of FY21.

Accordingly, the approved interests on capital loans for FY21 are as follows:

TABLE – 5.23
Approved Interest on Capital Loans for FY21

Amount in Rs. Crores	
Particulars	FY21
Opening balance of Long term secured & unsecured loans	1107.17
Add: New Loans Borrowed	250.00
Less: Repayments of loan	125.29
Total loan at the end of the year	1231.88
Average Loan	1169.52
Weighted average rate of interest considered for the existing loans	10.15%
Interest rate allowed on new loans in %	11.00%
Allowable Interest on Capital Loan	119.74

Thus, the Commission decides to approve interest on capital loans of Rs.119.74 Crores for FY21.

5.2.11 Interest on Working Capital Loan:

GESCOM's proposal:

GESCOM, in its application as per Format D-9, has claimed an amount of Rs.117.83 Crores towards the interest on working capital loan for FY21, as follows:

TABLE – 5.24
Interest on Working Capital loan for FY21
GESCOM's Submission

Amount in Rs. Crores	
Particulars	FY21
One-twelfth of the amount of O&M expenses	67.43
Opening Balance GFA	6007.43
1% of Opening Balance of GFA	60.07
One-sixth of revenue	897.11
Total Working Capital	1024.62
Rate of Interest	11.50%
Interest on Working Capital loan	117.83

Commission's analysis and decision:

As per the norms specified under the MYT Regulations, the Commission has computed the interest on working capital which consists of one months' O&M expenses, 1% of Opening GFA and two month's revenue as receivables.

As per the Format D-9, GESCOM has not claimed any interest towards working capital (short-term loan or OD). However, in its reply to the preliminary observations of the Commission, GESCOM has furnished the short term loans / overdraft details. The Commission notes that, GESCOM has availed its working capital loan at the interest rate of 8.85% per annum to 11.30% per annum for FY19. The Commission, for the purpose of allowing the working capital interest as per the MYT Norms has considered the MCLR based interest rates for FY21. The Commission, by considering the downward trend in the interest rates and considering the present SBI MCLR for loan with tenure of One year is 8.58% per annum to 8.70% per annum and by considering the spread on basis points, as per the provisions of the MYT Regulations, decides to consider interest on working capital at 11% per annum for FY21.

Accordingly, the approved interest on working capital for FY21 is computed as follows:

TABLE – 5.25
Approved Interest on Working Capital for FY21

Amount in Rs. Crores	
Particulars	FY 21
One-twelfth of the amount of O&M Expenses	70.93
Opening balance of Gross Fixed Asset (GFA)	5683.27
Stores, materials and supplies - 1% of Opening balance of GFA	56.83
One-sixth of the Revenue	901.23
Total Working Capital	1029.00
Rate of Interest (% p.a.)	11.00%
Interest on Working Capital	113.19

Thus, the Commission decides to approve interest on working capital of Rs.113.19 Crores for FY21.

5.2.12 Interest on Consumer Security Deposit:

GESCOM's proposal:

GESCOM, in its filing, has projected an expenditure of Rs.30.58 Crores towards interest on consumer security deposit for FY21.

Commission's analysis and decision:

In accordance with the KERC (Interest on Security Deposit) Regulations 2005, the interest rate to be allowed is the Bank Rate prevailing on the 1st of April of the financial year for which interest is due. As per Reserve Bank of India Notification dated 4th October, 2019, the bank rate is 5.40% per annum. This being the latest available bank rate, the Commission has considered the same, for computation of interest on consumer deposits for FY21.

The Commission has considered the consumer security deposits as per the audited accounts of FY19. The Commission has taken note of the additional amount of deposits collected from the consumers during the previous years. Based on the additional security deposits collected during the previous year and also in FY19, the Commission has decided to factor Rs.45 Crores for FY21, as the additional security deposit likely to be collected for the computation

of interest on consumer security deposit. Thus, the interest on consumer deposits for FY21 is computed in the following Table:

TABLE – 5.26
Approved Interest on Consumer Security Deposits
for FY21

Amount in Rs. Crores	
Particulars	FY21
Opening balance of consumer security deposits	576.79
Closing Balance of consumer security deposit	621.79
Average Consumer Security deposit amount	599.29
Rate of Interest at bank rate per annum to be allowed as per Regulations	5.40%
Allowable Interest on Consumer Security Deposit	32.36

Thus, the Commission decides to approve interest on consumer security deposits at Rs.32.36 Crores for FY21.

5.2.13 Interest and Finance Charges Capitalized:

GESCOM has claimed an amount of Rs.5.75 Crores towards capitalization of interest and finance charges during FY21.

Commission's analysis and decision:

Considering the capital expenditure and capitalization thereon in the previous years, the Commission decides to allow Rs.5.75 Crores towards capitalization of interest and finance charges as proposed by GESCOM for FY21.

The abstract of approved interest and finance charges for FY21 is as follows:

TABLE – 5.27
Approved Interest and finance charges for FY21

Amount in Rs. Crores	
Particulars	FY21
Interest on Capital Loan	119.74
Interest on Working Capital loan	113.19
Interest on Consumers Security Deposit	32.36
Less: Interest & Finance charges capitalized	-5.75
Approved Interest & Finance Charges	259.54

5.2.14 Other Debits:

GESCOM in its application has claimed an amount of Rs.10.00 Crores towards other debits during FY21.

Commission's analysis and decision:

The Commission as per the provisions of the MYT Regulations and as amended, has not been considering the projections of other debits for the reason that, the same cannot be estimated beforehand. The Commission therefore, has not allowed the same in the ARR for FY21. However, such expenses would be considered as per the actuals, with reference to the audited accounts for the relevant years at the time of APR.

5.2.15 Return on Equity (RoE):**GESCOM's proposal:**

GESCOM, in its application as per Format A-1, has claimed Rs. 58.64 Crore towards RoE for FY21 as detailed below:

TABLE – 5.28**Return on Equity for FY21-GESCOM's Proposal**

Particulars	Amount in Rs. Crores	
	FY21	
Paid Up Share Capital	1162.22	
Share Deposit	384.46	
Reserves and Surplus	-1168.33	
Total Equity	378.35	
Return on Equity	58.64	

Commission's analysis and decision:

The Commission notes that GESCOM has claimed Rs.58.64 Crores as RoE for FY21 as per A-1 Format.

The Commission notes the status of debt equity ratio with reference to the projected gross fixed assets for FY21. The Commission has considered the actual closing balance of share capital, share deposits and the accumulated surplus / deficit under Reserves & Surplus as per the audited

accounts for FY19 and the additional equity amount received from the GoK during FY20, for arriving at the allowable equity base for FY21. Further, the Commission has considered the additional equity infused by the GoK during the financial year 2020 in arriving at the opening balance of net equity for FY21.

The Commission, in accordance with the provisions of the MYT Regulations, has considered Return on Equity of 15.5% duly grossed up with the applicable Minimum Alternate Tax (MAT) of 17.94%. This works out to 18.8886 % per annum. Further, as per the decision of the Commission in the Review Petition No.6/2013 and Review Petition 5/2014, and the amended provisions of the MYT Regulations, the Return on Equity shall be computed based on the opening balances of share capital, share deposits and the accumulated balances of surplus / deficit under reserves and surplus account. Further an amount of Rs.22.00 Crores of recapitalized consumer deposit, as net worth is also considered as per the orders of the Hon'ble ATE in Appeal No.46/2014.

Further, in compliance of the orders of the Hon'ble ATE in Appeal No.46/2014, wherein it was directed to indicate the opening and closing balances of gross fixed assets along with break-up of equity and loan component in the Tariff Order issued henceforth, the details of GFA, debt and equity (net-worth) for FY21 are indicated in the following Table:

TABLE – 5.29
Status of Debt Equity Ratio for FY21

Amount in Rs. Crores								
Year	Particulars	GFA	Debt	Equity (Net worth)	Normative Debt @ 70% of GFA	Normative Equity @ 30% of GFA	%age of actual debt on GFA	%age of actual equity on GFA
FY21	Opening Balance	5683.27	1107.17	462.69	3978.29	1704.98	19.48	8.14
	Closing Balance	6168.27	1231.88	462.69	4317.79	1850.48	19.97	7.50

From the above Table it is seen that the debt equity lies within the normative debt equity ratio of 70:30 on the opening and closing balances of projected GFA for FY21. Further, the Commission will review the same during the Annual

Performance Review for each year, based on the actual data as per the audited accounts.

Accordingly, the Return on Equity that could be approved for FY21 works out as follows:

TABLE – 5.30
Approved Return on Equity for FY21

Amount in Rs. Crores	
Particulars	FY21
Opening balance of Share Capital	1114.96
Opening balance of Share deposit	372.17
Opening balance of Accumulated Losses	-1002.44
Less: Recapitalized Security Deposit	-22.00
Equity	462.69
RoE @18.8886% (grossed up by MAT at 17.94%)	87.40

Thus, the Commission decides to allow the RoE of Rs.87.40 Crores is for FY21.

5.2.16 Other Income:

GESCOM's proposal:

GESCOM in its application has claimed Rs,60.30 Crores towards other income for FY21 is as detailed below:

TABLE – 5.31
Other Income – GESCOM's Proposal

Amount in Rs. Crores		
Sl. No.	Particulars	FY21
1	Interest on Bank Deposit	10.26
2	Rental from staff quarters / others	3.32
3	Profit on sale of store	0.08
4	Rebate on collection of Electricity duty	0.97
5	Rebate on power purchase	4.01
6	Miscellaneous recoveries	41.66
	Total	60.30

Commission's analysis and decision:

The Commission has taken note of other income claimed by the GESCOM under D-3 Format for FY21.

The Commission notes that the other income earned by the GESCOM mainly includes income from miscellaneous recoveries, interest on bank deposits, rent from staff quarters / other, rebate on Power purchase, rebate on collection of electricity duty etc. The actual 'other income' earned by GESCOM, as per the audited accounts for FY19 is Rs.82.33 Crores.

Based on the other income earned by the GESCOM in the previous years and considering 7% growth in each of the years FY20 & FY21, **the Commission decides to approve Rs.93.09 Crores for FY21.**

5.2.17 Fund towards Consumer Relations / Consumer Education:

GESCOM in its filing has not claimed any amount towards Consumer Relations / Consumer Education fund towards Consumer Relations / Consumer Education for FY21.

The Commission has been allowing an amount of Rs.0.50 Crore per year towards consumer relations / consumer education. This amount is earmarked to conduct consumer awareness programmes, periodical consumers' grievance redressal meetings and institutionalize a mechanism for addressing common problems of the consumers. The Commission has already issued guidelines for consumer education and grievance redressal activities.

The Commission decides to continue to provide an amount of Rs.0.50 Crore for FY21 towards meeting the expenditure on consumer relations / consumer education.

The Commission reiterates that GESCOM shall furnish a detailed plan of action for utilization of this amount and also maintain a separate account of these funds and furnish the same, at the time of seeking APR.

5.3 Abstract of ARR for FY21:

In the light of the above analysis and decisions of the Commission, the following is the approved ARR for FY21:

TABLE – 5.32
Approved ARR for FY21

Amount in Rs. Crores		
Sl. No.	Particulars	Approved ARR
1	Energy at Gen Bus in MU	9170.60
2	Transmission Losses in %	3.039%
3	Energy at Interface in MU	8891.91
4	Distribution Losses in %	14.00%
	Sales in MU:	
5	Sales to other than IP & BJ/KJ	4243.15
6	Sales to BJ/KJ	237.95
7	Sales to IP	3165.94
	Total Sales	7647.04
	Revenue at existing and Misc. Charges:	
8	Revenue from tariff and Misc. Charges	3362.96
9	Tariff Subsidy to BJ/KJ Installation	167.04
10	Tariff Subsidy to IP Sets	1877.40
	Total Existing Revenue	5407.40
	Expenditure:	
10	Power Purchase Cost	4125.84
11	Transmission charges of KPTCL	521.183
12	SLDC Charges	3.67
	Power Purchase Cost including cost of transmission	4650.69
	O&M Expenses	851.19
13	Depreciation	172.10
	Interest & Finance charges	
14	Interest on Capital Loans	119.74
15	Interest on Working capital loans	113.19
16	Interest on belated payment on PP Cost	0.00
17	Interest on consumer security deposits	32.36
18	Other Interest & Finance charges	0.00
19	Less: interest & other expenses capitalised	-5.75
	Total Interest & Finance charges	259.54
20	Other Debits	0.00
21	Net Prior Period Debit/Credit	0.00
22	Return on Equity	87.40
23	Funds towards Consumer Relations/Consumer Education	0.50
24	Less: Other Income	-93.09

Sl. No.	Particulars	Approved ARR
25	Total ARR	5928.32
27	Surplus for FY19 carried forward (APR)	215.04
28	Net ARR for FY21	5713.28

5.4 Segregation of ARR into ARR for Distribution Business and ARR for Retail Supply Business:

GESCOM in its application has not proposed any new ratio for segregation of consolidated ARR into ARR for Distribution Business and ARR for Retail Supply Business.

Commission's Analysis and Decisions:

GESCOM in its application has not proposed any new ratio of segregation of consolidated ARR into ARR for Distribution Business and ARR for Retail Supply Business and proposed the same ratio as being adopted in the previous Tariff Orders as well. Thus, the Commission decides to continue with the existing ratio of segregation of ARR as detailed below:

TABLE – 5.33

Approved Segregation of ARR – FY21

Particulars	Distribution Business	Retail Supply Business
O&M	70%	30%
Depreciation	84%	16%
Interest on Loans	100%	0%
Interest on Consumer Deposits	0%	100%
RoE	84%	16%
GFA	84%	16%
Non-Tariff Income	7%	93%

Accordingly, the following is the approved ARR for Distribution Business and Retail supply business:

TABLE – 5.34
APPROVED REVISED ARR FOR DISTRIBUTION BUSINESS – FY21

Amount in Rs. Crores		
Sl. No	Particulars	FY21
1	O&M Expenses	595.83
2	Depreciation	144.56
	Interest & Finance Charges	
3	Interest on Capital Loans	119.74
4	Interest on Working capital loans	17.65
5	Interest on consumer security deposits	0.00
6	Other Interest & Finance charges	0.00
7	Less: interest & other expenses capitalized	-5.75
8	ROE	73.41
9	Less: Other Income	-6.52
10	Provision for taxes	0.00
	NET ARR	938.94

TABLE – 5.35
APPROVED ARR FOR RETAIL SUPPLY BUSINESS – FY21

Amount in Rs. Crores		
Sl. No	Particulars	FY21
1	Power Purchase & SLDC Charges	4129.51
2	Transmission Charges	521.183
3	O&M Expenses	255.36
4	Depreciation	27.54
	Interest & Finance Charges	
5	Interest on Capital Loans	0.00
6	Interest on Working capital loans	95.54
7	Interest on consumer security deposits	32.36
8	Other Interest & Finance charges	0.00
9	Less: Interest & other expenses capitalised	0.00
10	ROE	13.98
11	Less: Other Income	-86.57
12	Fund towards Consumer Relations / Consumer Education	0.50
	NET ARR	4989.39

5.5 Gap in Revenue for FY21:

As discussed above, the Commission decides to approve the Annual Revenue Requirement (ARR) of GESCOM for its operations in FY21 at Rs.5713.28 Crores as against GESCOM's application proposing an ARR of Rs.5984.70 Crores. The Commission has considered carry forward of the net

surplus of Rs.215.04 Crores of FY19 determined as per the APR for FY19 as discussed in Chapter-4. Considering the existing retail supply tariff, the total realization of revenue will be Rs.5407.40 Crores and which is Rs.305.88 Crores less the net approved revenue requirement of Rs.5713.28 Crores for FY21.

The net ARR, the gap in revenue and the average cost of supply for FY21 is indicated in the following table.

TABLE – 5.36
Revenue gap for FY21

Particulars	Amount in Rs. Crores
	FY21
Net ARR including carry forward surplus of FY19 (Rs. Crores)	5713.28
Approved sales (MU)	7647.04
Average cost of supply for FY21 (Rs./unit)	7.47
Revenue at existing tariff (Rs. Crores)	5407.40
Gap in revenue for FY21 (Rs. Crores) including Revenue surplus of FY19.	305.88

The determination of revised retail supply tariff on the basis of the above approved ARR is discussed in detail in the Chapter-6 of this Order.

However, the Commission was unable to issue the Tariff Orders for FY21 till October 2020 for the following reasons:

- a) Due to total lock down declared by the Government of India / Government of Karnataka on account of Covid-19 pandemic and pendency
- b) Pendency of Appeal No.97/2020 filed by the KPTCL before the Hon'ble Tribunal against the Commission's Order dated 16.01.2020 and disposal of the said Appeal by the Hon'ble Tribunal vide Order dated 05.10.2020.
- c) Applicability of the Code of Conduct on account of announcement of bye-Election to Assembly Constituency No.136-Sira and 154-Rajajageswari Nagar scheduled on 03.11.2020, by the Election Commission of India, vide Gazette Notification dated 09.10.2020.

The Commission has taken note of the various restriction and measures initiated and enforced by the GoI/GoK during lock down period, to prevent the spread of Corona Virus which has been declared as a Pandemic (COVID-19). This has resulted in setback to all the economic activities, hugely affecting all the sections of the Society, socially and economically. Hence, the consumers could not be burdened with tariff increase from 01.04.2020. However, the tariff increase is imminent due to substantial increase in power purchase cost and other costs to be incurred by the ESCOMs.

In order to tide over the present adverse financial situation, the Commission has decided to give effect to the Order to increase the Tariff from 1st November, 2020. This, in effect, would give relief on account of increased tariff for seven months to the consumers and the Commission hopes that due to gradual relaxation of lockdown conditions, the economic activities would resume and the consumers have to bear the revised tariff from 1st November 2020 onwards.

Due to the postponement of the recovery of the revised tariff, out of the projected additional revenue of Rs.305.88 Crores from revision of tariff, the Commission decides to create the unrecovered portion of the revenue gap of seven months amounting to Rs.178.43 Crores of FY21 as Regulatory Asset to be recovered in the tariff over the next two years (FY22 and FY23). The Commission also decides to allow carrying cost at 10% per annum (based on the current MCLR plus reasonable Basis points) on the amount of Regulatory Asset which will be assessed at the time of the Annual Performance Review (APR) of FY22 and FY23. The balance amount of Rs.127.45 Crores in gap in revenue for FY21 is proposed to be realized as additional revenue through the revision of tariff for the different category of consumers during FY21, from 01.11.2020.

The net ARR and the gap in revenue for FY21 is shown in the following table:

TABLE – 5.37
Revenue gap for FY21

Particulars	FY21
Net ARR including carry forward surplus of FY19 (Rs. Crores)	5713.28
Approved sales (MU)	7647.04
Revenue at existing tariff (Rs. Crores)	5407.40
Gap in revenue for FY21 (Rs. Crores)	305.88
Regulatory Asset to be recovered over next two years (in Rs.Crores) in FY22 & FY23	178.43
Balance revenue gap to be collected over a period of five months during FY21 by revision of tariff (Rs.in Crores)	127.45

The details of revised retail supply tariff, on the basis of the above approved ARR, is discussed and approved in Chapter-6 of this Order.