KARNATAKA ELECTRICITY REGULATORY COMMISSION

TARIFF ORDER 2021

OF

KPTCL

ANNUAL PERFORMANCE REVIEW FOR FY20

&

APPROVAL OF REVISED ANNUAL REVENUE REQUIREMENT FOR FY22

&

REVISION of TRANSMISSION TARIFF FOR FY22

9th June, 2021

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ABBREVIATIONS	
ABT	Availability Based Tariff
A & G	Administrative & General Expenses
ALDC	Area Load Dispatch Centre
APR	Annual Performance Review
ARR	Annual Revenue Requirement
ATE	Appellate Tribunal for Electricity
BESCOM	Bangalore Electricity Supply Company
CAPEX	Capital Expenditure
CERC	Central Electricity Regulatory Commission
CEA	Central Electricity Authority
CESC	Chamundeshwari Electricity Supply Corporation
CPI	Consumer Price Index
CWIP	Capital Work in Progress
DA	Dearness Allowance
DPR	Detailed Project Report
EA	Electricity Act
EC	Energy Charges
ERC	Expected Revenue From Charges
ESAAR	Electricity Supply Annual Accounting Rules
ESCOMs	Electricity Supply Companies
FoR	Forum of Regulators
FY	Financial Year
GESCOM	Gulbarga Electricity Supply Company
GFA	Gross Fixed Assets
GoI	Government Of India
GoK	Government Of Karnataka
HESCOM	Hubli Electricity Supply Company
HP	Horse Power
ICAI	Institute of Chartered Accountants of India
IFC	Interest and Finance Charges
IEGC	Indian Electricity Grid Code
IW	Industrial Worker
KASSIA	Karnataka Small Scale Industries Association
KEB	Karnataka Electricity Board
KER Act	Karnataka Electricity Reform Act
KM/Km	Kilometre
KPCL	Karnataka Power Corporation Limited
kV	Kilo Volts
kVA	Kilo Volt Ampere
kW	Kilo Watt
kWH	Kilo Watt Hour
LDC	Load Despatch Centre
MAT	Minimum Alternate Tax
MD	Managing Director

MESCOM	Mangalore Electricity Supply Company
MFA	Miscellaneous First Appeal
MIS	Management Information System
MoP	Ministry of Power
MU	Million Units
MVA	Mega Volt Ampere
MW	Mega Watt
MYT	Multi Year Tariff
NFA	Net Fixed Assets
NTP	National Tariff Policy
O&M	Operation & Maintenance
P & L	Profit & Loss Account
PCKL	Power Corporation of Karnataka Ltd.
P & G Trust	Pension & Gratuity Trust
PLR	Prime Lending Rate
PPA	Power Purchase Agreement
R & M	Repairs and Maintenance
ROE	Return on Equity
ROW	Right of Way
SBI	State Bank of India
SCADA	Supervisory Control and Data Acquisition System
SLDC	State Load Despatch Centre
SRLDC	Southern Regional Load Dispatch Centre
STU	State Transmission Utility
TSA	Transmission System Availability
TCC	Total Contracted Capacity
TR	Transmission Rate
WPI	Wholesale Price Index
WC	Working Capital

KARNATAKA ELECTRICITY REGULATORY COMMISSION

No.16C-1. Miller Tank Bed Area, Vasanthnagar
BENGALURU - 560 052

Dated 9th June, 2021

In the matter of:

Application of the Karnataka Power Transmission Corporation Limited, in respect of the Annual Performance Review for FY20, and consequent revision of Annual Revenue Requirement for FY22 and Revision of Transmission Tariff for FY22.

Present:	**Shri Shambhu Dayal Meena**	**Chairman**
	Shri H.M. Manjunatha	**Member**
	Shri M.D. Ravi	**Member**

O R D E R

The Karnataka Power Transmission Corporation Ltd (hereinafter referred to as KPTCL) is a Transmission Licensee, under the provisions of the Electricity Act, 2003. KPTCL, under the provisions of the KERC (Tariff) Regulations, 2000 and KERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2006, as amended, has filed its application on 30th November, 2020, for Annual Performance Review for FY21, as per the audited accounts and consequent revision of ARR and transmission tariff for FY22.

In exercise of the powers conferred under Sections 62 and 64 and other provisions of the Electricity Act, 2003 and the KERC (Tariff) Regulations, 2000 read with the KERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2006, as amended from time to time and other enabling Regulations, the Commission has considered the said application of the KPTCL. The item-wise analysis, review and the Commission's decisions thereon are brought out in the subsequent chapters of this Order.

CHAPTER – 1

INTRODUCTION

1.0 KPTCL – A brief Profile of the State Transmission Utility:

The Karnataka Power Transmission Corporation Limited, (KPTCL) is a transmission licensee under Section 14 and a State Transmission Utility (STU) under Section 39 of the Electricity Act, 2003 (hereinafter, referred to as the Act).

The KPTCL is a Company incorporated on 28th July, 1999, registered under the Companies Act, 1956 and has commenced its operations from 1st August, 1999. Initially the KPTCL performed the functions of both Transmission and Distribution of electricity in the State, which were earlier carried out by the erstwhile the Karnataka Electricity Board (KEB).

After unbundling and formation of separate Distribution Companies, the KPTCL was assigned the functions of transmission of power from 1st June, 2002 as a Transmission Company, which also functions as the State Transmission Utility (STU) in Karnataka. The Distribution business was entrusted to the newly created Electricity Supply Companies (ESCOMs).

The bulk power purchase activity was separated from the functions of KPTCL as per the Electricity Act, 2003 from 10th June, 2005 and the KPTCL became an exclusive transmission company. The co-ordination of bulk power purchase activities has been vested with the newly formed Power Company of Karnataka Ltd., (PCKL).

The KPTCL enables the ESCOMs to provide electricity to around 2.66 Crores consumers of different categories spread over the State covering an area of about 1.92 lakh square kilometers. To transmit power from different sources of generation, besides the CTU network, KPTCL, as on 31.01.2021, has 1249 substations and 38514 Ckt. kms of transmission lines which include 66 kV, 110 kV, 220 kV and 400 kV lines spread over the State.

To carry out its functions in a smooth and effective manner, the KPTCL has created six transmission zones, each headed by a Chief Engineer; sixteen circles, each headed by a Superintending Engineer; and forty-eight divisions, each headed by an Executive Engineer. The operation and maintenance of the transmission system in the State is looked after by thirty-three Transmission Line and Substation Maintenance Sub-divisions. Also, there are fifteen Transmission major works divisions to carry out the construction activities related to transmission system of the State.

Further, there are six Relay testing Circles covering sixteen relay Testing Divisions for protection, troubleshooting and maintenance of protective relays, metering and testing. These relay testing wings also carry out the pre-commissioning tests of new sub-stations, besides testing of interface meters at regular periods. The Hotline Circle is established with Hotline divisions and sub-divisions to facilitate live line work for speedy addressing of the maintenance and troubleshooting works.

1.1 KPTCL at a glance:

Sl. No	Particulars		31.03.2020
1.	**Generation Capacity (connected to Transmission System)**	MW	
	a) KPC Hydro and Thermal	MW	8852
	b) CGS (Karnataka Share)	MW	4123
	c) NCE, IPPs and Others	MW	17090.13
2.	**No. of Receiving Sub-Stations**		
	a) 400 kV	Nos.	6
	b) 220 kV	Nos.	108
	c)110 kV	Nos.	432
	d)66 kV	Nos.	676
3	**Length of Tr. Lines**		
	a) 400 kV	CKms.	3699
	b) 220 kV	CKms.	11,609
	c)110 kV	CKms.	10,915
	d)66 kV	CKms.	11,430
3.	Gross Assets as at the end of FY20	Rs. in Crores	20857.66
4.	**Total employees:**		
	a) Sanctioned	Nos.	16,434
	b) Working	Nos.	12,647
5.	Demand Charges for Transmission of Power to ESCOMs (FY20), wheeling and Miscellaneous Charges	Rs. in Crores	3,593.79
6.	Collection of transmission charges	Rs. in Crores	3,082.86

Source: KPTCL –SLDC load curve, KPTCL Website, APR Filing and Annual Accounts

1.2 Transmission capacity of KPTCL in FY20:

The total transmission capacity in the State was 21718 MW during FY20. The ESCOM-wise transmission capacity for FY20 is as follows:

ESCOM WISE TRANSMISSION CAPACITY IN MW – FY20

Company	Capacity in MW
BESCOM	11046
MESCOM	1615
CESC	2422
HESCOM	4085
GESCOM	2550
TOTAL	**21718**

CHAPTER – 2

TARIFF APPLICATION PROCESS

2.1 BACKGROUND:

The Commission has approved the ARR and transmission tariff of KPTCL for FY20 in its MYT Order dated 30th May, 2019. The KPTCL in its application dated 30th November, 2020, has sought approval of the revised ARR under APR for FY20 and carry forward the deficit of FY20 to the approved ARR of FY22 and revision of the transmission tariff for FY22, accordingly.

2.2 Commission's Directives and Compliance by KPTCL:

The Commission, in its Tariff Order dated 4th November, 2020, has issued directives on various matters pertaining to transmission system maintained and operated by the KPTCL. The Commission has directed the KPTCL to ensure full compliance of the directives in a time bound manner.

The summary of the directives issued by the Commission and compliance by the KPTCL thereof, is appended vide Appendix, to this Order.

2.3 Public Hearing Process:

On receipt of the application of the KPTCL dated 30th November, 2020 filed for the approval of APR for FY20 and consequent revision of ARR and transmission tariff for FY22, the Commission has communicated its preliminary observations on the application on 9th December, 2020. The KPTCL furnished its replies on 19th December, 2020.

The Commission, vide its letter dated 28th December, 2020, informed KPTCL that its tariff application has been treated as petition in terms of the Tariff Regulations subject to further verification and validation. Accordingly, the KPTCL was directed to publish the summary of the application in the newspapers within five days, in accordance with Clause 5(1) of the KERC (Tariff) Regulations, 2000, as amended from time to time.

In compliance of the above directions of the Commission, the KPTCL has published the summary of its application in the following newspapers on 02.01.2021 and 03.01.2021.

- Deccan Herald
- The Hindu
- Prajavani
- Udayavani

The KPTCL's Application for APR for FY20 and approval of revised ARR and determination of revised Transmission tariff for FY22, was also made available on the web-sites of the KPTCL and the Commission. In response to the notices published in the above newspapers calling for objections on the APR for FY20, and consequential revision of ARR and transmission tariff of the KPTCL for FY22, the Commission has received two numbers of written objections from stakeholders.

The Commission held a Public Hearing on 16th February, 2021 in its Court Hall of the Commission and two persons made oral submissions during the public hearing.

2.4 Consultation with Advisory Committee of the Commission:

The meeting of the Advisory Committee of the Commission was held on 19th March, 2021. The various issues involved in the KPTCL's application were discussed in the meeting and the Members offered valuable suggestions. The Commission has taken note of these suggestions, while finalising this Order.

CHAPTER – 3

PUBLIC CONSULTATION

SUGGESTIONS / OBJECTIONS & REPLIES

3.1 As per the provisions of Section 64 of the Electricity Act, 2003, the Commission has undertaken the process of public consultation, inviting suggestions / views / objections from the interested stakeholders and the general public on the application filed by KPTCL for Annual Performance Review (APR) for FY20, approval of revised ARR and re-determination of Transmission Tariff for FY22. In the written submissions filed as well as during the public hearing, the stakeholders and the public have raised several objections/ made suggestions, on the KPTCL's Tariff Application dated 30.11.2020. The names of the persons who filed written objections are given below:

3.2 KPTCL has received written objections from BMTC and Sri Prabhulingaiah Rudraiah Karjagi Math. KPTCL has forwarded the objections received from BMTC to BESCOM as the matter pertains to them. As regards objections received from Sri Prabhulingaiah Rudraiah Karjagi Math, KPTCL has replied the relevant queries regarding the transmission losses, AG's report and schemes implemented by them. KPTCL forwarded the letter received from Sri Prabhulingaiah Rudraiah Karjagi Math to the ESCOMs as the rest of the queries pertains to them. The Commission has received objection from BESCOM on 10th February, 2021, on the APR and ARR of KPTCL directly in the Commission's office. Since the same was received after the due date, the same was not forwarded to the KPTCL for furnishing replies. The Commission has taken note of the objections raised by BESCOM.

3.3 The Commission held a Public Hearing on 16.02.2020. During the Public hearing the MD, KPTCL made a presentation highlighting the status of implementation of the Commission's directives and the brief facts of submissions made by KPTCL in its Petition for APR of FY20, approval of ARR and re-determination of transmission tariff for FY22.

Shri. G.N. Krishnappa, Electrical Contractor made oral submissions before the Commission. He appreciated the efforts of KPTCL in improving the power supply situation to industries. However, he pointed out that there are abnormal delays in commissioning of Mandur Sub-station due to delay in laying of 10KM line, for which feasibility was given 5 years back.

He also wanted to know the details of stations completed and pending in KPTCL. He also pointed out that KPTCL and ESCOMs are taking one year to issue NOC and as per the SoP Regulations penalty has to be levied.

Commission's Views:

The Commission observed that there are newspaper reports on the excess capacity creation and delay in commissioning of projects and has resulted in time and cost overrun as observed by the Comptroller & Auditor General of India (C & AG). The Commission directed the KPTCL to furnish the compliance on the C & AG Report. The Commission also directed KPTCL to reduce the delay in commissioning of projects to avoid time and cost overrun to reap the benefit of the project to the end consumer.

KPTCL's Response:

KPTCL stated that the laying of line to Mandur station is struck up because of ROW issues and assured the Commission that the same will be addressed.

KPTCL has also submitted the replies vide its letter dated 24.02.2021, on the C & AG observations giving the details of excess capacity creation and delay in completion of projects resulting in time and cost overrun. The Commission noted the reply submitted by KPTCL.

CHAPTER – 4

ANNUAL PERFORMANCE REVIEW FOR FY20

4.0 KPTCL's Application for APR for FY20:

The KPTCL, in its application dated 30th November, 2020, in its prayer has requested the Commission to take up the Annual Performance Review (APR) for the FY20, and approve the revised ARR, based on its Audited Accounts for FY20.

The Commission, in its Tariff Order dated 30th May, 2019 and Tariff Order dated 4th November 2020 had approved net Annual Revenue Requirement (ARR) of Rs. 3,506.24 Crores for FY20, which was inclusive of the deficit of Rs.112.47 Crores for FY18.

In this Chapter, the Commission has reviewed the Annual Performance of KPTCL for FY20, in accordance with the provisions of the MYT Regulations, keeping in view the KPTCL's application, the Audited Accounts for FY20, Commission's observation and the replies thereon furnished by KPTCL. The item-wise analysis of expenditure and revenue and the decisions, thereon, of the Commission are discussed in the following paragraphs:

4.1 KPTCL's Submission:

The KPTCL has submitted the details of revenue earned and item-wise expenditure incurred during FY20 for the purpose of carrying out APR as indicated below:

TABLE – 4.1

KPTCL's filing – APR FY20

Amount in Rs. Crores

Sl. No.	Particulars	As approved (Tariff Order dated 30th May, 2019 & Tariff Order dated 04.11.2020)	As filed
1	Energy Handled in transmission in MU	70959.21	75128.91
2	Energy sold at IF Points in MU	68759.47	72777.87
3	Transmission Losses in MU	2200.74	2351.04

4	Transmission Loss in %	3.10	3.129
5	**Installed Capacity in MW**	21863	21729
6	**Revenue from Transmission Charges**	**0.0**	**3593.79**
	Expenditure:		
7(i)	Employee Cost	1,490.20	1217.85
(ii)	Repairs & Maintenance		305.64
(iii)	Admin, & General Expenses		141.35
	Total O&M Expenses		**1664.84**
8	Depreciation	786.38	855.15
9	Interest & Finance Charges	502.40	532.45
10	Interest on working capital	91.58	32.32
11	Return on Equity at 15.5%	843.36	771.39
12	Income Tax	0.00	603.98
13	Other Debits	0.00	4.54
14	Extraordinary items	0.00	0.00
15	Less: Interest & Finance Charges capitalized	-71.82	-106.86
16	Less: Other Expenses capitalized	-44.21	-72.93
17	Less: Other Income	-204.12	-127.49
18	Carry forward and Deficit as per APR for FY18	-112.47	0.00
19	**Total Expenses (Net ARR)**	3506.24	**4157.39**
20	**Revenue Gap**	0.00	**563.60**
22	**Transmission Charges in Rs. /MW/Month**	**Rs.1,33,644 / MW / Month**	**159441/MW/Month**

As per the APR application, KPTCL has reported a gap of Rs.563.60 Crores in revenue, as indicated above for FY20 and has requested the Commission to approve the revised ARR of Rs.4157.39 Crores for FY20. In addition to the above, KPTCL has included Rs.331.41 Crores towards Regulatory Asset recoverable during FY22 as per the KERC Order dated 19.10.2020 and Rs.37.37 Crores towards interest on the TBPCL claims for the period from April, 2020 to October, 2020.

The Commission has noted that, as per Format-A1 and the audited accounts, the KPTCL had earned a surplus of Rs.644.49 Crores for FY20.

4.2 Financial Performance of KPTCL as per Audited Accounts for FY20:

The overview of the financial performance of KPTCL for the FY20, as per its Audited Accounts, is as follows:

TABLE – 4.2

Financial Performance of the KPTCL – FY20

Amount in Rs. Crore

Sl. No	Particulars	FY20
	Revenue:	
1	Revenue from Operations	3593.79
2	Other Income	226.06
3	**Total Revenue**	**3819.847**
	Expenditure:	
4	**O & M Expenses**	
	Employee Cost	1154.684
	Repairs & maintenance	305.638
	A & G Expenses	131.603
5	Depreciation	953.724
6	Interest& Finance Charges	457.911
7	Income Tax and Deferred Tax	603.975
8	Other Debits	4.536
9	Extraordinary items	0.000
10	Net Movement of Regulatory deferred balance	-436.710
	Total Expenditure	**3175.361**
	Profit for the Year	**644.486**

As per the Audited Accounts, the KPTCL has earned a profit of Rs.644.486 Crores for the FY20, which includes Regulatory Deferred Balances of Rs.436.71 Crores. Considering the balance of surplus of the previous years of Rs.2149.88 Crores, the cumulative surplus as at the end of FY20 is Rs. 2794.36 Crores.

4.3 Annual Performance Review for FY20:

The Commission has considered the actual revenue and expenses reported by KPTCL as per the Audited Accounts, vis-à-vis the expenses approved by the

Commission, in its Tariff Orders dated 30th May, 2019, for the purpose of Annual Performance Review for FY20.

The Annual Performance Review (APR) of KPTCL for FY20, has been taken up by the Commission, in accordance with the provisions of the KERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2006, as amended from time to time. The analysis of item-wise expenditure and the decisions of the Commission thereon, are discussed in the following paragraphs:

i) Transmission Losses for FY20:

The KPTCL, in its filings, as per the audited accounts has reported the transmission losses of 3.129%, as against 3.100% approved by the Commission in its Tariff Order dated 04.11.2020 for the FY20.

The Commission in its Preliminary observation, has noted that KPTCL has indicated transmission losses of 3.129% for FY20. The Commission based on the actual Transmission loss achieved during FY19 and upto August, 2020 as reported by KTPCL has advised KPTCL to consider the revised trajectory of transmission losses for FY20 to FY22 as approved by the Commission in its Tariff Order dated 04.11.2020.

KPTCL, in its reply has submitted that it will consider the transmission losses as approved by the Commission in its Tariff Order dated 04.11.2020.

The Commission also notes that KPTCL in its APR filing has considered 75128.910 MU as the total input energy to KPTCL's transmission system for FY20 as against 75128.720 MU as reported by the KPTCL, in its letter dated 30.06.2020. The Commission directed KPTCL to furnish the reasons for the difference in figure for FY20.

KPTCL in its reply to the preliminary observations, has submitted that the total energy input to the KPTCL Transmission system, as per the transmission loss statement furnished vide letter dated 30.06.2020, is 75128.91 MU for FY20.

Further KPTCL, in its filing, has submitted that the actual voltage-wise losses in respect of 220 kV during FY19 was 1.506% and 1.507% during FY20. The Commission also noted that the actual voltage-wise losses in respect of 110 kV during FY19 was 0.381% and 0.393% during FY20. The KPTCL was directed to furnish the reasons for increase in the transmission losses under 220 kV and 110 kV for FY20 over FY19.

KPTCL, in its reply has submitted that the losses of any transmission network are dynamic and are not constant in nature. The marginal increase in voltage-wise losses at 220 kV and 110 kV is due to dynamic power flows. KPTCL has stated that the overall transmission losses are less as compared to FY19.

The Commission has taken note of reply furnished by KPTCL.

The ESCOMs, in their application for APR for FY20 has filed the following details towards energy consumption at IF points:

ESCOMs	Energy consumption by ESCOMs at IF points for FY20 (MU)
BESCOM	31625.73
MESCOM	5835.03
CESC	7208.30
HESCOM	12832.13
GESCOM	8790.07
Total	**66291.26**

The Commission has observed that the KPTCL, in its letter dated 30.06.2020, has submitted that the energy consumption at ESCOMs interfacing points was 65223.660 MU for FY20. Hence, KPTCL was directed to furnish the actual energy at IF points after reconciliation of the figures with ESCOMs.

KPTCL in its reply to preliminary observations has informed that the interface energy is recorded at 11KV and 33KV IF points with ESCOMs and it does not include EHT consumptions and energy drawn by IPPs (Captive power plants). Considering the wheeled energy, Open access energy, energy drawn by Railways/EHT Consumers through IEX the energy at IF points differing from the quantum indicated at 11KV and 33KV IF points.

After considering the replies furnished by KPTCL, the Commission has considered the actual transmission loss of 3.129% as reported by the KPTCL, based on the input energy and energy supplied exclusively at the interface points of the KPTCL transmission system. **The Commission therefore, decides to approve the KPTCL's transmission loss of 3.129% for FY20. Since, the actual transmission loss of 3.129% as reported by KPTCL for FY20 is well within the approved upper and lower range of 3.150% and 3.050%, KPTCL is not entitled for any incentive / penalty for achieving the transmission losses for FY20.**

Hence, the Commission decides not to allow any incentive or levy penalty, as the actual transmission loss of 3.129% is within the approved lower and upper limits.

ii) Transmission System Availability (TSA):

KPTCL's Submission:

KPTCL, in its Petition has submitted that the total energy input into the KPTCL's transmission system during FY20 was 75128.91 MU and the energy transmitted @ IF points with ESCOM's was 72777.87 MU resulting in transmission loss of 3.129%. The details of Transmission System Availability (TSA) of the transmission lines, transformers and the reactors in the KPTCL system, as submitted for FY20 vide its letter dated 18.11.2020, are as follows:

TABLE – 4.3
Transmission System Availability – FY20

Name of the Transmission Zone	Total No of AC Tr. Lines	% Availability	Total No of ICT's	% Availability	Total No of switched BUS Reactors	% Availability	% Availability for the system
Bagalkote Zone	456	99.436	592	99.848	0	0.000	99.6685
Bengaluru Zone	420	99.895	664	99.841	5	66.246	99.7075
Kalaburagi Zone	301	99.961	390	99.957	0	0.000	99.9585
Hassan Zone	235	98.528	338	99.778	3	99.985	99.2692
Mysuru Zone	195	99.916	310	99.982	0	0.000	99.9566
Tumakuru Zone	144	96.585	412	99.717	6	86.063	98.7687
Total	**1751**	**98.905**	**2706**	**99.844**	**14**	**82.380**	**99.4212**

Commission's Analysis:

The Commission had observed that the RE generators are reporting several instances of their renewable energy generation units have been backed down for various reasons, thus affecting their revenues. In this regard, the Commission in its preliminary observations, had directed KPTCL to furnish:

a. Details of any backing down of RE generators for want of transmission network for FY20. KPTCL was also directed to submit the updated status of the action initiated and time taken/required to resolve the same; and

b. Updated status of the capital works for smooth integration of RE:

The Commission notes that KPTCL has not furnished the details of outages in RE generation for want of network and the resultant loss of RE Generation. As such, the Commission vide its rejoinder letter dated 23.12.2020 had once again requested KPTCL to submit the details of backing down of RE generators if any, for want of transmission network for FY20.

Further, the updated status of the capital works for smooth integration of RE, as submitted by KPTCL is as follows:

Sl. No.	Project	Status Report as submitted by KPTCL in its preliminary observations
1	Establishing 2x100 MVA, 220/66 kV sub-station at Hosadurga, Chitradurga District.	Work under progress; Target Date of Commissioning (DoC): March 2021
2 (a)	Const. of 220 kV SC line on DC towers for a length of 15.168 Kms from existing 400 kV PGCIL station at Beeranahalli (Hiriyur) to existing 220/66/11 kV KPTCL station at Hiriyur in Chitradurga district in existing corridor of 220 kV SC line from Hoysalakatte to 220/66/11 kV station Hiriyur (partly in new corridor i.e. from PGCIL point to link 220 kV SC line from Hoysalakatte to 220/66/11 kV SRS at Hiriyur) along with const. of 02 nos. of 220 kV TBs at 220/66 kV Hiriyur station.	Work under progress. Target DoC: March 2021
2(b)	Const. of 220 kV DC line on DC towers from existing 220/66 kV station Chitradurga to existing 220/66 kV Station Hiriyur in Chitradurga district in existing corridor (partly MC between LILO point of Guttur-Hiriyur line to 220 kV Chitradurga S/s in the existing corridor (5.255 Kms - 03 circuits) for a length of 36.506 Kms and construction of 01 no. of 220 kV TB at 220 kV Chitradurga Station (114 DC towers; 35 MC towers).	Work under progress. Target DoC: March 2021

3	Providing additional 1X100MVA, 220/66kV Power transformer at 220/66kV Thallak substation in Chitradurga District.	All work completed and testing work under progress. Target DoC: December, 2020
4	Providing 3rd 100 MVA, 220/66 kV power transformer at 220/66 kV Hiriyur sub-station.	Work commissioned on 06.02.2020.
5(a)	Reconstruction of 66kV SC idle line on SC towers having Coyote conductor from 66kV Chitradurga old S/s to 66kV Pandrahalli substation for a distance of 17.5kms by 66kV SC line on DC towers using Drake conductor in the existing corridor.	DPR under preparation.
5(b)	Providing additional 66 kV circuit between H.D. Pura tap point and H.D. Pura Substation for a distance of 10kms with Coyote conductor to provide LILO arrangements at 66/11kV H.D. Pura substation along with construction of 1 No of 66kV terminal bay at H.D. Pura substation.	
6	Strengthening of 66 kV Holalkere-Pandarahalli SC to DC line.	To be retendered.
7	Construction of additional 66kV SC line having Coyote conductor from 66/11kV Hangal substation to 66/11kV Rampura substation with LILO at 66/11 kV Nagasamudra substation for a distance of 28kms approx. along with one number of 66kV terminal bay at 66/11kV Hangal & Rampura substations and two numbers of 66kV terminal bay at 66/11kV Nagasamudra substations.	DPR under preparation.
8(a)	Stringing of Second circuit with coyote conductor between 66kV P.D. Kote and 66kV Hariyabbe substations on existing D/C towers for a distance of 12.25 Kms along with two nos. of new terminal bays, one at P.D.Kote and one at Hariyabbe substation.	Tender called at circle office DVG and tender opened on 27.11.2020 under evaluation.
8(b)	Replacement of existing "66kV S/C coyote line on S/C towers" between 66kV Hariyabbe sub-station and Hariyabbe tap point by "66kV D/C Drake line on D/C towers" for a distance of 10.25 Kms and creation of one terminal bay at Hariyabbe sub-station for providing LILO arrangement.	
8(c)	Replacement of existing "66kV D/C coyote line on D/C towers" between 220/66kV Hiriyur sub-stations and Hariyabbe tap point by "66kV D/C Drake line on D/C towers" for a distance of 18.0 Kms.	
9	Conversion of 66kV SC line on SC towers to DC line on DC towers from 220kV Chitradurga Station to 66kV Turuvanur Station with coyote conductor in the existing corridor for a distance of 22Kms along with construction of 1 No. of 66kV Terminal Bay at both stations.	Survey approval and estimate to be submitted.

The Commission had also directed KPTCL to submit the details of remedial action taken / proposed to be taken for reducing system outages in different zones, ranging between 60.98 hours. to 6811.5 hours (approx. 284 days).

KPTCL in its reply has submitted that it has achieved Transmission Availability of 99.42% against target of 98%. Further, KPTCL has proposed the following action plan to reduce system outages:

1. Overhauling of 220kV and 66kV Circuit Breaker in all the 220kV and 66kV stations to reduce interruptions.
2. Augmentation of transformers to higher capacity to reduce the unscheduled interruptions.
3. Strengthening of lines by higher capacity of conductors like HTLS/AAAC Moose/ Drake conductor and Cable to meet future load growth.
4. Replacement of electromechanical relays by numerical relays.
5. Procurement of 400kV Reactor bushing to rectify faulty reactor.
6. Procurement of Local Breaker Backup (LBB) relays for 220kV and 66kV Substations to overcome line faults.

KPTCL has further informed that, during unavoidable line outages, Stations have been energized with alternate source to ensure better availability of transmission network.

The Commission notes that the works indicated at item no. 5 to 9 in the above Table are in initial stage and hereby directs KPTCL to expedite the above works and to complete the other works as per the schedule.

The Commission, vide letter dated 30.11.2020 & reminder e-mail dated 22.12.2020 had directed the ESCOMs to confirm the percentage of zone-wise Transmission System Availability (TSA) of KPTCL for the period April 2019 to March 2020. The Commission has received replies from all the ESCOMs except MESCOM in the matter, BESCOM, CESC, HESCOM & GESCOM have concurred with the TSA as submitted by KPTCL for their respective zones. CESC has submitted that the total installed capacity of capacitors banks in Mysore zone is 858.45 MVAr out of which 847.22 MVAr is in service. As such KPTCL is directed to repair / replace the faulty capacitors in a time bound manner to ensure quality of supply.

The Commission, after duly validating the submissions made by the KPTCL, has considered the TSA at 99.42%, and directs KPTCL to consistently improve and maintain its TSA, by monitoring and taking remedial measures in respect of the transmission elements which are prone to show lower availability. **KPTCL shall also ensure that no RE Generation is affected by transmission system constraints.**

iii) Incentive for Transmission System Availability:

As per the provisions of Regulation 3.17(1) of the KERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2006, the Transmission Licensee is allowed an incentive for achieving system availability above the target availability of 98%. Hence, considering the availability and the net ARR for FY20 as approved by the Commission in this order, the allowable incentive for the FY20 is calculated as follows:

TABLE – 4.4

Incentive for better Transmission System Availability

Particulars	FY20
System Availability Target	98%
Actual System Availability for FY20	99.42%
Maximum Availability considered to allow incentive (No incentive allowed beyond 99.75% as per MYT Regulations)	99.42%
Availability beyond target levels	1.42%
Incentive for Availability beyond target levels linked to approved ARR in Rs. Crores	50.63
50% to be shared with the ESCOMs and balance to be retained by KPTCL Rs. Crores	**25.31**

The total incentive earned by the KPTCL on account of improved system availability for the FY20 is Rs.50.63 Crores. The Commission hereby approves sharing of the gains with ESCOMs in the ratio of 50:50. Thus, the incentive on account of system availability achieved by KPTCL beyond the target set by the Commission for FY20, is Rs.25.31 Crores.

The Commission, therefore, directs the KPTCL to recover the above incentive amount of Rs.25.31 Crores from the ESCOMs, in proportion to their actual transmission capacity for the FY20 and utilize the same to adopt technological advancements in tools & machineries and also to initiate advanced training to

its officers and employees, to improve their efficiency in performance and report compliance thereof, to the Commission.

iv) Operation and Maintenance Expenses:

KPTCL's Submission:

KPTCL in its application has submitted that as per MYT norms, the total O & M expenses works out to Rs.1747.46 Crores. This amounts consists of Rs.1489.86 Crores towards employee cost, Rs.182.94 Crores towards Additional O & M expenses on account of P & G contribution and Rs. 74.66 Crores towards leave contribution. However, KPTCL has requested the Commission to allow the actual O&M expenses of Rs.1591.92 Crores for FY20. As per the audited Accounts, the Employee costs is Rs.1217.86 Crores, Repairs & Maintenance expenses of Rs.305.64 Crores and A & G expenses of Rs.141.35 Crores for FY20.

The Commission, in its Tariff Orders dated 30th May, 2019, had approved O&M Expenses of Rs.1,490.20 Crores, inclusive of uncontrollable O & M expenses on account of contribution to P&G Trust (Terminal Benefits) & leave encashment for FY20. The actual O&M Expenses incurred by KPTCL as per Provisional Accounts is Rs.1664.86 Crores which is higher than the approved expenses by Rs.174.66 Crores.

The KPTCL in its filing, has submitted that the allowable O&M expenses as per norm is Rs.1747.46 Crore consisting of O&M expenses of Rs.1489.86 Crore as per norms and uncontrollable O&M costs of Rs.257.60 Crores for FY20. However, KPTCL has requested the Commission to allow the actual O&M expenses as per provisional accounts of Rs.1592.92 Crores for FY20.

Commission's Analysis and decisions:

The Commission's preliminary observations on O & M expenses and replies furnished by KPTCL are as indicated below:

a. Repairs & Maintenance Expenses:

The Commission in its preliminary observations has sought the details for having incurred Rs.256.49 Crores towards R & M expenses on Plant and Machinery. The Commission had also directed KPTCL to furnish the number of power transformers failed, reasons for failure, repaired, repaired transformers reissued to the works and opening and closing balance of failed transformers during FY20 and upto November in FY21.

KPTCL, in its replies, has submitted the details of R&M expenditure of Rs.256.49 Crores incurred towards Plant & Machinery during FY20. KPTCL has informed that the R&M expanses under Plant and Machinery includes Remuneration paid to contract agency for shift and minor maintenance of stations.

As regards failed transformers, KPTCL in its reply to the preliminary observations, has submitted that the opening balance of total failed transformers as on 01.04.2020 was 122. Further, it is submitted that 20 transformers failed during the year. Out of which, 7 transformers were repaired and ready for commissioning, 8 transformers were repaired and commissioned and 5 transformers were approved to be scrapped. Thus, the total number of failed transformers as on November, 2020 remained at 122 Nos. **The Commission notes that the reply submitted by KPTCL and observed that, the failed transformers lying idle as dead stock without being repaired and used to save money on buying new transformers and directed KPTCL to take timely action to repair and make use of the failed power transformers.**

b. A & G Expenses:

The Commission in its preliminary observation noted that, as per Audited account for FY20, KPTCL had incurred an amount of Rs.25.02 Crores towards Corporate Social Responsibility. Hence, KPTCL was directed to furnish the details for having incurred the expenditure under this head of account.

KPTCL, in its replies has submitted that it has paid Rs.25 Crores to Karnataka Disaster Management Authority under CSR.

c. Employee Cost:

Further, the Commission noted that, as per Audited Accounts for FY20, KPTCL has incurred an amount of Rs.1217.86 Crores towards employee cost for FY20 as against Rs.1337.95 Crores incurred during FY19 which is inclusive of contribution towards P&G Trust.

d. Terminal Benefits:

KPTCL in its filing of APR for FY20 has claimed a total amount of Rs.182.94 Crores contribution to P&G Trust towards Terminal Benefit and Rs.72.56 Crores towards leave contribution for FY20. The Commission directed KPTCL to furnish the computation sheet for having booked the expenditure as per the audited accounts for FY20, besides submitting the full Actuarial Valuation Report for FY20.

KPTCL in its replies has submitted that as per the Actuarial Valuation Report, and as intimated by P&G Trust vide letter No. KEPGT/KCO-12/P7/2019-20/cys-13 dated 30/10/2019 the rates of contribution for Pension and Gratuity contribution for FY2019-20 is 57.30% and 6.08% and accordingly, KPTCL has contributed Rs.182.94 Crores towards Pension and Gratuity in respect of employees in appointed prior to 1st April 2006, for FY20 has been booked.

The Commission also noted that in respect of employees appointed after 01/04/2006 under New Defined Contributory Pension Scheme (NDCPS), contribution at the rate of 14% on Basic+ DP+DA has been accounted for Rs.73.85 Crores as per the audited accounts for FY20.

The Commission has taken note of the above replies furnished by KPTCL and the amount of expenditure booked as per the audited accounts for FY20. The analysis of the Commission is discussed below:

Commission's Analysis:

The Commission note the Actuarial Valuation Report submitted by KPTCL and the rate of contributions accordingly. Considering the revision of rates of contribution to P & G Trust, on account of pension and gratuity, on the basis of Actuarial Valuation Report submitted by KPTCL, the contribution towards P&G Trust as per the audited accounts is Rs.182.94 Crores and Rs.72.56 Crores towards terminal benefit of those employees covered under NDCPS and Rs.74.66 Crores towards earned leave encashment contribution as the uncontrollable O & M expenses for FY20.

In accordance with Clause 2.5.1 of the MYT Regulations, the values of the base year of the Control period are being determined on the basis of the latest available audited accounts, best estimates for the relevant years and other factors considered appropriate by the Commission, after applying the tests for determining the controllable and uncontrollable nature of various items.

As per the MYT Regulations, the O&M expenses of the transmission licensee are treated as controllable expenses. The major components of the O & M expenses are: Employees Cost, Administration and General Expenses and Repairs and Maintenance expenses. The audited accounts for FY20 indicate the actual expenses incurred under these heads of expenditure. Besides these expenses, the KPTCL has been making contributions to the Pension and Gratuity Trust towards regular employees and the employees covered under NDCPS and making the provision for Earned Leave encashment. The Commission has considered the contribution made to P&G Trust, expenses and the Earned Leave encashment as uncontrollable expenses.

The normative O&M expenses are being determined, considering the actual O&M expenses incurred by the KPTCL during the base year in 2019, the actual number of bays and length of transmission lines in circuit kilometers and the inflation factor for the year 2020. The Commission has been consistently adopting this approach to compute the O & M expenses, as provided for in the MYT Regulations, besides allowing additional employee cost treated as uncontrollable O & M cost, as per the provisions of MYT Regulations.

The Commission, in its Tariff Order dated 30th May, 2019, while approving the O&M expenses for FY20 had considered 23956 No. of Bays and 38138 Ckt. Kms of transmission Lines. The actual number of Terminal Bays and the length of Ckt.

Kms. of transmission lines constructed by the KPTCL, as furnished by KPTCL are shown below:

TABLE - 4.5
Length of Transmission Lines and No. Bays

Transmission Lines-Voltage class:	Transmission lines (in Circuit kms) as on 31.03.2020)
400 KV	3699
220 KV	11609
110 KV	10915
66 KV	11430
TOTAL	**37653**
Type of Bay	**Nos. as on 31.03.2020**
Line Bay	5661
Transformer bay	2695
PT Bay	1690
Capacitor Bank Bay	1069
11 KV Bay	12952
Total	**24067**

From the above table, the Commission notes that, there is a shortfall in achievement of the proposed length of Ckt. Kms. of transmission lines for FY20, by KPTCL.

In line with the earlier Tariff Orders, the Commission decides to continue computation of composite inflation index based on 80% weightage to CPI and 20% weightage to WPI. Based on this composite inflation index, the Commission has computed the inflation factor, based on methodology adopted by the CERC, in its orders on escalation rates, issued from time to time, as shown follows:

TABLE - 4.6
Computation of Inflation Rate

Year	WPI	CPI	Composite Series	Yt/Y1=Rt	Ln Rt	Year (t-1)	Product [(t-1)* (LnRt)]
2008	80.0	141.7	129.36			0	
2009	81.9	157.1	142.06	1.10	0.09	1	0.09
2010	89.7	175.9	158.66	1.23	0.20	2	0.41
2011	98.2	191.5	172.84	1.34	0.29	3	0.87
2012	105.7	209.3	188.58	1.46	0.38	4	1.51
2013	111.1	232.2	207.98	1.61	0.47	5	2.37
2014	114.8	246.9	220.48	1.70	0.53	6	3.20
2015	110.3	261.4	231.196	1.79	0.58	7	4.06
2016	110.3	274.3	(-)241.5	1.87	0.62	8	4.99
2017	114.1	281.2	247.78	1.92	0.65	9	5.85

2018	118.9	294.8	259.62	2.01	0.70	10	6.97
2019	121.2	317.4	278.16	2.15	0.77	11	8.42
A= Sum of the product column							38.75
B= 6 Times of A							232.49
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							0.0796
e=Annual Escalation Rate (%)=g*100							**7.9586**
As per CERC Notification No. Eco T I / 2019-CERC dated 02.04.2019 with weightage of 80% on CPI and 20% on WPI							

Considering the inflation rate of 7.9586%, the normative O & M expenses for the FY20 will be as follows:

TABLE – 4.7
Approved Normative O & M Expenses for FY20

Amount in Rs. Crores

Particulars	Amount
O&M cost in terms Rs. Thousand/bay	373.01
O&M cost in terms Rs. Thousand/Km of Line	99.54
Inflation rate*	7.9586
No. of Bays	24067
Length of Line in Kms	37653
O&M Expenses for Bays Rs. Crores	897.72
O&M Expenses for Lines Rs. Crores	374.81
TOTAL O&M Expenses as per Norms Rs. Crores	**1272.53**

As per the audited accounts for the FY20, the KPTCL has incurred Rs.255.50 Crores towards P&G contribution and Rs.74.66 Crores towards Earned Leave encashment. The Commission decides to allow the same as uncontrollable additional employee cost for FY20.

Based on the above discussions, the allowable O & M expenses for the FY20 are worked out as under:

TABLE – 4.8
Approved Allowable O & M expenses for FY20

Amount in Rs. Crores

Particulars	FY20
O&M Expense as per Norms Rs. Crores	1272.53
Additional O&M Expenses on account of P&G Contribution and Earned Leave Encashment	330.16
Allowable O&M Expenses with P&G Contribution, Leave contribution and Arrears of Pay revision	**1602.69**

Thus, as per norms, the allowable total O & M expenses would be Rs.1602.69 Crores. Thus, the Commission decides to approves of Rs.1602.69 Crores as total O & M expenses for the FY20, as per norms under MYT Regulations.

v) Depreciation:

KPTCL, in its application has stated that, as per the provisional audited accounts, the net depreciation after considering the capitalised depreciation amount of Rs.1.08 Crores is Rs.953.72 Crores for FY20. This amount includes Rs.98.57 Crores towards depreciation on assets created out of Consumers' Contribution / grants. Hence, KPTCL has claimed Rs.855.15 Crores towards net depreciation as against Rs.786.38 Crores, approved by the Commission in its Tariff Order dated 30th May, 2019.

Commission's Analysis and decision:

As per the Audited accounts, the net Depreciation after capitalized amount of Rs.1.08 Crores is Rs.953.7239 Crores (Rs.954.806 Cr.- Rs.1.0821)

The Commission, in accordance with the provisions of the KERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2006, and as amended from time to time has determined the allowable depreciation duly considering the actual average gross block of fixed assets for FY20.

The depreciation before capitalization is Rs.954.81 Crores as per the audited accounts for FY20. Out of this amount, Rs.1.08 Crores being the capitalised depreciation amount. After excluding the depreciation on the assets created out of consumer contribution / grants of Rs.98.572 Crores and depreciation charged on SLDC assets of Rs. 0.22 Crores, the net depreciation for FY20 works out to Rs.854.93 Crores. The same is shown as under:

The Asset-wise break-up of Depreciation is shown as under:

TABLE – 4.9
Allowable Depreciation for FY20

Amount in Rs.Crores

Sl. No	Particulars of assets	Depreciation for the Year
1	Land and Rights/leased assets	0.609
2	Building and structures	22.087
3	Plant and Machinery Substation Transformers, Circuit breakers, other fixed apparatus of rating 100 MVA and above.	453.150
4	Substation Transformers, Circuit breakers, other fixed apparatus of rating below 100 MVA .	459.705
5	Hydraulic Works	5.441
6	Other Civil Works	7.046
7	Vehicles	2.298
8	Furniture Fixtures	1.219
9	Office Equipment	0.212
10	Intangible Assets	0.249
11	Depreciation on released assets and released assets issued to repairs.	2.791
12	**Gross Depreciation (Before Capitalisation)**	**954.81**
13	Less: Depreciation withdrawn on assets created out of consumer contribution and grants	-98.572
14	Less: Depreciation on SLDC assets	-0.22
15	less Depreciation Capitalised	1.08
	Allowable Net depreciation	**854.93**

Thus, the Commission decides to allow Rs.854.93 Crores towards Depreciation for FY20.

vi) Capital Expenditure for FY20:

KPTCL's submission:

As per the application for APR for FY20, the KPTCL has achieved a capital expenditure of Rs.2231.63 Crores, as against the Commission approved capex of Rs.2000 Crores for FY20. The KPTCL, has submitted the breakup of work-wise capital expenditure and corresponding amount in respect of capital expenditure during FY20, as follows:

Particulars	Works targeted by KPTCL in FY20	Works completed by KPTCL in FY20
Sub-Station works (in Nos)	40	32
Transmission line Works (in Ckms)	886	794
Augmentation Works (in Nos)	80	84
Grand Total		

Note: KPTCL has not furnished the work-wise total amounts incurred against Rs.2231.63 Crores

The breakup of addition of MVA capacity/ length of Transmission lines etc. due to completion of the above works is as under:

Sub-Station Works Completed During FY-20

Particulars	Achievement (No's)	MVA Added
400kV	01	1000.00
220kV	03	800.00
110kV	09	110.00
66kV	19	231.50
Total	**32**	**2141.50**

Length of Transmission line constructed during FY-20

Particulars	Achievement (in Ckt. Kms)
400kV	130
220kV	106
110kV	203
66kV	355
Total	**794**

Station Augmentation Works completed

Particulars	Achievement (Nos)
220kV	01
110kV	23
66kV	60
Total	**84**

Commission's Analysis and Decisions:

The Commission noted the above details, and observed that KPTCL, in its APR filing for FY20, has indicated the total Capex amount incurred for FY20 is

Rs.2231.63 Crores as against an approved capex of Rs.2000 Crores for FY20. The Commission, in its preliminary observations on tariff filing had directed the KPTCL to furnish the reasons for exceeding the capex beyond the approved amount.

In response to the Commission's letter, KPTCL in its reply has stated that the capex of Rs.2231.63 Crores includes an amount of Rs.106 Crores towards capitalization of interest & Finance charges and Rs.74.01 Crores towards capitalization of other expenses besides inclusion of expenditure towards spill over works from the previous financial years. Hence, the total capex incurred is less than the approved capex of Rs.2000 Crores.

The Commission, in its preliminary observations had directed KPTCL to furnish break up details of the opening balance of work in progress, actual expenditure incurred during the year, assets categorized and the closing balance of work in progress for FY20. KPTCL in its replies to the preliminary observations, has submitted that the detailed breakup of the works will be furnished in due course. The Commission directs KPTCL to furnish the break-up details, duly tallied to the total amount as depicted in the audited accounts for FY20.

The Commission had also directed KPTCL to furnish details of station/Line-wise loading with reference to the projected loads. However, KPTCL has not furnished the loading details of the following stations / lines:

Establishing 2X500MVA 400/220kV substation with 400kV side GIS & 220kV side AIS with associated lines Jagalur
Establishing 1x10MVA, 110/11kV Sub-Station G. Hoskote, Belgaum
Up-gradation of 2x5 MVA,33/11 kV MUSS to 1x10MVA, 110/11kV Sub-Station, Shiraguppi Belgaum
Establishing 1X10MVA 110/11kV Sub-station, Shivamogga
Establishing 1X10MVA 110/11kV Sub-station Konandur
Establishing 1 x 8 MVA, 66/11 KV sub-station ShettiHalli, Hassan
Establishing 2X8MVA 66/11kV substation with associated line Malladihalli, Chitradurga
Establishing 1X8MVA 66/11kV substation with associated line, Vishweshwarapura, Tumakuru

From the above facts, the Commission conclude that the purpose for which capex incurred has not been served and the stations though commissioned are yet to achieve optimal load. Hence, while planning the works, KPTCL shall prioritize the works besides coordinating the various activities in course of execution of works, failing which the Commission would treat them as imprudent works and disallow the consequential costs in the ARR.

It is observed from the details provided by KPTCL in respect of target and achievement of Sub-Stations, Transmission lines and Augmentation works that, majority of the works in all the three categories have undergone time over and cost overrun. This indicates lack of proper planning and coordination in the execution of works. The Commission reiterates it earlier directive that KPTCL shall minimize the time and cost over runs in the execution of works.

The common reasons noticed in respect of time overrun are Right of Way issues, obtaining approvals from Railway Department, delay in supply of materials, delay in shifting of 11kV lines from the switchyard area, delay in work execution by agency, delay in handing over of land, reorientation of the line, change in layout of the substation, delay in obtaining CEIG clearance, delay in issuance of road cutting permissions and Forest clearance issues.

The common reasons noticed for cost overrun are due to change of Survey, Price Variation, Quantity variation, Corridor compensation, Employee cost, Interest during Construction and incentives.

The Commission noted that the above reasons are recurring in nature in most of the works and hence, KPTCL is directed to plan the work to overcome these impediments while executing the works. The Commission directs KPTCL to take necessary action to monitor and complete the work within the time frame to avoid the extra financial burden and also for the benefit of end users.

Review of Dis-allowance towards Imprudent/ conditionally prudent works as per the Order dated 04.11.2020

The current status of Imprudent/ conditionally prudent works as per Commission's Order dated 04.11.2020, as furnished by KPTCL is as under:

Sl. No.	Commission's Observations	Status as furnished by KPTCL/CESC/BESCOM	Commission's Decision
a)	Providing the link line to new Ramenahalli feeder for the overloaded F-3 J.C Pura feeder opposite to petrol bunk at J.C. Pura towards Ramenahalli in D.M.Kurke section and Banavara Sub-division, CESC This works was treated as conditionally prudent since KPTCL had not provided breaker to the above works and an amount of Rs. 0.2122 Crores was proposed to be disallowed.	As per the details furnished by KPTCL vide letter No KPTCL/B36/19-20/1513/4172-75 dated 10.03.2020., the Link line to new Ramenahalli feeder has been commissioned on 30.10. 2019 and CESC has also confirmed the same and requested the Commission to treat this work as prudent work .	Since the feeder has been commissioned, this work is considered as prudent.
b)	Evacuation of new 11Kv feeders from 66/11KV c station to reduce overload of F14 and F9 feeders of LR Bande MUSS in O & M -14 of C5 sub-division, BESCOM for the categorized amounting to Rs. 3.176597 Crores.	11kV Switchgear was commissioned on 20.04.2020. However, the feeder was not loaded since the date of Commissioning by BESCOM, citing reasons that the UG cable laid for the said feeder has proved faulty at multiple locations. The BESCOM in its replies to the preliminary observations has mentioned that the breaker has been commissioned by KPTCL on 13.12.2019 and load was taken.	KPTCL has since commissioned the breaker, but due to fault in cable works executed by BESCOM the feeder is not charged, which will be reviewed during next tariff.
c)	Drawing new feeder from Vandaraguppe 66/11 KV MUSS to release the load of F17-tagachagere NJY feeder of Channapatna MUSS in O&M -1, Channapatna rural sub-division. Ramanagar division, BESCOM for the categorized amounting to Rs 0.146865 Crores.	Vandaraguppe 66/11 KV MUSS was commissioned on 30.11.2019. After commissioning of F2-Kengal feeder of Vandaraguppe MUSS, the load has been bifurcated from F17 Tagachagere NJY feeder of Channapatna MUSS At present 20 Amps Load has been taken on F2-Kengal feeder.	In view of the explanation furnished by KPTCL, this work is considered as prudent.

Considering the replies furnished and subject to the directions issued in the matter of incurring the capex, the Commission recognizes the capex of Rs.2231.63 Crores for the purpose of APR for FY20. The capex approved by Commission for FY20 is to outside the preview of any enquiry conducted / to be conducted by the department / any agency on the capital works.

vii) Prudence Check of Capital Expenditure incurred by KPTCL during FY19 and FY20:

a) The Commission, in its Tariff Orders dated 14th May 2018 and 30th May 2019 had allowed Capital expenditure incurred by the KPTCL for the period FY19 and FY20 respectively, subject to carrying out the prudence check of the various works undertaken by KPTCL. Accordingly, the Commission had entrusted prudence check work of KPTCL to M/s TERI, Bengaluru.

M/s TERI, Bengaluru have completed the prudence check and submitted the report in the matter. As per their report, the following is the summary of findings in respect of work of Prudence Check for FY19 and FY20:

Financial Year	FY19		FY20	
Particulars of works executed and selected for prudence check	**(no.s)**	**(Rs in Cr)**	**(no.s)**	**(Rs in Cr)**
Works executed, costing above Rs. 3 Crores	51	2152.16	44	1342.44
Works Selected for carrying out prudence check	51	2152.16	44	1342.44
Percentage of works selected for carrying out prudence check	100%	100%	100%	100%
Abstract of Prudent / Non-Prudent works	**(no.s)**		**(no.s)**	
Total no. of Prudent works	51		42	
Total no. of non-prudent works	**0**		**2**	
Abstract of Cost over run works	**(no.s)**		**(no.s)**	
No. of works with no cost over-run	15		16	
No. of works with cost over-run upto 10%	19		14	
No. of works with cost over-run between 10% and 25%	11		7	
No. of works with cost over-run exceeding 25%	6		7	
Abstract of Time over Run works	**(no.s)**		**(no.s)**	
No. of works with no time over-run	11		2	
No. of works with time over run of up to 1 year	34		31	
No. for works with time over run of between 1 to 2 years	5		5	
No. of works with time over run more than 2 years	1		6	

b) The Commission had forwarded a copy of the Report of the Consultant to KPTCL for information and to submit its comments on the findings of the report in the matter of imprudent works and other observations as pointed out in the report.

c) After analyzing KPTCL's replies on the findings of the Consultant on the imprudent works and justifications furnished by KPTCL, the Commission has decided that, two works amounting to Rs.39.74 Crores for FY20 among the samples the selected by the consultant, do not qualify for being treated as prudent. Hence, the Commission has considered disallowance of the related costs on account of imprudent works, in the APR of KPTCL for FY20.

d) Accordingly, the expenses towards depreciation and interest incurred on capital works by KPTCL, on such imprudent works have to be disallowed, in APR of FY20, as detailed below:

The amount to be disallowed for KPTCL due to imprudent works of FY20 (Amount in Rs in Crores)		
1	Total cost of capital works categorized during the year FY20	1844.5
2	Total cost of categorized works costing more than Rs.3 Cores considered for prudence check	1342.44
3	Total cost of sample works	1342.44
4	Cost of sample works not meeting prudence norms	39.74
5	Net Capex which is not meeting prudence norms, as per the Report of Prudence check of KPTCL	39.74
6	**Name of the imprudent Work : Badanakuppe: Establishing 2x31.5 MVA, 66/11 kV Badanaguppe S/s with associated line.**	33.34
7.a	Target date of completion	10.01.2019
7.b	Year of completion	27.11.2019
7.c	Year of categorization	31.03.2020
8	Period for which amount to be disallowed towards works not meeting prudence norms calculated on the basis of weighted average interest and weighted average depreciation on the amount in the above item considering the observations of the Consultant that Sub-station is idle charged till date. Project is completed by KPTCL as per order of GoK on KIADB request. However, intended benefits are not realized, as there are no industries coming up to take the load as envisaged in DPR.	1st December 2019 to March-2020
9	Amount to be disallowed for 1st December 2019 to March-2020	1.18
10	**Sub-total amount to be disallowed**	**1.18**
11	**Name of the imprudent Work: Establishing 2x8MVA, 66/11 kV S/S at Malladihalli (Hosadurga Taluk) with associated 66 kV line from proposed 220 KV Station, Benkikere. Tumakuru Zone**	6.40
12.a	Target date of completion	05.02.2014
	Year of completion	16.09.2019

12.b		
12.c	Year of categorization	31.03.2020
13	Period for which amount to be disallowed towards works not meeting prudence norms calculated on the basis of weighted average interest and weighted average depreciation on the amount in the above item considering the observations of the Consultant that No incoming power supply from 66 kV side to Malladihalli S/s and load taken from 11 kV side as intended in the DPR. Hence, the non-realization of envisaged benefits is attributable to KPTCL.	1st October 2019 to March-2020
14	Amount to be disallowed for 1st October 2019 to March-2020	0.33
15	**Sub-total amount to be disallowed**	**0.33**
16	**Total amount to be disallowed**	**1.51**

While arriving at the above amounts for disallowance, the weighted average rate of interest on loans and depreciation considered is as follows:

Weighted Average depreciation rate and interest for FY20		
Company	**Wt. Avg. Dep.**	**Wt. Avg. Interest on loan**
KPTCL	**4.67%**	**8.39%**

In view of the above, the Commission hereby disallows Rs.1.51 Crore for FY20 towards depreciation and interest on loans allowed in respect of imprudent works. Accordingly, the same is ordered to be deducted in KPTCL's APR of FY20.

The Commission has directed KPTCL to take note of the following observations and recommendations made in the prudence check report and take suitable actions/measures in future, while implementing the capex project, in order to avoid disallowance of amounts towards imprudent works:

Observations:

i) The primary objectives and secondary objectives were not clearly defined for each of the investment. However, based on the DPR analysis has been done on prudence check.

ii) The project data provided in the prescribed format were in most cases incomplete and did not have vital details necessary for grading.

iii) The field officers are not aware of the relevance/objective of the prudence check exercise or even post execution analysis/evaluation.

iv) The asset categorization takes place based on the individual category of works and not on the complete project work package.

v) Significant variation in actual expenditure and cost of asset categorization was found proper verification from the KPTCL accounting & finance personal is required.

vi) In a few projects, date of asset categorization is much before the date of project completion, which is not possible as per the detailed accounting & categorization procedure of KPTCL.

vii) Liquidated damages are charged to the projects based on delay condonation report; However, in response of majority of the projects, the amount is refunded to the contractor subsequently. This would in effect results in cash outflow, after completion of work leading to improper accounting of assets, as per DWA or planned Capex.

viii) In respect of some of the projects in all the transmission zones, amount of depreciation charged and Interest capitalized is either not shown or depicted as zero.

ix) Interest capitalized and depreciation charged indicates huge variation in comparison with low and high value projects.

x) In respect of execution of augmentation and replacement of transformers works, there is inordinate delay in execution of projects, after the commencement of works.

Recommendations:

i) The progress of works monitored at every stage by the project monitoring wing ends with the completion/commissioning of the works. The area of project monitoring may be extended to procurement and monitor details of performance of the capital works post commissioning, especially major works like substations/lines etc. to ensure that the objectives for taking up of the project are met.

ii) The field officers are required to be made aware of the capital expenditure guidelines. This would facilitate in better understanding of the relevance of prudence check and implications of not meeting the specified parameters. Further, availability and quality of data would also improve.

iii) There should be proper system of comprehensive post execution evaluation, especially in case of major works. This would enable providing relevant data with regard to the parameters (especially achievement of objective) as prescribed by the prudence check guidelines. The data in respect of all the works should be analysed and thereafter, sample should be selected for validation/prudence check. This would make the prudence check exercise more effective. This exercise has been initiated by KPTCL but all the details/data required is not recorded /evaluated as prescribed by the KERC prudence check guidelines.

iv) KPTCL should adopt a system of ABC analysis of stock.

v) KPTCL should follow a system of post execution productivity approval of the Capital works commissioned during a period by the project approval committee. This would ensure that the objectives for each project are clearly defined and the same is evaluated post execution and timely corrective action / measures, taken if necessary.

vi) KPTCL should have a system of speedy approvals of deviations so that delay in execution on that account is minimized.

vii) KPTCL should develop a strong and effective Vendor rating system.

viii) KPTCL should have central data repository of information which would provide all the details of a project.

ix) KPTCL should provide the project data in the format prescribed by KERC within a specified period after commissioning of the project.

x) The DPR should correctly envisage the intended benefits in terms of projected load growth year on year, interruptions reductions and line lengths along with its associated energy loss reduction. The project proposals which do not have alternatives should be clearly mentioned in the DPR or addressed in the TCCM.

xi) Projects established with dedicated loads such as anticipation of industrial area growth and residential layouts, should be justified appropriately in the DPR with specification of alternative arrangement, when there is delay of more than year.

xii) In many stations, the 11kV power evacuation has not happened concurrently with the completion of sub stations. Hence KPTCL and ESCOMs should ensure effective co-ordination to ensure there is no delay in power evacuation from the downstream end.

xiii) Ensuring accuracy of tri-vector energy meter and issue effective guidance to station operators for monitoring the load based on active power (MW) and not on current (in amps).

xiv) Additional training to accounting staff for following a uniform procedure, in asset categorization computation of depreciation and interest components for project evaluation. Asset shall be monitored for the revenue realization after post commissioning of projects by relevant accounts division.

xv) Centralized monitoring and accounting major materials procured.

viii) Interest and Finance Charges:

The KPTCL in its filing, has claimed an amount of Rs.532.45 Crores inclusion of interest capitalization of Rs.106.86 Crores towards interest and finance charges on capital loans as against the Commission approved amount of interest on capital loans of Rs. 502.40 Crores in the Tariff Order dated 30th May, 2019 for FY20. Thus, the Interest and Finance charges claimed by KPTCL is more than the amount approved by Rs.30.05 Crores for FY20.

Commission's Analysis & Decision:

The Commission, in its preliminary observation had noted that KPTCL in Format T-9 has indicated the both the long term and short-term loan amount details for FY19 and FY20. Hence, KPTCL was directed to furnish the both long term and short term (working capital) loan-wise details including interest rates on the amount of loans borrowed with reference to the details furnished in Note on Audited Account for FY20. KPTCL was also required to submit the details about the measures taken / action plan to reduce the interest burden on capital loans / short term loans (W.C) in the light of the Government of India guidelines issued to reduce the financial burden suffered by the transmission and distribution

Companies and to the consumers during the economic slowdown period on account of pandemic COVID – 19.

KPTCL, while submitting the details has stated that the average interest rate for Long Term Loan (LTL) is 8.26% and Short-Term Loan (STL) is 7.88% and that KPTCL is availing its loan from Commercial Banks at lowest interest rates available to the Sector.

The Commission notes that the interest and finance charges of Rs.457.91 Crores net of capitalization (Rs.106.85 Crores), includes Interest on Working Capital of Rs.32.32 Crores for FY20. For computation of interest and finance charges on capital loans, the Commission has considered the opening and closing balance of long-term loans, new loans availed and repayment of loans made during FY20, as per the details provided under Format – T9 and Audited Accounts for FY20. Based on the opening and closing balances of long-term capital loans, the average capital loan for the year FY20 works out to Rs.6346.26 Crores. The actual amount of interest on capital loans incurred is Rs.532.45 Crores (before capitalization of interest on capital loan) for FY20. The weighted average rate of interest works out to 8.39%. The details of the allowable interest on capital loans is worked as follows:

TABLE – 4.10

Allowable Interest and Finance Charges

Amount in Rs. Crores

Particulars	FY20
Opening balance of Secured Loans	5989.36
Opening balance of Unsecured Loans	2.38
Total	5991.74
Add: New Loans	1442.00
Less: Repayments	-732.96
Total loan at the end of the year	6700.78
Average Loan	6346.26
Interest on long term loans, as filed by KPTCL (before capitalisation)	532.45
Weighted average rate of interest based on the actual interest provided on long term loans in FY20 as per audited accts in %	8.39
Allowable interest on long term loans	**532.45**
Less Interest capitalised	106.86
Net Allowable Interest	**425.59**

As the actual weighted average rate of interest of 8.39% is comparable with the prevailing interest rates for long term loans, the Commission decides to allow the actual interest on long term loans and finance charges of Rs.532.45 Crores for FY20. Further, considering the actual capitalization of interest on long term capital loan of Rs.106.86 Crores as per the annual audited accounts, the net interest on long term loans works out to Rs.425.59 Crores for FY20.

Thus, the Commission decides to allow the gross interest on long term loans of Rs.532.45 Crores and Rs.106.86 Crores towards capitalisation of interest on capital loan for FY20.

ix) Interest on Working Capital:

The Commission, in its Tariff Order dated 30th May, 2019, had approved an amount of Rs.91.58 Crores towards interest on working capital as per the provisions of the MYT Regulations for FY20. KPTCL, in its filing has not claimed any amount towards interest on working capital for FY20. The Commission noted that as per the audited accounts, it has incurred Rs.32.32 Crores towards interest on short term loans for FY20. Though the KPTCL has claimed this amount under interest on long term loans, the same has been excluded from interest & finance charges and allowed under the head- Interest on Working Capital. Thus, the KPTCL is entitled to interest on working capital for FY20, as per the norms under MYT Regulations, which is worked out as follows:

TABLE – 4.11

Allowable Interest on Working Capital

Amount in Rs. Crores

Particulars	FY 20
One-twelfth of the amount of O&M Exp.	133.56
Opening GFA as per Audited Accts	19531.59
Stores, materials and supplies 1% of Opening balance of GFA	195.32
One-sixth of the revenue from Transmission users at the prevailing tariffs	586.81
Total Working Capital	915.69
Rate of Interest (% p.a.)	11.00%
Interest on Working Capital	**100.73**
Actual Interest on WC as per accounts	32.32
As per Regulations actual plus 50% of difference (savings) between actual and normative	**66.52**

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Thus, the Commission decides to allow Rs.66.52 Crores towards interest on working capital for FY20.

x) Other Debits:

KPTCL in its Petition, has claimed an amount of Rs.4.54 Crores towards other debits. This amount includes Rs.0.18 Crores towards interest on belated payment of power purchase cost. The Commission is not allowing interest on belated payment on Power Purchase dues as the Commission has allowed the interest on working capital separately. Thus, the Commission, as per the provisions of the MYT Regulations, decides to allow an amount of Rs.4.36 Crores (Rs.4.54 Crores – Rs.0.18 Crores) towards other debits for FY20.

xi) Return on Equity:

The KPTCL in its Petition, has claimed an amount of Rs.771.39 Crores towards Return on Equity for FY20, as against Rs. 843.36 Crores as ROE grossed up with MAT approved by the Commission in its Tariff Order dated 30th May, 2019. The details of the KPTCL's submission on RoE are as follows:

TABLE – 4.12

Return on Equity - KPTCL's Submission

Amount in Rs. Crores

Calculation of RoE	FY20
Paid-up share capital	2182.32
Share Deposit	0.00
Reserves and Surplus	2794.36
Total Equity	4976.68
RoE @ 15.50%	**771.39**

Commissions Analysis and Decisions:

The Commission in accordance with the provisions of the MYT Regulations, has considered the opening balance of equity, based on the amount of paid-up share capital, share deposits and accumulated balance of surplus / deficit in profit and loss account under 'Reserves and Surplus' of the audited accounts for FY20.

Further, the Commission, in compliance of the Orders of the Hon'ble ATE in Appeal No.46/2014, has been indicating the details of opening and closing balances of gross fixed assets along with break-up of equity and loan component in all its Tariff Order.

The details of GFA, debt and equity (net-worth) for FY20 are indicated as follows:

TABLE – 4.13
Status of Debt Equity Ratio for FY20

Amount in Rs. Crores

Particulars	GFA	Actual Debt	Actual 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
Opening Balance	19531.59	5991.74	4332.20	13672.113	5859.48	30.68	22.18
Closing Balance	21619.58	6700.77	4731.13	15133.706	6485.87	30.99	21.88

From the above table, it is seen that the actual debt equity ratio is within the normative debt equity ratio of 70: 30, on the opening and closing balances of GFA for FY20.

Based on the above, the Commission hereby decides to allow RoE at 15.50% on the opening balance of Paid-up share capital along with the opening balance up of accumulated surplus, besides allowing the taxes separately. Accordingly, the allowable RoE for FY20 is computed as follows:

TABLE – 4.14
Allowable RoE for FY20

Amount in Rs. Crores

Particulars	FY20
OB: Paid Up Share Capital	2182.32
OB: Share Deposit	0.00
OB: Reserves & Surplus (accumulated surplus)	2149.88
Total Equity	**4332.20**
Allowable RoE @ 15.5% on equity	**671.49**

Thus, the Commission decides to approve an amount of Rs.671.49 Crores as the RoE for FY20.

xii) Provision for Taxation:

The KPTCL in its application, has requested the Commission to allow an amount of Rs.603.98 Crores towards Income Tax for FY20. As per the details furnished by

KPTCL, it has accounted Rs.220.46 Crores towards the income tax on profits and accounted Rs.383.52 Crores towards deferred tax liability for FY20.

The Commission, in its preliminary observations, had directed KPTCL to submit the computation sheet for having booked Rs.220.46 Crores towards Income Tax and deferred tax of Rs.383.52 Crores for FY20.

KPTCL, in its reply has furnished the details for having claimed the Income tax and the deferred tax liability for FY20. It is seen that KPTCL has computed tax on the profits earned. As per the provisions of MYT Regulations, KPTCL is entitled to the actual income tax payable on the allowable Return on equity grossed up with MAT rates applicable for the relevant years. Accordingly, the allowable maximum income tax payable on the equity at the beginning of the year with the grossed up MAT rates relevant for the year, works out to Rs.142.16 Crores. The Commission notes that as per the latest audited account submitted by KPTCL, the actual income tax booked for FY20 is Rs.131.42 Crores. Hence the allowable income tax as per the provision of MYT Regulations is Rs.131.42 Crores for FY20. As regards the deferred Tax liability, the Commission would allow the same as per actuals as and when incurred by the KPTCL

Thus, the Commission decides to allow an amount of Rs.131.42 Crores, towards Income Tax for FY20.

xiii) Net Prior Period Income and Expenses /Losses:

The KPTCL in its filing, has not claimed any amount towards net prior period income and expenses / losses for FY20.

The Commission notes that as per the P & L Accounts in the audited accounts for FY20, KPTCL has not incurred any Expenses /Losses towards Net Prior Period Income.

Therefore, the Commission decides not to allow any income/expenditure towards net prior period expenses for FY20.

xiv) Other Expenses Capitalized:

The KPTCL, in its computations of revenue gap for FY20, as per the audited accounts has claimed Rs.72.93 Crores towards other expenses of employee cost, R&M expenses and A&G expense capitalized for FY20.

Thus, the Commission decides to allow Rs.72.93 Crores towards capitalization of other expenses for FY20.

xv) Other Income:

The KPTCL in its Petition, has claimed an amount of Rs.127.49 Crores towards Other Income for computation of revenue gap for APR FY20, after deducting Rs.98.57 Crores towards depreciation withdrawn on assets created out of consumer contribution/grants. This amount of Rs.127.49 Crores mainly includes interest on Bank deposit, rent from staff quarters and others, income from investments, profit on sale / hire of apparatus, profit on sale of stores, miscellaneous recoveries and excess provision in earlier years which are no longer required, etc.

The Commission takes note of the other income of Rs.127.49 Crores earned by KPTCL as per the audited accounts for FY20.

Thus, the Commission decides to allow an amount of Rs.127.49 Crores as other income (non-tariff income) for FY20.

xvi) SLDC Charges:

The KPTCL, in its Petition, has claimed SLDC charges of Rs. 28.17 Crore for FY20 as detailed below:

TABLE – 4.15

SLDC Charges for FY20-KPTCL's Submission

Amount in Rs. Crores

Sl. No.	Particulars	FY20
1	Employee cost	18.05
2	A & G Expenses	9.87
3	Repairs & Maintenance Expenses	0.03
4	Depreciation	0.22
	Total	**28.17**

The Commission in its Order dated 30th May, 2019 had approved Rs.22.84 Crores towards SLDC Charges for FY20. However, considering the actual SLDC charges of Rs.28.17 Crores incurred during FY20, as per KPTCL's application, the Commission decides to allow the recovery of the increased SLDC charges of Rs.5.53 Crores to be shared by the ESCOMs for FY20, along with the approved SLDC charges payable for FY22 are as follows:

TABLE – 4.16
Allowable SLDC Charges for FY20

Amount in Rs. Crores

Particulars	Capacity Allocation in MW for FY20	SLDC Charges for FY20 as per APR	SLDC Charges for FY20 as approved in Order dated 30.05.2019	Difference to be adjusted in FY22
BESCOM	11046	14.33	11.35	2.98
MESCOM	1615	2.09	1.69	0.40
CESC	2422	3.14	2.53	0.61
HESCOM	4085	5.30	4.53	0.77
GESCOM	2550	3.31	2.74	0.57
TOTAL	**21718**	**28.17**	**22.84**	**5.33**

Thus, the Commission decides to consider the actual SLDC charges of Rs.28.17 Crores for FY20 and the difference of Rs.5.33 Crores in SLDC charges allowed to be recovered along with the SLDC charges payable by ESCOMs to KPTCL for FY22 as discussed in the subsequent Chapter of this Order.

xvii) Revenue:

KPTCL in its Petition, has considered an amount of Rs.3593.79 Crores as the Revenue from Transmission Charges and miscellaneous charges as per the audited accounts for FY20.

The Commission in its preliminary observation has noted that, as per Format T-18 demand, collection and closing balance of revenue, the closing balance of revenue to be recovered from the ESCOMs is Rs.1054.31 Crores, as at the end of FY20. The collection percentage in respect of all other ESCOMs except GESCOM is not satisfactory despite guaranteed recovery of the Transmission Agreement through LC/ ESCROW arrangements and KPTCL was required to explain the reasons for accumulation of arrears from the ESCOMs.

KPTCL, in its replies has stated that it has filed a petition (O.P No.: 55/2019) before Hon'ble Commission with a prayer to direct ESCOMs to adhere to terms and conditions of power transmission agreement approved by the Commission to arrange payment of transmission charges through ESCROW. Subsequently KPTCL has submitted the revised audited accounts and accordingly, projected the revenue from operation as Rs.3520.89 Crores for FY20.

The Commission, while taking note of the above reply, as furnished by KPTCL, and the revised audited accounts, decides to consider Rs.3520.89 Crores as the revenue from operation for the purpose of APR for FY20.

xviii) Abstract of Approved ARR for FY20 as per APR:

Based on the above decisions the consolidated Statement of approved ARR as per APR for FY20 is as follows:

TABLE – 4.17
Abstract of approved ARR for FY20 as per APR

Amount in Rs. Crores

Sl. No.	Particulars	As approved (T.O. dated 30.05.2019 & 04.11.2020)	As filed	As per APR
1	Energy available for transmission in MU	70959.21	75128.91	75128.91
2	Energy sold at IF Points in MU	68759.47	72777.87	72777.87
3	Transmission Losses in MU	2199.74	2351.04	2351.04
4	Transmission Loss in %	3.10%	3.129%	3.129%
5	Installed Capacity in MW	21863	21729	21729
6	**Revenue from Transmission of power and other operative income**	**3506.24**	**3593.79**	**3520.89**
7	**Expenditure in Rs. Crores**			
i	Employee Cost	1490.20	1217.85	1602.69
ii	Repairs & Maintenance		305.64	
iii	Administration & General Expenses		141.35	
	Total O&M Expenses	**1490.20**	**1664.84**	**1602.69**
8	Depreciation	786.38	855.15	854.93
9	Interest & Finance Charges	502.40	532.45	532.45
10	Interest on working capital	91.58	32.32	66.52
11	Return on Equity	843.36	771.39	671.49
12	Income Tax	0.00	603.98	131.42
13	Other Debits	0.00	4.54	4.36
14	Extraordinary items	0.00	0.00	0.00

15	**Less:** Interest & Finance Charges capitalised	-71.82	106.86	-106.86
16	**Less:** Other Expenses capitalised	-44.21	72.93	-72.93
17	**Less:** Other Income	-204.12	127.49	-127.49
18	Net Prior Period Charges (Debit)	0.00	0.00	0.00
19	Carrying forward deficit as per APR for FY18	112.47	0.00	0.00
20	Disallowance towards imprudent capital works for FY19 & FY20	0.00	0.00	-1.51
21	**Net ARR**	**3506.24**	**4157.39**	**3555.07**
22	**Deficit for FY20 (Sl. No. 6-21)**		-563.60	-34.18

As per the above computations, the Commission hereby approves Net ARR of Rs.3555.07 Crores for FY20, after undertaking the Annual Performance Review of FY20, as per the audited accounts.

After considering the actual Revenue from Transmission business of Rs.3520.89 Crores for FY20, as per the audited accounts, there is a net deficit of Rs.34.18 Crores for FY20.

4.4 Treatment of Gap in Revenue for FY20:

KPTCL has proposed a revised ARR of Rs.4157.39 Crores for FY20 as against an ARR of Rs. 3506.24. Crores as approved by the Commission, vide its Order dated 14th May, 2019. The Commission, after analyzing the submission of KPTCL, decides to allow revised ARR of Rs.3555.07 Crores towards Annual Performance Review for FY20. The net Revenue deficit for FY20 is worked out at Rs.34.18 Crores.

The Commission decides to carry forward the said deficit of Rs.34.18 Crores, to the ARR for FY22, as discussed in the subsequent Chapter of this Order.

CHAPTER – 5

ANNUAL REVENUE REQUIREMENT FOR FY22

5.1 Approved ARR for FY22:

KPTCL in its application dated 30th November, 2020, has requested the Commission to allow recovery of the proposed overall gap of Rs.932.38 Crores from ESCOMs w.e.f., 01.04.2021. To arrive at the gap, KPTCL has considered the following amounts:

Rs. Crores

1. Revenue Gap as per application for APR for FY20	563.60
2. Add: Amortized Regulatory Asset as per KERC Order dated 19.10.2020 (Recoverable for FY22)	334.41
3. Interest on TBPCL Claims for the period from April-2020 to October-2020	37.37
4. Overall Gap	**932.38**

KPTCL has also prayed for modifying the short-term open access charges and to allow recovery of actual SLDC charges of Rs.28.17 Crores for FY22.

Commission's Analysis and Decision:

The Commission in its Tariff Order dated 30th May, 2019 had approved ARR and Transmission Tariff for the control period FY20 to FY22. In the said Tariff Order, the Commission had approved an ARR of Rs.3,910.48 Crores for FY22 as tabulated below:

TABLE – 5.1
Approved ARR FY22

Amount in Rs. Crores

Sl. No	Particulars	As approved
	Expenditure	
1	Total O&M Expenses	**1,850.52**
2	Depreciation	895.25
3	Interest & Finance Charges	573.01

4	Interest on working capital	104.04
5	Return on Equity with MAT at 21.5488% (19.7575% on allowable equity)	843.36
	Less:	
6	Interest & Finance Charges capitalized	-81.91
7	Other Expenses capitalized	-48.74
8	Other Income	-225.04
	NET ARR	**3,910.48**

KPTCL, in its application has sought to add the revenue gap of FY20 of Rs.563.60 Crore, amortised Regulatory Asset as per KERC Order of Rs.331.41 Crores and Interest on M/s TBPCL amount for the period from April, 2020 to Oct, 2020 of Rs.37.37 Crore (total of Rs.932.38 Crores) to the approved ARR of FY22.

As discussed in the previous chapter, the Commission has decided to carry forward the net deficit of Rs.34.18 Crores based on the APR for FY20.

Thus, the revised ARR for FY22, considering the deficit of Rs.34.18 Crores of FY20, is as follows:

TABLE – 5.2
Revised ARR for FY22

Amount in Rs. Crores

Particulars	FY22
Approved ARR for FY22 as per Tariff Order dated 30th May, 2019	3,910.48
Add: Deficit as per approved ARR as per APR for FY20	34.18
Revised ARR for FY22	**3944.66**

5.2 Implementation of the Orders dated 05.10.2020 of Hon'ble ATE in Appeal No.97/2020:

The Commission, vide its Order No. N/33/2020 dated 19.10.2020, has implemented directions of the APTEL in the Order dated 05.10.2020 in Appeal No.97/2020. In the said Order, the Commission has allowed an amount of Rs.1657.07 Crores (Rs.545.87 Crores towards power purchase claims of Tanir Bhavi Power Company plus carrying cost of Rs.1111.20 Crores for the period from FY02 to FY20). As per the directions of the Hon'ble ATE, the KPTCL shall create a regulatory asset for the above amount, for facilitating gradual increase in tariff.

Accordingly, as per its Order dated 19.10.2020, the Commission has decided to recognise the regulatory asset to be amortized over a period of 5(Five) years and recover the same through tariff payable by the consumers. The yearly amortized amount of Regulatory Asset as per the order dated 19.10.2020, of Rs.331.414 Crores, shall have to be included in the ARR of KPTCL over a period of five years.

Accordingly, an amount of Rs.331.414 Crores towards regulatory asset has to be recovered during FY22. Thus, the Commission has considered an amount of Rs.331.414 Crores for recovery in tariff along with the approved ARR for FY22 in pursuance of the Hon'ble ATE's Order dated 05.10.2020.

The KPTCL has claimed an additional amount of Rs. 37.37 Crores towards interest on TBPCL Claims for the period April, 2020 to October, 2020 in addition to the amount of Regulatory Asset as indicated above. However, as per the Orders of the Hon'ble ATE, no such interest has been allowed. The Commission has worked the amount of Regulatory Asset of Rs.1657.07 Crores, which consists of the principal amount ofRs.545.87 Crores and carrying cost of Rs.1111.20 Crores for the period from FY02 to FY20, as claimed by KPTCL during the proceedings before this Commission and also proceedings before the Hon'ble Tribunal. The Hon'ble ATE has ordered for pass-through of carrying cost to be recovered over a period of next five years by creation of Regulatory Asset. Accordingly the Commission, vide its Order dated 19.10.2020 has worked out the yearly amount of Rs.331.414 Crores to be recovered in tariff over a period of next five years. As such the additional claim of interest has not been specifically allowed in the Hon'ble ATE's Order dated 05.10.2020 and not included in Commission's Order dated 19.10.2020. Therefore, the Commission has computed the total revised ARR and transmission tariff for FY22, as under:

Amount in Rs. Crores

1.	Total Approved ARR for FY22 as per the MYT Order dated 30th May, 2019	3,910.48
2.	Add: Carry forward of deficit as per APR for FY20	34.18
3.	Amortized Regulatory Asset (over five years' period) as per Orders of the Hon'ble ATE dated 05.10.2020	331.414
4.	Net revised ARR for FY22	4276.07

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Accordingly, the Commission decides to approve the revised ARR of Rs.4276.07 Crores for FY22.

i) Revised Transmission tariff for FY22:

The Commission in its Tariff Order dated 30th May, 2019 had considered the following ESCOM-wise transmission capacity for FY22:

TABLE - 5.3

ESCOM wise capacity Allocation for FY22- As per Tariff Order dated 30.05.2019

ESCOMs	Capacity Allocation in MW
BESCOM	12,113
MESCOM	1,815
CESC	2,800
HESCOM	4,675
GESCOM	2,960
TOTAL (MW)	**24,363**

The transmission tariff approved by the Commission, in its Order mentioned above, was Rs.1,33,758 per MW per Month for FY22.

The Commission has re-estimated the transmission capacity as 23518 MW for FY22 keeping in view the proposed capital investment plan and the pandemic situation that prevailed in FY20-21. The following is the revised transmission capacity projections:

TABLE - 5.4

ESCOM wise capacity Allocation for FY22

ESCOMs	Capacity Allocation in MW
BESCOM	12018
MESCOM	1750
CESC	2700
HESCOM	4350
GESCOM	2700
TOTAL (MW)	**23518**

The Commission notes that, the above said projected transmission capacity for FY22 is based on the actual transmission capacity of 21718 MW in FY20.

Considering the above estimated transmission capacity for FY22, the revised transmission charges to be recovered from the ESCOMs and long-term users of transmission network are determined as under:

TABLE – 5.5

Approved Transmission Charges payable by ESCOMs for FY22

Particulars	Capacity Allocation (MW)	Transmission charges for FY22 (Rs. Crores per annum)	Transmission charges for FY22 (Rs. Crores per Month)
BESCOM	12018	2185.129	182.094
MESCOM	1750	318.187	26.516
CESC	2700	490.918	40.910
HESCOM	4350	790.923	65.910
GESCOM	2700	490.918	40.910
TOTAL (MW)	**23518**	**4276.07**	**356.339**

The revised transmission charge for FY22 works out to Rs.151518 per MW per month.

ii) SLDC Charges:

The Commission in its Tariff Order dated 30th May, 2019 had approved the ESCOM-wise SLDC charges for FY22 as follows:

TABLE – 5.6

SLDC charges – Approved for FY22 in Tariff Order 2019

Amount in Rs. Crores

ESCOMs	Capacity Allocation In MW	Share of SLDC Charges Approved for FY22
BESCOM	12,113	14.570
MESCOM	1,815	2.180
CESC	2800	3.370
HESCOM	4675	5.620
GESCOM	2960	3.560
TOTAL	**24,363**	**29.300**

The Commission, as discussed in Chapter-4 of this Order has decided to allow KPTCL to recover the net deficit amount of Rs.5.33 Crores from the ESCOMs towards SLDC charges for FY20 along with the approved SLDC charges of Rs.29.30 Crores for FY22.

The revised SLDC charges, considering the APR for FY20 and approved ARR for FY22 as per the Commission's Order dated 30th May, 2019 (duly considering the revised transmission capacity), to be collected from ESCOMs during FY22 are as follows:

TABLE – 5.7

Approved Revised SLDC charges of FY22

Amount in Rs. Crores

Particulars	Actual Capacity Allocation for FY20 (MW)	SLDC Charges for FY20 as per APR	SLDC Charges for FY20 as approved in Order dated 30th May, 2019	Difference to be adjusted in FY22	Revised Transmission Capacity for FY22	Approved SLDC Charges for FY22	Net SLDC Charges to be collected in FY22
1	2	3	4	5	6	7	8 (7-5)
BESCOM	11046	14.33	11.35	2.98	12018	14.570	17.548
MESCOM	1615	2.09	1.69	0.40	1750	2.180	2.585
CESC	2422	3.14	2.53	0.61	2700	3.370	3.982
HESCOM	4085	5.30	4.53	0.77	4350	5.620	6.389
GESCOM	2550	3.31	2.74	0.57	2700	3.560	4.128
TOTAL	**21718**	**28.17**	**22.84**	**5.33**	**23518**	**29.300**	**34.630**

Thus, the Commission decides to allow the SLDC charges of Rs.34.63 Crores recoverable from ESCOMs for FY22.

iii) Transmission Charges and SLDC Charges for all Open Access Consumers:

The Commission notes that, apart from the ESCOMs, the open access consumers/Railways/IPPs are also availing the services of the SLDC and hence they should also bear the expenses incurred by the SLDC.

Apart from the applicable transmission charges payable to KPTCL, the Commission decides to allow the SLDC to collect **Rs.40.34 per MW per day for all open access transactions from 01st of April, 2021** as charges towards SLDC expenditure based on the total transmission capacity and the allowable SLDC expenses for FY22.

As determined above, the transmission charge of **Rs.151518 per MW** per month is applicable for all long-term open access consumers for FY22 (excluding RE projects for which separate Orders issued by the Commission would be applicable).

Further, the revised transmission charges for short term open access consumers for FY22 are as follows:

TABLE – 5.8

Revised transmission & SLDC charges for short term open access consumers – FY22

Duration of Open Access (Rs/MW)	Transmission Charges Amount in Rs/MW	SLDC Charges in Rs/MW/Day
More than 12 hrs & up to 24 hrs in a day in one block	1245.35	40.34
More than 6 hrs & up to 12 hrs in a day in one block	622.68	
Up to 6 hrs in a day in one block	311.34	

Commission's Order:

1. **In exercise of the powers conferred on the Commission under Sections 62 and 64 and other enabling provisions of the Electricity Act 2003, the Commission hereby approves the revised ARR as per Annual Performance Review for FY20 and determines and hereby notifies the revised ARR and Transmission Tariff of KPTCL for FY22 as approved in this Order.**
2. **The tariff determined in this Order shall come into effect from 01st April, 2021.**
3. **The Commission, in order to soften the burden due to increase in tariff to the consumers during the period of lockdown situation prevailing in the State, has allowed the ESCOMs to recover the revenue arrears for the energy consumed during the month of April and May, 2021, during the month of October and November, 2021 respectively, without charging any interest. Consequently, the Commission hereby orders that the arrears of Transmission Charges for the month of April and May, 2021 payable by the ESCOMs, shall be recovered during the month of October and November, 2021 respectively without charging any interest.**
4. **This Order is signed dated and issued by the Karnataka Electricity Regulatory Commission at Bengaluru, this day, the 9th of June, 2021.**

(Shambhu Dayal Meena)	**(H.M. Manjunatha)**	**(M.D. Ravi)**
Chairman	**Member**	**Member**

APPENDIX

COMMISSION'S DIRECTIVES AND COMPLIANCE BY THE KPTCL

1) Directive on Manpower Studies conducted

The Commission had observed from KPTCL APR filing that KPTCL has been furnishing year after year, the same status on the manpower Studies and hence directed it to have a fresh look into its manpower requirements keeping in view the computerization of its operational and financial activities and also keeping in view the technological advancements and the changed organizational set-up.

The Commission had opined that there is a need to streamline the personnel deployment and carrier growth to achieve higher employee productivity, accrual of greater benefits to the organization which would result in least costs tariff and hence reduction of burden on the consumers. It was pointed out that the delay in implementation of the study report by KPTCL would lead to inefficient utilization of its human resources. Thereby, the Commission in its earlier Tariff Orders also had directed the KPTCL to complete the manpower studies at the earliest and submit the interim report to the Commission. Also, KPTCL was directed to ensure implementation of a proper manpower planning strategy with a view to ensure optimum use of human resources and to minimize the operational costs and submit a compliance thereon to the Commission, within three months from the date of the Tariff Order dated 30.05.2019.

Compliance by KPTCL:

The existing study report by ASCI was 8 years old (i.e., 2012), based on the studies conducted from 2009 data. KPTCL had taken certain measures to reduce the staff based on the existing report as informed to the Commission in the previous APR filing. However, KPTCL has added many substations and transmission lines to its network after 2012. Further KPTCL is in the process of implementing ERP programme. Keeping in view of these developments, KPTCL has decided to conduct a fresh manpower study by a suitable agency.

In its replies to the preliminary observations by the Commission, KPTCL has informed that, it is planning to have the study done afresh. It is submitted by KPTCL that once the study is completed and the report is made available, the same will be reviewed by a high-level committee of KPTCL, for its implementation, in a definite time frame. The report along with implementation plan would be submitted to the Commission thereafter.

Commission's views:

The Commission notes that, KPTCL has not taken the directive seriously. KPTCL has been furnishing the same status of implementation of Report on the Manpower studies conducted by ASCI Hyderabad. It has not furnished any concrete steps / action plan to be taken to minimize the operational costs by ensuring optimal utilization of the available human resources. The Commission, after going through the compliance submitted in its APR, has noted that addition of transmission network, sub-stations every year is a natural phenomenon. The Commission also notes the number of persons engaged on contract / outsource basis to manage the station / offices. Given these circumstances, it is absolutely necessary to institute manpower studies to plan for the future in order to efficiently utilize the available manpower with a view to reduce the overall costs.

In this regard, KPTCL was directed to submit a stringent action plan to conduct a manpower study indicating the implementation strategies along with a comprehensive action plan for implementation without further delay. Instead, KPTCL in its tariff filing has informed that it is in the process of implementing ERP Programme. Commission notes that, the ERP is an efficient system which is based on a common database and a modular software design that allows every department of a business to store, share and retrieve information in real-time helping the organization to effectively manage all kinds of the resources. One of the pre-requisites for effective implementation of ERP is the Man Power Study.

The Commission in its previous Tariff Order has directed KPTCL to circulate the report submitted by the internal committee of KPTCL among all the ESCOMs and similar action be taken in all the ESCOMs for streamlining the deployment and carrier growth in order to achieve higher employee productivity and accrual of greater benefits to the organization which would also reduce the tariff burden on the consumers. Whereas, KPTCL has not mentioned any action taken on the above Directive.

The Commission reiterates that the KPTCL shall ensure proper implementation of the Man Power planning strategy with a view to ensure optimum use of human resources to minimize its operational costs.

KPTCL shall submit time line on conducting studies of man power and report to the Commission within two months from the date of this Order.

2) **Directive on prevention of electrical accidents:**

The Commission had directed the KPTCL to prepare a stringent action plan to effect improvements in transmission network and also implement safety measures to prevent electrical accidents. A detailed Sub-Station Division-wise action plan for improvement in the Transmission Lines and reduction in accidents were to be submitted to the Commission.

Compliance by KPTCL:

The Zonal Chief Engineers are regularly monitoring the works related to rectification of hazardous locations. Zone-wise Action Plan for prevention of Electrical Accidents was furnished to the Hon'ble Commission vide letter No. KPTCL/B36/2019-20/1495/160 dated 22.05.2020.

In its replies to the preliminary observations by the Commission, KPTCL has informed that it has furnished the details of the electrical accidents for the 1st Quarter and 2nd Quarter of FY21 vide letter No KPTCL/B36/20-21/11067/638 dated 18.08.2020 and KPTCL/B36/20-21/11067/1189 dated 02.12.2020 respectively.

And it is submitted that KPTCL has initiated action for rectification of all the hazardous locations in order to avoid accidents. As on date there are 143 hazardous locations and details of action taken by KPTCL are enclosed as per Annexure-13 of the Replies.

Commission's views

The Commission notes that, KPTCL vide letter No KPTCL/B36/20-21/11067/638 dated 18.08.2020 and KPTCL/B36/20-21/11067/1189 dated 02.12.2020, has furnished the information on the accidents and not furnished the details of the hazardous locations identified, rectified and balance to be rectified, as at the end of the specific quarter. In the annexure – 13, it has only mentioned that the balance number of hazardous locations to be rectified is 143, without giving any information on what is the number of hazardous locations identified, rectified etc.,

The Commission notes with concern that, with this data, the performance of KPTCL cannot be judged with respect to its resolve to prevent electrical accidents and ensure safety of its network.

The Commission expects KPTCL to provide strategic action plan to rectify all the hazardous locations within a definite timeframe, in order to prevent electrical accidents.

The Commission notes with displeasure the casual manner in which KPTCL has furnished the reply in identification and rectification of hazardous locations instead of initiating strategic, stringent action plan to identify and set right the already identified hazardous locations. If KPTCL doesn't initiate stringent action plan to set right the already identified hazardous locations and do not take aggressive steps to identify the hazardous locations, electrical accidents are bound to increase resulting in loss of lives of human beings and livestock besides loss of properties.

Sowmp

Further, KPTCL has not submitted any details of action taken to conduct awareness campaign on electrical safety aspects, including sensitising its field staff so as to sustain its efforts to prevent and minimize accidents.

Therefore, the Commission reiterates directive to the KPTCL to speed up the work of identification and rectification of hazardous locations and also to submit a stringent strategic action plan along with the details of number of locations identified, set right and the balance number of such locations, to prevent electrical accidents in transmission lines and substations, quarterly to the Commission.

3) **Reactive Power compensation and restoration of failed Capacitors**

The Commission in its Tariff Order dated 30th May, 2019, had directed the KPTCL to take timely action to restore all the failed capacitors and submit monthly status report thereon to the Commission. The Commission also directed KPTCL to furnish the following:

i) Details of reactive energy charges paid to the CTU every month; and
ii) Action plan for restoring the balance failed capacitors.

Compliance of Directive by the KPTCL:

KPTCL, in its Petition, has submitted that the Transmission Zone Chief Engineers are taking timely action to restore the failed capacitors, as and when they fail. KPTCL is submitting the details of capacitor banks to the Commission on a regular basis and the observations made thereon are also being complied with.

Commission's Views:

The Commission, in its preliminary observations, had directed KPTCL to submit the total installed capacity in MVAr, as at the end of October 2020 vis-à-vis total the MVAr capacity required for the State for maintaining the required power factor for the transmission system, in accordance with the relevant Regulations. The Commission also directed KPTCL to submit the average number of days taken for replacement of faulty capacitors. Further, KPTCL was directed to submit month-wise average percentage of spare capacitor of each type in terms of physical dimension and rating together with associated equipment/components of capacitor bank available for replacement of failed capacitors.

KPTCL in its reply to the Preliminary observations, had submitted that the total installed capacitor banks are 1682 Nos with capacity of 8174.3 MVAR out of which 1578 Nos are working with capacity of 6956.90 MVar. Further, KPTCL informed that the Transmission Zones have placed purchase orders for procurement of capacitor cells / CTs / Neutral unbalance relays and breakers for early restoration of faulty capacitor banks. KPTCL also submitted the details of capacitor banks added/restored and failed from January 2020 to October 2020 as an annexure.

The Commission, in its rejoinder letter dated 23.12.2020 had once again requested KPTCL to submit the total installed capacity in MVAR, as at the end of October 2020 vis-à-vis total the MVAR capacity required for the State for maintaining the required power factor of the transmission system in accordance with the relevant Regulations. KPTCL was also directed to furnish the average number of days taken for replacement of faulty capacitors and month-wise average percentage of spare capacitor of each type in terms of physical dimension and rating together with associated equipment/components of capacitor bank available for replacement of failed capacitors. The KPTCL has not furnished any reply in the matter as such KPTCL is directed to furnish its reply within one month from the date of issue of this Order.

The Commission notes that for effective reactive power management and to save KPTCL from paying reactive energy charges, it is very important to maintain the capacitors in a healthy condition and to restore the failed capacitors as and when they fail to put them back to service quickly. Keeping the capacitors in working condition results in improvement in bus voltages, reduction of transmission losses and minimize/avoid payment of reactive energy charges to the CTU. Thus, in order to ensure efficient grid management, it is imperative to provide desired reactive power compensation in the transmission network by installing adequate capacitor banks into the system. The Commission, in its earlier

Orders had directed KPTCL to submit the status of capacitor banks every month to the Commission and accordingly, KPTCL is submitting month-wise details of status of capacitor banks regularly to the Commission. The Commission notes that providing reactive power compensation and restoration of failed capacitors is a continuous process. The Commission also notes that KPTCL is taking measures to restore the failed capacitors in its transmission network and is installing additional capacity of capacitor banks into the system to achieve the desired reactive compensation in the transmission network for ensuring efficient grid management. Hence, the Commission reiterates that the KPTCL shall:

a. Restore any failed capacitors by taking timely action; and
b. Regularly submit the monthly status report of capacitor banks duly furnishing the following details:
    i. Reactive energy charges paid to the CTU every month; and
    ii. Action plan for restoring the remaining failed capacitors.

KPTCL shall also maintain minimum 5% of spare capacitor of each type in terms of physical dimension and rating together with associated equipment/components of capacitor bank available for replacement of failed capacitors.

4) **Implementation of Intra State ABT:**

The Commission vide its Order dated 30th May, 2019 had directed KPTCL to submit the impact of the implementation of Intra-State ABT to the Commission every month from the date of implementation.

Compliance of Directive by the KPTCL:

KPTCL in its Petition, has submitted that it has issued the intra-State ABT bills to the ESCOMs. However, ESCOMs had raised certain issues before the Hon'ble Commission during Advisory Committee meeting held on 13.01.2020. The Director(Tech.) KERC, was directed to conduct a meeting with ESCOMs and SLDC to resolve the issues. Once the issues are resolved, KPTCL will start submitting the impact to the Commission on a monthly basis.

Commission's Views:

During 61st Advisory Committee Meeting held on 27th August, 2020, KPTCL informed the Committee that weekly bills up to 26th May 2019 were issued to all the ESCOMs. The ESCOMs have raised various issues and none of the ESCOMs have paid the UI Charges as per the intra State ABT charges. During the meeting, KPCL informed that installation of ABT Meters in KPCL thermal generating stations has been completed and installation of ABT Meters in all the KPCL Hydro Generating Stations is proposed to be completed by March, 2021. A meeting between the ESCOMs and KPTCL, to sort out issues regarding load management and implementation of ABT is yet to be held under the chairmanship of Director (Tech), due to Covid-19 restrictions.

The Commission in its preliminary observations, had directed KPTCL to furnish the updated status of implementation of intra-State ABT and the month upto which the bills have been issued. KPTCL in its reply to the preliminary observations, has submitted the same status that was furnished at the time the Advisory Committee meeting held during August, 2020 i.e. it has issued weekly bills up to 26th May 2019 and that none of the ESCOMs have paid the UI Charges as per the intra State ABT Bills issued.

The Commission notes that pending sorting out of issues, the KPTCL shall continue to raise the bills, so that the ESCOMs shall be aware of their share of DSM charges to be paid by them due to deviations in the drawl of power. Hence the Commission reiterates that the KPTCL and ESCOMs shall take necessary measures to achieve full implementation of the Intra-State ABT. The Issues posed by the ESCOMs may be brought to the notice of the Commission so as to find a way out to implement the Intra-State ABT at least during FY22.