# CHAPTER - 4

# **ANNUAL PERFORMANCE REVIEW FOR FY19**

# 4.0 KPTCL's Application for APR for FY19:

The KPTCL, in its application dated 27<sup>th</sup> November, 2019 has prayed the Commission to take up the Annual Performance Review (APR) for the FY19, and approve the revised ARR, based on its Audited Accounts for FY19.

The Commission, in its Tariff Order dated 14<sup>th</sup> May, 2018 had approved Annual Revenue Requirement (ARR) of Rs.2975.91 Crores for FY19.

In this Chapter, the Commission has reviewed the Annual Performance for FY19, in accordance with the provisions of the MYT Regulations, based on the application filed by the KPTCL, the Audited Accounts for FY19 and KPTCL's replies to the Commission's preliminary observations. The item-wise analysis of expenditure and revenue and the decisions, thereon, of the Commission are as follows:

### 4.1 KPTCL's Submission:

The KPTCL has submitted the details of revenue earned and item-wise expenditure incurred for consideration during APR for FY19 as follows:

TABLE - 4.1

KPTCL's filing - APR FY19

**Amount in Rs. Crores** 

SI. No.	Particulars	As approved (Tariff Order dated 30.03.2016; 14.05. 2018)	As filed
1	Energy available for transmission in MU	75447	76145.50
2	Energy sold at IF Points in MU	72980	73738.69
3	Transmission Losses in MU	2467	2406.81
4	Transmission Loss in %	3.27%	3.161%
5	Installed Capacity in MW	21420	21420
6	Revenue from Transmission Charges	2975.91	2952.12

7	Expenditure:		
i	Employee Cost		1198.52
ii	Repairs & Maintenance	1326.85	273.08
iii	Admin, & General Expenses		125.84
	Total O&M Expenses	1326.85	1597.43
8	Depreciation	786.95	782.70
9	Interest & Finance Charges	671.07	461.75
10	Interest on working capital	93.54	7.54
11	Return on Equity	764.01	662.78
12	Income Tax	0.00	125.92
13	Other Debits	0.00	8.32
14	Extraordinary items	0.00	0.00
15	Less: Interest & Finance Charges capitalized	-60.26	-77.75
16	Less: Other Expenses capitalized	-51.91	-64.99
17	Less: Other Income	-57.66	-103.06
18	Surplus as per APR for FY17	496.69	0.00
19	ARR	2975.91	3400.64
20	Deficit as per APR for FY19	0.00	-448.52
21	Net ARR	2975.91	3849.16
22	Transmission Charges in Rs. per MW/Month	115776	132300

As per the APR application, KPTCL has reported a deficit of Rs.448.52 Crores in revenue, as indicated above for FY19 and has requested the Commission to approve the ARR for of Rs.3400.64 Crores for FY19.

The Commission has noted that, as per Format-A1 and the audited accounts, the KPTCL had earned a surplus of Rs.214.25 Crores for FY19.

# 4.2 Financial Performance of KPTCL as per Audited Accounts for FY19:

The overview of the financial performance of KPTCL for the FY19, as per its Audited Accounts, is as follows:

TABLE – 4.2 Financial Performance of the KPTCL – FY19

Amount in Rs. Crore

SI. No	Particulars	FY19
	Revenue:	
1	Revenue from Operations	2952.12
2	Other Income	175.11
3	Total Revenue	3127.23
	Expenditure:	
4	O&M Expenses	1597.44
5	Depreciation	855.31
6	Interest& Finance Charges	469.29
7	Income Tax	125.92
8	Other Debits	8.32
9	Extraordinary items	0.00
10	Net Prior Period Charges	0.00
	Less:	
11	Interest and Finance charges capitalized	-77.75
12	Other expenses capitalized	-65.55
	Total Expenditure	2912.98
	Profit for the Year	214.25

As per the Audited Accounts, the KPTCL has earned a profit of Rs.214.25 Crores for the FY19. Considering the surplus earned by the Company in the previous years, the cumulative surplus as at the end of FY19 is Rs.2298.42 Crores (inclusive of profit in the FY19).

# 4.3 Annual Performance Review for FY19:

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 30.03.2016 and 14.05.2018, for the purpose of Annual Performance Review for the FY19.

The Annual Performance Review (APR) of KPTCL for FY19, 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 FY19:

The KPTCL, in its filings as per audited accounts, has reported the transmission losses of 3.161%, as against the Commission approved annual average transmission loss of 3.27% for the FY19.

The Commission in its Tariff Order dated 30<sup>th</sup> March, 2016, had fixed the target of transmission loss at 3.27% for the FY19 on the basis of the methodology suggested by the KPTCL, wherein the total energy at interface points of the ESCOMs is deducted from the energy input from generation bus to the KPTCL grid, to arrive at the transmission loss in KPTCL system.

The Commission, in its MYT Order 2019 had approved the transmission loss of 3.162%, 3.132% and 3.102% for FY20, FY21 and FY22 respectively based on the actual performance of KPTCL in earlier years. As the transmission loss of 3.162% approved by the Commission for FY20 has already been achieved during FY19 itself, the Commission directed KPTCL to reassess and propose revised transmission losses trajectory for FY20 to FY22.

KPTCL in its reply to the Preliminary observation has submitted that the actual transmission losses for FY19 is 3.161%, which is within the approved range of transmission losses (3.07% to 3.47%). The approved losses for FY20 are in the range of 3.112 % to 3.212% and that the exact transmission losses cannot be projected, as it varies with loads, generation and grid operation. Further, it is submitted that the transmission losses for the period April 2019 to August 2019 is 3.137% and that KPTCL would take necessary measures for reduction of transmission losses from the current level of 3.161% for FY20.

The Commission has taken note of the actual transmission loss of 3.161% reported by the KPTCL, which is based on the input energy and energy supplied exclusively at interface points of the KPTCL transmission system. Thus, the Commission decides to approve the KPTCL's transmission loss of 3.161% for FY19. The actual transmission loss of KPTCL is within the approved lower and

upper limits of transmission loss (3.07% to 3.47%) for the FY19 and hence, it is not entitled for any incentive for loss reduction within the set range.

Thus, the Commission decides not to allow any incentive or levy penalty, as the actual transmission loss of 3.161% is within the approved lower and upper limits.

The Commission also notes KPTCL's reply that, during FY20, from April - August, 2019, the transmission loss is 3.137% as against the target loss of 3.162% for FY 20. Further, the Commission notes that, KPTCL has achieved the transmission loss of 3.161% in FY19 itself which is marginally lower than the target fixed for FY20. Therefore, it would be necessary to revise the loss target for FY20 and for subsequent years of the current Control Period i.e. FY20 - FY22. Keeping in view the actual loss achieved during FY19 and as on August, 2019, the Commission decides to revise the transmission loss for FY20 to 3.100%, FY21 to 3.039% and FY22 to 2.978% respectively. Accordingly, the loss target is modified for the current control period as follows:

Revised Transmission Loss Target in % for FY20 to FY22

Particulars	FY 20	FY 21	FY 22
Upper Limit	3.150	3.089	3.028
Average	3.100	3.039	2.978
Lower limit	3.050	2.989	2.928

The Commission has also observed that the 220 kV voltage transmission losses are more than the loss levels at 110 kV and 66 kV voltage. The Commission directed KPTCL to analyze and furnish the reason for the higher 220 kV voltage transmission losses for FY19.

KPTCL, in its replies to the preliminary observation has submitted that the energy handled and the transmission lines at 220 kV are higher as compared to other voltage levels. As such the transmission losses are higher at 220 kV level. Hence, this voltage-wise loss pattern is typically seen in all the previous years as well.

The Commission has noted the reply furnished by the KPTCL and directs KPTCL to make a detailed study in the matter and submit the report to the Commission, within three months from the date of issue of this Order.

The Commission notes that in the APR application filed by the KPTCL, the energy delivered at IF points had been indicated as 73738.691 MU which includes the following:

- i. Energy exported under open Access:
- ii. Energy handled under Wheeling & Banking Agreement;
- iii. Energy imported by ESCOMs and the Open Access customers;

Whereas, the ESCOMs in their tariff applications had filed the energy at IF points as detailed below:

Energy Consumption by ESCOMs at IF Point for FY19 (in MU)								
BESCOM	BESCOM MESCOM CESC HESCOM GESCOM Total							
31742.35	31742.35 5539.73 7225.69 13773.58 8796.04 67077.39							

In order to arrive at the actual energy drawn by ESCOMs at IF points, KPTCL was directed to segregate the energy at IF points and accordingly, KPTCL has submitted the following details, in its reply to preliminary observation:

Figures in MU

SI No.	Description	BESCOM	GESCOM	MESCOM	CESC	HESCOM	TOTAL
01	Total Energy Handled	76145.497					
02	Total Energy drawn at IF points by ESCOMs**	31793.873	8764.245	5600.113	7378.828	14134.028	67671.088
03	Energy Handled under W & B Agreement	3835.441	265.782	259.668	392.298	345.331	5098.520
04	Energy imported by EHT consumer	238.395	188.841	105.560	180.709	217.900	931.405
05	Others (AUX)	18.289	4.075	3.553	5.023	6.737	37.677
06	Energy exported by OA generator***	Not Applicable					
07	TOTAL	35885.997	9222.943	5968.895	7956.859	14703.996	73738.691

Metered Energy furnished by TL&SS division.

<sup>\*\*\*</sup> For transmission losses calculation (excluding SR losses), OA export energy will not be taken.

KPTCL, has furnished the details of energy handled except the details of energy exported by the OA generators as the same is stated to be not applicable to computation of losses. The Commission also notes that the losses are worked out based on the energy handled at different voltage-wise stations. However, details of energy handled at each voltage level station is not given (even in the energy flow diagram). In the absence of the details of energy, the correctness of the loss computations at each voltage level cannot be established. Therefore, the Commission has provisionally accepted the loss levels as submitted in the APR application (which is as per the audited accounts), subject to KPTCL initiating a study and furnishing a report thereon, within three months from the date of this order.

The Commission in its preliminary observation had also directed KPTCL to compute and furnish the transmission losses by considering the Southern Region losses.

KPTCL, in its reply to the preliminary observation, has stated that the Ex-Bus Generation of CGS units for FY19 for the State is 25281.254 MU and the energy received at PGCIL/KPTCL interface is 24170.840 MU. The Losses on the PGCIL network is shared among ESCOMs as per the provisions under CERC (Sharing of Transmission Charges and Losses) Regulations 2010. Hence, the losses of KPTCL network is computed duly considering the energy input at State periphery.

The Commission notes that, the KPTCL has not furnished the losses considering the southern region losses, as directed by the Commission.

Further, it was observed that in the Energy Flow Diagram, the KPTCL did not furnish the energy flows at different voltage levels to indicate the loss levels in each voltage levels. As such, KPTCL was directed to furnish the same and to justify its transmission losses indicated at different voltage levels.

KPTCL in its reply to preliminary observation, has submitted the revised Flow Diagram, duly indicating the energy flows at different voltage levels to indicate the loss levels in each voltage levels.

The Commission notes that KPTCL has not indicated quantum of voltage-wise loss either in absolute terms or in percentage terms. Henceforth, KPTCL shall clearly indicate in the Energy Flow Diagram, the input & output at each voltage level, the line losses and the transformation losses in MU as well as percentage.

# ii) Transmission System Availability (TSA):

### **KPTCL's Submission:**

KPTCL in its Petition has submitted that the total energy input to KPTCL's transmission system during FY19 was 76145.497 MU and the energy transmitted @ IF points with ESCOM's was 73738.691 MU resulting in transmission loss of 3.161 %. The Transmission System Availability (TSA) of the transmission lines, transformers and the reactors in the KPTCL system, as submitted for FY19, are as follows:

**TABLE - 4.3** Transmission System Availability – FY19

Name of the Transmissi on Zone	Total No of AC Tr. Lines	% Availa- bility	Total No of ICT's	% Availa- bility	Total No of switched BUS	% Availa- bility	% Availabilit y for the system
Bagalkote Zone	445	99.320 %	583	99.947%	0	0.000%	99.6758%
Bengaluru Zone	392	99.842 %	632	99.937%	4	91.180%	99.8668%
Kalaburagi Zone	237	99.669 %	374	99.924%	0	0.000%	99.8251%
Hassan Zone	226	98.391 %	323	99.678%	3	100.000%	99.1528%
Mysuru Zone	180	99.893 %	292	98.770%	0	0.000%	99.1981%
Tumakuru Zone	123	97.853 %	400	99.691%	4	96.703%	99.2395%
Total	1603	98.987 %	2604	99.792%	11	95.718%	99.4754%

### Commission's Analysis:

The Commission, in its preliminary observations, had noted that the KPTCL has submitted the monthly reports of Transmission System Availability duly certified

by the SLDC. But KPTCL had not furnished the details of outages in RE generation for want of network and the resultant loss of RE Generation. Further, during the Advisory Committee Meeting held on 23.09.2019, KPTCL had submitted the details of the regions having transmission network constraints, details of the RE generators affected by it and action taken by KPTCL to resolve the same. Hence, the KPTCL was directed to furnish the expected time frame for completion of each of the projects undertaken by them for resolving the issues on transmission network constraints.

KPTCL in its reply to preliminary observation, has submitted the following details regarding area-wise RE Generators affected due to evacuation issues and the remedial action initiated by KPTCL:

SI.No	Area	Affected RE Generators	Remedial Measures
1.	Bijapur	<ul> <li>M/s Devarhippargi /Sandur/ Vyshali- 225 MWs</li> <li>M/s Wardha Solar/ KN Bijapur-70MWs</li> </ul>	<ul> <li>220kV MC line to Kudagi- Completed</li> <li>New 400kV Yalwar Sub-Station – Land acquisition under process.</li> </ul>
2.	Itagi	Renew/ Clean Max /Avaada/Solarsys- 160 MWs	<ul> <li>New 220kV Kudaligi- Work under progress.</li> <li>Likely Commissioning date: Jan.,2020</li> <li>Tap Changer of 100MVA, Itagi- Completed</li> </ul>
3.	Kustagi	<ul> <li>M/s Taletthtayi- 30 MWs</li> <li>M/s Paramapujya-50 MWs</li> <li>M/s OstroDakshin-100 MWs</li> <li>M/s INR Energy &amp; Kushtagi Solar-45MWs</li> <li>M/s Solarsys/Pace Power-70MWs</li> <li>M/s Suzlon - 247.8 MWs</li> </ul>	<ul> <li>110kV line CT ratio enhance- Yelburga-Kustagi- Completed</li> <li>Tap Changer of 100MVA, Kustagi-Completed</li> <li>New 400kV Kustagi-Land identified</li> <li>New 220kV Yelburga-Land acquisition under process.</li> <li>New 220kV Hungud Sub-Station-Land Acquisition under process.</li> </ul>

4.	Thallak	<ul> <li>M/s Welspun- 83 MWs</li> <li>M/s SEI Venus/ Daimond- 60 MWs</li> <li>M/s Avaada- 30 MWs</li> </ul>	3 <sup>rd</sup> 100MVA transformer at Thallak-Awarded     Likely commissioning date:16.08.2020     New 220kV Hanagal Sub-Station – Land acquired.     Estimate under preparation.
• 5.	• Hiriyur	<ul> <li>M/s Welspun- 34 MWs</li> <li>M/s Clean Solar- 30 MWs</li> <li>M/s Solitaire- 30 MWs</li> <li>M/s Asian Fab- 33MWs</li> <li>M/s Clean Solar- 20 MWs</li> </ul>	<ul> <li>Tap Changer of 100MVA, Hiriyur- Completed</li> <li>3rd 100MVA transformer at Hiriyur- Work under progress</li> <li>66kV SC to DC line between PD Kote- Hariyabbe- Hiriyur- Estimate under preparation.</li> <li>66kV SC to DC line between JG Halli- Hiriyur- Tendered</li> <li>New 220kV PD Kote Sub-Station – Land acquired. Estimate under preparation.</li> </ul>
6	Pandrahalli	<ul> <li>M/s NEG Micon- 48 MWs</li> <li>M/s MMCL- 9.6 MWs</li> <li>M/s Nandan Hosur-44MWs</li> <li>M/s NVR Renew- 20 MWs</li> </ul>	2 <sup>nd</sup> 66kV Line between Pandrahalli-Holalkere- work to be retendered.
7	Nagalmadike	<ul> <li>M/s Atria CS         Sunder Raju-20         MWs</li> <li>M/s RNS Infras-         tructure-9 MWs         LOFS-14 MWs</li> </ul>	66kV DC line between Nagalmadike-220kV Pavagada- Work to be tendered

The Commission notes that KPTCL has submitted the details of the regions having transmission network constraints, details of the RE generators affected by it and action taken by KPTCL to resolve the same. However, in most of the cases, KPTCL has not submitted the expected time frame for completion of each of the projects undertaken by them. Also, where there is land acquisition

issue, KPTCL shall take up the matter with the concerned authority, to expedite the land acquisition.

The Commission had also observed that the system outages in different zones of KPTCL are ranging between 121 hours (5 days) to 3077 hours (128 days). This would affect the system availability significantly. Hence, KPTCL is directed to submit the action taken report for reducing such outages, by taking remedial measures.

The KPTCL in its replies to the Preliminary observation, has furnished that the outages mentioned by the Commission is specific to certain works where maintenance of Transmission lines inclusive of replacement of insulators were taken up by KPTCL. These works require obtaining line clear for substantial duration of time. As per KERC (Terms and conditions of determination of Transmission Tariff) Regulation 2006, clause 3.2, the outages on account of maintenance works, the transmission elements are deemed to be available.

The Commission has taken note of the above reply furnished by KPTCL.

The Commission, after duly validating the submissions made by the KPTCL, has considered the TSA at 99.48%. The Commission 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.

## 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 FY19 as approved by the Commission in this order, the allowable incentive for the FY19 is calculated as follows:

TABLE – 4.4
Incentive for better Transmission System Availability

Particulars	FY19
System Availability Target	98%
Actual System Availability for FY19	99.48%
Maximum Availability considered to allow	
incentive (No incentive allowed beyond 99.75% as	
per MYT Regulations)	99.75%
Availability beyond target levels	1.48%
Incentive for Availability beyond target levels	
linked to approved ARR in Rs. Crores	46.43
50% to be shared with the ESCOMs and balance to	
be retained by KPTCL Rs. Crores	23.21

The total incentive earned by the KPTCL on account of improved system availability for the FY19 is Rs.46.43 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 FY19, is Rs.23.21 Crores.

The Commission, therefore, directs the KPTCL to recover the above incentive amount of Rs.23.21 Crores from the ESCOMs, in proportion to their actual transmission capacity for the FY19 and utilize the same to adopt technological advancements in tools & machinery and 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 audited accounts has reported that the net actual O&M Expenses incurred for FY19 is Rs.1597.43 Crores (excluding SLDC Charges & Other expenses shared by the ESCOMs). This includes Employee costs of Rs.1198.52 Crores, Administration & General Expenses of Rs.125.84 Crores and Repairs & Maintenance expenses of Rs.273.08 Crores.

The Commission, in its Tariff Orders dated 30<sup>th</sup> March, 2016, had approved O&M Expenses of Rs.1326.85 Crores, inclusive of uncontrollable O & M expenses of Rs.228.56 Crores on account of contribution to P&G Trust (Terminal

Benefits) & leave encashment for FY19. Thus, the actual O&M Expenses reported by KPTCL is higher than the approved expenses by Rs.270.58 Crores.

The KPTCL in its filing, has submitted that the allowable O&M expenses for FY19 as per norms are Rs.1459.15 Crores, consisting of controllable O&M expenses as per norms of Rs.1051.25 Crores and uncontrollable O& M expenses of Rs.407.90 Crores which includes P & G contribution of Rs.293.17 Crores and leave encashment of Rs.114.73 Crores. However, KPTCL, in its filing, has requested the Commission to allow Rs.1597.43 Crores, towards O & M expenses for FY19. Further, the KPTCL has also submitted the breakup of O&M expenses for the transmission lines and the bays. KPTCL has incurred an expense of Rs.741.64 Crores towards maintenance of bays and Rs.309.61 Crores towards maintenance of lines.

# Commission's Analysis and decisions:

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

# a. Repairs & Maintenance Expenses:

The Commission has noted that, there is a huge increase in R&M expenses during FY19 (by 34.26%), as compared with the actual R&M expenses incurred during FY18. KPTCL has claimed an amount of Rs.273.08 Crores towards repair and maintenance to plant and machinery for FY19 as against the actual expenditure of Rs.215.96 Crores incurred during FY18. The Commission directed KPTCL to furnish the reasons and details for having incurred a higher amount towards R&M of plant and machinery.

KPTCL, in its replies has submitted that there is an increase in R&M to plant and machinery to the extent of Rs.57.16 Crores as compared to the previous year. The expenditure booked under R&M to plant and machinery includes remuneration paid to private contract agencies for shift and minor maintenance of stations. Increase is also attributable to the new stations added during the year, maintenance of the existing stations and increase in remuneration to contract agencies.

### b. A & G Expenses:

The Commission, had also observed that the KPTCL while claiming the A&G expenses had claimed an amount of Rs.19.55 Crores towards Rent, Rate and Taxes and Rs.18.75 Crores towards Professional charges for FY19, as against Rs.5.27 Crores and Rs.13.72 Crores respectively incurred under the same head of account, for FY18. The Commission directed KPTCL to furnish the details and the reasons for incurring higher expenditure under these head of accounts during FY19.

KPTCL, in its replies has submitted that based on the demand notices received from Panchayats and Corporations for current year as well as previous years it has paid property taxes during FY19, resulting in increase in expenditure in respect of Rent, rate and taxes.

As regards professional charges, KPTCL has submitted that the remuneration to Data entry operators has been enhanced with effect from 01.01.2018 vide Order dated 24.07.2018. Consequent to enhancement of remuneration, KPTCL has incurred an additional expenditure of Rs.4.84 Crores.

#### c. Additional Employee Cost:

The Commission, in its Tariff Order 2019, based on the audited accounts for FY18, had approved an additional employee cost of the Rs.130.34 Crores on account of arrears of revision of pay scale to its employees with effect from 01.04.2017 and reckoned the provisions of Rs.10.58 Crores towards earned leave encashment for FY18. The Commission directed KPTCL to furnish the actual amount of expenditure incurred towards pay revision arrears, as per the audited accounts for FY19.

KPTCL in its replies has submitted that it has incurred an expenditure of Rs.137.34 Crores towards pay revision arrears during FY19.

#### d. Contribution to Pension fund:

KPTCL was directed to furnish the computation sheet for claiming Rs.296.73 Crores towards contribution to Pension Trust for FY19, supported by Actuarial Valuation Report.

KPTCL in its replies has furnished the computations along with the Actuarial Report dated 20.05.2019 for the valuation period 01.04.2017 to 31.03.2018.

The Commission has noted the above replies furnished by KPTCL and the analysis of the Commission is discussed below:

# Commission's Analysis:

The Commission has taken note of 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. Thus, an amount of Rs.292.85 Crores has been accounted towards Contribution to the P & G Trust under the head-Employee Cost, as per the audited accounts. Accordingly, the Commission decides to consider Rs.292.85 Crores towards contribution to P & G Trust (Terminal Benefits) and Rs.114.73 Crores towards Earned Leave Encashment as the uncontrollable O & M expenses for FY19.

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 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 FY19 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 notes the actual pay revision arrears amount paid to the KPTCL employees during for the period from 01.04.2018 to 31.03.2019 against the provisions made during FY18 and allowed by the Commission in the approved

APR for FY18. The Commission considers the contribution made to P&G Trust, expenses on 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 2017 and the O&M expenses approved by the Commission for FY18, the actual number of bays and length of transmission lines in circuit kilometers and the actual inflation factor for the year 2019. 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 March, 2016, while approving the O&M expenses for FY19 had considered 24230 No. of Bays and 38214 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 per the audited accounts for FY19, are shown below:

**TABLE - 4.5** Length of Transmission Lines and No. Bays

Transmission Lines- Voltage class:	Transmission lines (in Circuit kms) as on 31.03.2019)
400 KV	3568
220 KV	11503
110 KV	10712
66 KV	11075
TOTAL	36858
Type of Bay	Nos. as on 31.03.2019
Line Bay	5551
Transformer bay	2615
PT Bay	1644
Capacitor Bank Bay	1005
11 KV Bay	12289
Total	23104

From the above table, the Commission notes that, there is a shortfall in achievement of the proposed number of terminal bays and length of Ckt. Kms. of transmission lines for FY19, 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, shown follows:

**TABLE - 4.6 Computation of Inflation Rate** 

Year	WPI	СРІ	Composite Series	Yt/Y1=Rt	Ln Rt	Year (t-1)	Product [(t- 1)* (LnRt)]
2007	73.6	130.8	119.36				
2008	80.0	141.7	129.36	1.08	0.08	1	0.08
2009	81.9	157.1	142.06	1.19	0.17	2	0.35
2010	89.7	175.9	158.66	1.33	0.28	3	0.85
2011	98.2	191.5	172.84	1.45	0.37	4	1.48
2012	105.7	209.3	188.58	1.58	0.46	5	2.29
2013	111.1	232.2	207.98	1.74	0.56	6	3.33
2014	114.8	246.9	220.48	1.85	0.61	7	4.30
2015	110.3	261.4	231.196	1.94	0.66	8	5.29
2016	110.3	274.3	241.5	2.02	0.70	9	6.34
2017	114.1	281.2	247.78	2.08	0.73	10	7.30
2018	118.9	294.8	259.62	2.18	0.78	11	8.55
A= Sum of t	he produc	t column					40.16
B= 6 Times	of A						240.97
C= (n-1)*n*	C= (n-1)*n*(2n-1) where n= No of years of data=12					3036.00	
D=B/C					0.08		
g(Exponential factor)= Exponential (D)-1					0.0826		
e=Annual Escalation Rate (%)=g*100					8.2604		
As per CERO weightage			co T I / 2019-CE 20% on WPI	RC dated 02	2.04.2019	with	

Considering the inflation rate of 8.2604%, the normative O & M expenses for the FY19 will be as follows:

**TABLE - 4.7** Approved Normative O & M Expenses for FY19 **Amount in Rs. Crores** 

Particulars	Amount
O&M cost in terms Rs. Thousand/bay	381.60
O&M cost in terms Rs. Thousand/Km of Line	99.96
Inflation rate*	8.2604
No. of Bays	23104
Length of Line in Kms	36858.00
O&M Expenses for Bays Rs. Crores	881.66
O&M Expenses for Lines Rs. Crores	368.43
TOTAL O&M Expenses as per Norms Rs. Crores	1250.09

As stated in pre-para, as per the audited accounts for the FY19, the KPTCL has incurred Rs.292.85 Crores towards P&G contribution and Rs.114.73 Crores

towards Earned Leave encashment. Since the pay revision effect is considered and included in approval of APR for FY18, the effect of the same element is also factored in the total allowable normative O&M expenses for FY19. The Commission decides to allow the same as additional employee cost for FY19.

Based on the above discussions, the allowable O & M expenses for the FY19 are as follows:

**TABLE - 4.8** Approved Allowable O & M expenses for FY19

Amount in	Rs. Crores
Particulars	FY19
O&M Expense as per Norms Rs. Crores	1250.09
Additional O&M Expenses on account of P&G Contribution and Earned Leave Encashment (292.85	
+ 114.73)	407.58
Allowable O&M Expenses with P&G Contribution, Leave contribution and Arrears of Pay revision	1657.67

Thus, as per norms, the allowable O & M expenses would be Rs.1657.67 Crores. As stated earlier, the actual O & M expenses incurred by KPTCL is Rs.1597.44 Crores. The Commission notes that, the O & M expenses are controllable expenses and allowing any expenditure beyond the actual expenditure is a burden to the end consumers in the retail supply tariff. The Commission in order to reduce the burden on the end consumers, decides to limit the O & M expenses to actuals of Rs.1597.44 Crores. Therefore, the Commission decides to approves total O & M expenses of Rs.1597.44 Crores for the FY19.

### v) Depreciation:

KPTCL, in its application has claimed a net amount of Rs.782.70 Crores towards depreciation as against Rs.786.95 Crores approved in the Tariff Order dated 30th March, 2016. KPTCL in its Petition, has booked an amount of Rs.854.75 Crores, which includes depreciation on assets created out of consumers' contribution/grants of Rs.72.05 Crores and Rs.0.22 Crores being the depreciation on SLDC assets for FY19. The KPTCL, in its audited accounts, under other income head of accounts, has booked an amount of Rs.72.05 Crores as depreciation withdrawn on the assets created out of consumer contribution

and grant for FY19. Thus, the actual net depreciation is Rs.782.70 Crores which is less by Rs.4.25 Crores as compared to the approved amount.

As per the provisions of the KERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2006, the Commission has determined the allowable depreciation duly considering the actual average gross block of fixed assets for FY19.

As per the audited accounts for FY19, the depreciation before capitalization is Rs.855.31 Crores. After excluding the withdrawal of depreciation of Rs.72.05 Crores, towards assets created out of consumer contribution and 0.22 Crores attributed to depreciation on SLDC assets, the net depreciation for FY19 works out to Rs.783.03 Crores.

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

TABLE – 4.9 Allowable Depreciation for FY19

**Amount in Rs.Crores** 

SI. No	Particulars of assets	Depreciation for the Year
1	Land and Rights	0.00
2	Building and structures	20.73
3	Plant and Machinery Substation Transformers, Circuit breakers, other fixed apparatus of rating 100 MVA and above.	409.65
4	Substation Transformers, Circuit breakers, other fixed apparatus of rating below 100 MVA .	409.78
5	Hydraulic Works	4.76
6	Other Civil Works	5.23
7	Vehicles	0.60
8	Furniture Fixtures	1.24
9	Office Equipment	0.20
10	Intangible Assets	0.05
11	Depreciation on released assets and released assets issued ti to repairs.	3.06
12	Gross Depreciation (Before Capitalisation)	855.30
13	Less: Depreciation withdrawn on assets created out of consumer contribution and grants	72.05
14	Less: Depreciation on SLDC assets	0.22
	Allowable Net depreciation	783.03

Thus, the Commission decides to allow Rs.783.03 Crores as Depreciation for FY19.

# vi) Capital Expenditure for FY19:

### **KPTCL's submission:**

As per the application for APR for FY19, the KPTCL has achieved a capital expenditure of Rs.1873.92 Crores, as against the Commission approved capex of Rs.2000 Crores for FY19. The KPTCL, has furnished the breakup of capital expenditure and corresponding works in respect of capital expenditure during FY19 as follows:

Capital Expenditure of KPTCL for FY19

Particulars	Works targeted by KPTCL in FY19	Works completed by KPTCL in FY19
Sub-Station works (in Nos.)	35	35
Transmission line Works (in Ckms)	801	735
Augmentation Works (in Nos.)	75	60
Actual capital expenditure fo	r FY19 (in Rs. Cro	res) 1873.92

The breakup of above said works are as below:

**Sub-Station Works Completed During FY-19** 

	=	•
Particulars	Achievement (No's)	MVA Added
440kV	00	00.00
220kV	04	900.00
110kV	10	150.00
66kV	21	252.50
Total	35	1302.50

Length of Transmission line constructed during FY-19

Particulars	Achievement (in Ckt. Kms)
400kV	24
220kV	225
110kV	203
66kV	283
Total	735

Augmentation Works FY19			
Particulars Achievement (Nos)			
220kV	04		
110kV	26		
66kV	30		
Total	60		

## Commission's Analysis and Decisions:

From the above it is noted that, the KPTCL has incurred total capex amounting to Rs.1873.92 Crores, as against the Commission approved capex of Rs.2000 Crores for FY19.

KPTCL was directed to provide compliance on the following observations:

- a) The break up details of target and achievement of Sub-Stations, Transmission lines and Augmentation works in the prescribed format, involving its purpose, cost and time lines.
- b) The details regarding Stations and Transmission lines in the prescribed format, involving number of source of input, percentage of loading, peak load handling capability and voltage issues in respect of Stations and percentage loading in respect of Transmission lines.
- c) During FY19 none of the 400kV Stations have been completed and commissioned. Whether no targets were fixed or if the targets were fixed why the targets were not achieved need to explained.
- d) The reason for not achieving the targets in respect of Transmission lines (Ckms) and Augmentation for FY19, implications thereon.

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 viz. Sub-Stations, Transmission lines and Augmentation works have undergone time overrun and cost overrun.

The common reasons noticed for 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.

It is implied that the above reasons are recurring in nature in many of the works and hence, KPTCL is directed to acknowledge these reasons and plan the work to overcome the time and cost overrun. The Commission directs KPTCL to take necessary action to monitor and complete the work within the time frame for the benefit of end users.

As directed, KPTCL in the compliance, has submitted the following details in respect of Stations and Transmission lines:

Station Capacity	220kV	110kV	66kV
Total no. of Stations completed during FY-19	4	10	21
Number of substations having 2nd or 3 <sup>rd</sup> source of power input:	2	2	12
Number of substations having only one source of power input:	2	8	9
Number of substations which are loaded above 70% of installed	0	5	5
capacity:			
Number of substation which are loaded above 50% upto 70%	0	0	6
Number of substation which are loaded above 20% upto 50%	4	3	5
Number of substation which are loaded below 20%	0	1	4
Number of substations having only one power transformer:	0	5	19
Number of substations in which simultaneous peak load cannot be		Nil	
met and remedies considered:			
Number of substations having under voltage problem and		Nil	
remedies considered.			

Line Capacity	440kV	220kV	110kV	66kV
The no. of works corresponding to above Ckt. Kms	1	8	18	32
The no. of works, having line loading of above 70%	0	1	1	8
The no. of works, having line loading of above 50% & upto 70%	0	1	5	6
The no. of works, having line loading of above 20% & up to 50%	0	3	6	8
The no. of works, having line loading below 20%	1	2	5	4

From the above data, it is noticed that, in the year of commissioning itself, as many as 10 Stations and 10 lines are loaded more than 70%. This indicates that Stations and lines from which these loads were released are very much needed for these Stations and any hindrance in commissioning of these stations and lines could have led to critical situations. The KPTCL is directed to plan the works timely and complete the works on time.

In respect of substations having only one source which are loaded upto 70% and above, KPTCL should make all efforts to ensure that all substations are provided with alternative sources to improve reliability of power supply and to cater the power supply to all consumers as mandated without any constraints. This was also directed by the Commission in Tariff Order 2018.

As regards non-commissioning of 400kV Stations, (planned if any), KPTCL has submitted that there were no targets of 400kV Stations for FY19 and there are on-going works of 400kV stations at Devanahally Hardware Park and Electronic City (Mylsandra), expected to be commissioned in FY20. For the reason for not achieving the targets in respect of Transmission lines (Ckms) and Augmentation for FY19 and implications thereon, KPTCL has submitted that the achievement of Transmission lines as per targets was not possible mainly due to ROW issues involving land owners demanding higher compensation and deviations of line routing.

The Commission, after taking note of progress achieved in capex for FY19, decides to consider the capex of Rs.1873.92 Crores, subject to disallowance, if any, as per the results of the prudence check of capital expenditure for FY19.

Prudence Check of Capital Expenditure incurred by KPTCL during FY17 and FY18:

The Commission, in its Tariff Orders dated 30th March 2016 and 11th April 2017 had allowed Capital expenditure incurred by the KPTCL for the period FY17 and FY18 respectively subject to carrying out the prudence check of the various works undertaken by KPTCL. Accordingly, the Commission had entrusted conducting prudence check work of KPTCL to M/s RSA & Co, Kolkata.

M/s RSA & Co. has 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 FY17 and FY18:

Financial Year	FY	′17	F	Y18
Particulars of works executed and selected for prudence check	(Nos.)	(Rs in Cr)	(Nos.)	(Rs in Cr)
Works executed, costing above Rs. 3 Crores	39	424.58	38	418.53
Works Selected for carrying out prudence check	39	424.58	38	418.53
Percentage of works selected for carrying out prudence check	100%	100%	100%	100%
Abstract of Prudent / Non-Prudent works	(N	os.)	(N	los.)
Total no. of Prudent works		37		37
Total no. of works non-prudent	2		1	
Abstract of Cost over run works	(Nos.)		(Nos.)	
No. of works with no cost over-run		14		15
No. of works with cost over-run upto 10%		7		9
No. of works with cost over-run between 10% and 25%		11		12
No. of works with cost over-run exceeding 25%		7		2
Abstract of Time over Run works	(N	os.)	()	los.)
No. of works with no time over-run		14		17
No. of works with time over run of upto 1 year		16		14
No. for works with time over run of between 1 to 2 years		2		2
No. of works with time over run more than 2 years		7		5

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.

After analyzing KPTCL's replies on the findings of the Consultant on the non-prudent works and justifications furnished by KPTCL, the Commission has decided that, one work amounting to Rs.8.48 Crores for FY17 and one work amounting to Rs.7.99 Crores for FY18 among the samples selected by the consultant, do not qualify for being treated as prudent, due to reasons attributable to BESCOM and GESCOM respectively. This has been considered in Annual Performance Review (APR) of BESCOM and GESCOM for FY19 respectively. Similarly, there were two works which is not meeting prudence norms in BESCOM for FY18, attributable to KPTCL (for Rs.3.32 Crores) and one work which is not meeting prudence norms in CESC for FY18, attributable to KPTCL (for Rs.0.21 Crores). On obtaining the compliance from KPTCL, in respect of two works which is not meeting prudence norms in BESCOM for FY18, attributable to KPTCL (for Rs.3.32 Crores), the Commission accepted force majeure event in one case and in another case, the Commission felt to take

up the comments of BESCOM on compliance provided by KPTCL before deciding on levying penalty and to take up the matter in the next tariff order. Further, the Commission has decided that, one work which is not meeting prudence norms in CESC for FY18 is attributable to KPTCL (for Rs.0.21 Crores) and have been considered for disallowance into the account of imprudent works in APR of KPTCL for FY19.

Accordingly, the corresponding depreciation and interest on loans allowed by the Commission in the tariff have to be disallowed in APR of FY17 and FY18 as detailed below:

The am	nount to be disallowed for KPTCL due to imprudent works of FY18 (a in Crores)	Amount in Rs
1	Total cost of capital works categorized during the year FY18	1848.23
2	Total cost of categorized works costing more than Rs. 3 Cores considered for prudence check	418.53
3	Total cost of sample works	418.53
4	Cost of sample works not meeting prudence norms	7.99
5	Cost of sample works not meeting prudence norms attributable to other companies (viz. GESCOM, Rs : 7.99 Crores))	7.99
6	Net Capex which is not meeting prudence norms as per the Report of Prudence check of KPTCL	0.00
7	The capex not meeting prudence norms in CESC attributable to KPTCL	
8	Name of the imprudent Work: For 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 Ramenahally in D.M. Kurke Section & Banavara Sub Division	
9	Target date for completion, Year of completion and categorization	16.04.2017, 28.01.2017 and 01.05.2017
10	The capex not meeting prudence norms in CESC attributable to KPTCL	0.21
11	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 above item	1st February 2017 to March 2019

	Amount to be disallowed for 1st February 2017 to 31st March 2018	0.01
12	Amount to be disallowed for FY19	0.03
	Total amount to be disallowed for capex not meeting prudence norms in CESC attributable to KPTCL	0.04
13	Total amount to be disallowed	0.04

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					
	FY18		FY19		
Company	Wt. Avg. Dep.	Wt. Avg. Interest on Ioan	Wt. Avg. Dep.	Wt. Avg. Interest on Ioan	
CESC	5.31%	10.53%	5.16%	10.13%	

KPTCL is directed to note the following observations and recommendations made in respect of prudence check and take suitable actions/measures in future while implementing a project in order to avoid disallowance of amounts towards imprudent works:

### **Observations:**

- i) It was observed that in few cases, primary objectives were not clearly defined in few cases, in most cases, secondary objectives were also not defined.
- ii) There is no nodal/focal point for records & details which is essential for any validation/analysis exercise.
- The project data provided in the prescribed format were in most cases iii) incomplete and did not have vital details necessary for grading.
- The field officers are not aware of the relevance/objective of the iv) prudence check exercise or even post execution analysis.
- It was observed that KPTCL has not followed the capital expenditure **v**) guidelines issued by KERC in all respects. The objectives are not clearly defined & quantified; alternatives are not considered in most cases. Further, data w.r.t. pre & post execution of works are not recorded.

#### **Recommendations:**

- i) KPTCL has a very strong system of project monitoring where by progress of works are monitored at every stage and deviations from the target/schedule are worked out, however, the monitoring process ends with the completion/commissioning of the works. The area of project monitoring may be extended to obtain & 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 projects are met. This is essential at least during the first performance phase of the work.
- The field officers are required to be made aware of the capital ii) 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.
- There should be proper system of comprehensive post execution iii) evaluation, especially in case of major works, where in the data with regard to the parameters (especially achievement of objective) as prescribed by the prudence check guidelines are to be provided. 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 were not recorded /evaluated as prescribed by the KERC prudence check guidelines.
- The DPRs/Estimates should quantify the objectives to be achieved. This i∨) would facilitate in evaluation of the achievement post execution. Further, alternatives possible/considered are also to be provided in the DPR.
- KPTCL should also adopt a system of ABC analysis of stock. v)
- KPTCL should follow a system of post execution productivity approval of vi) 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 monitored post execution and corrective measures if necessary, may be taken up in time.

- KPTCL should have a system of speedy approvals of deviations so that ∨ii) delay in execution on that account is minimized.
- viii) KPTCL should develop a strong and effective Vendor rating system.
- KPTCL should have central data repository of information which would ix) provide all the details of a project.
- KPTCL should provide the project data in the format prescribed by KERC X) within a specified period after commissioning of the project.

In view of the above, the Commission hereby disallows Rs.0.04 Crore for FY18 towards depreciation and interest on loans allowed in respect of imprudent works attributable to KPTCL. Accordingly, the same is ordered to be deducted in KPTCL's APR of FY19.

# vii) Interest and Finance Charges:

The KPTCL in its filing, has claimed an amount of Rs.469.29 Crores (excluding capitalization) towards interest and finance charges on capital loans against the Commission approved amount of interest on capital loans of Rs.671.07 Crores in the Tariff Order dated 30th March, 2016 for FY19. Thus, the Interest and Finance charges claimed by KPTCL is less than the approved amount by Rs.201.78 Crores due to better financial management in terms of borrowings, swapping of loans with lower interest debts etc. Thus, KPTCL has requested the Commission to consider the Interest and Finance charges of Rs.391.54 Crores for FY19, net of capitalization of Rs.77.75 Crores.

The Commission notes that the interest and finance charges of Rs.469.29 Crores includes Interest on Working Capital of Rs.7.54 Crores. The Commission has considered the opening and closing balance of long-term loans, new loans availed and repayment of loans made during FY19, as per the details provided under Format – T9 and Audited Accounts for FY19. Based on the opening and closing balances of long-term loans, the average loan for the year FY19 works out to Rs.5599.33 Crores. The actual amount of interest on capital loans incurred is Rs.461.76 Crores for FY19. The weighted average rate of interest works out to 8.25%. The details of the allowable interest on capital loans are as follows:

**TABLE - 4.10** Allowable Interest and Finance Charges Amount in Rs. Crores

Particulars	FY19
Opening balance of Secured Loans	5203.96
Opening balance of Unsecured Loans	2.97
Total	5206.93
Add: New Loans	1375.00
Less: Repayments	590.19
Total loan at the end of the year	5991.74
Average Loan	5599.33
Interest on long term loans (as filed as per audited accounts)	461.76
Weighted average rate of interest based on the actual interest provided on long term loans in FY19 as per audited accts in %	8.25%
Allowable interest on long term loans	461.76

Since, the actual weighted average rate of interest of 8.25% 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.461.76 Crores for FY19. Further, considering the actual capitalization of interest of Rs.77.75 Crores as per the annual audited accounts, the net interest on long term loans works out to Rs.384.01 Crores for FY19.

Thus, the Commission decides to allow net interest on long term loans of Rs.384.01 Crores FY19.

### viii) Interest on Working Capital:

The Commission, in its Tariff Order dated 30th March, 2016, had approved an amount of Rs.93.54 Crores towards interest on working capital as per the provisions of the MYT Regulations for FY19. The Commission notes that, the KPTCL, in its filing has not claimed any amount of interest on working capital for FY19 and that, as per audited accounts, it has incurred Rs.7.54 Crores towards interest on short term loans for FY19. KPTCL has claimed this amount under interest on long term loans. As per the norms under MYT Regulations, the KPTCL is entitled to interest on working capital for FY19 as follows:

TABLE – 4.11
Allowable Interest on Working Capital

Amount in Rs. Crores

Particulars	FY 19
One-twelfth of the amount of O&M Exp.	133.12
Opening GFA as per Audited Accts	17286.64
Stores, materials and supplies 1% of Opening balance of GFA	172.87
One-sixth of the revenue from Transmission users at the prevailing tariffs	492.02
Total Working Capital	798.01
Rate of Interest (% p.a.)	11.00%
Interest on Working Capital	87.78
Actual Interest on WC as per accounts	7.54
As per Regulations actual plus 50% of difference (savings) between actual and normative	47.66

Thus, the Commission decides to allow Rs.47.66 Crores towards interest on working capital for FY19.

# ix) Other Debits:

As per the Audited Accounts for FY19, the KPTCL has claimed an amount of Rs.8.32 Crores towards other debits. This amount includes Rs.1.18 Crores towards Assets Decommissioning costs, Rs.3.19 Crores towards miscellaneous losses & write offs, Rs.2.64 Crores towards interest on delayed compensation and Rs.1.30 Crores towards losses relating to fixed assets etc.

The Commission notes, the item of expenditure accounted under other debits as per the audited accounts for FY19. Thus, the Commission, as per the provisions of the MYT Regulations, decides to allow an amount of Rs.8.32 Crores towards other debits for FY19.

# x) Return on Equity:

The KPTCL in its application for APR of FY19, has claimed an amount of Rs.662.78 Crores towards Return on Equity for FY19, as against the RoE grossed up with MAT approved at Rs.764.01 Crores approved by the Commission in its

Tariff Order dated 30<sup>th</sup> March, 2016. 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	FY19
Paid-up share capital	2182.32
Share Deposit	0.00
Reserves and Surplus	2093.70
Total Equity	4276.02
RoE @ 15.50%	662.78

### **Commissions Analysis and Decisions:**

In accordance with the provisions of the MYT Regulations, the Commission, 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 FY19.

Further, in compliance of the Orders of the Hon'ble ATE in Appeal No.46/2014, wherein it was directed to indicate the opening and closing balances of gross fixed assets along with break-up of equity and loan component in the Tariff Order henceforth, the details of GFA, debt and equity (net-worth) for FY19 are indicated as follows:

TABLE – 4.13 Status of Debt Equity Ratio for FY19

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	17286.64	5206.93	4268.57	12100.65	5185.99	30.12	24.69
Closing Balance	19075.42	5991.74	4480.74	13352.79	5722.63	31.41	23.49

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 FY19.

Based on the above, the Commission hereby decides to allow RoE at 15.5% on the opening balance of equity, besides allowing the taxes separately. Accordingly, the allowable RoE for FY19 is computed as follows:

TABLE – 4.14
Allowable RoE for FY19

**Amount in Rs. Crores** 

Particulars	FY19
OB: Paid Up Share Capital	2182.32
OB: Share Deposit	0.00
OB: Accumulated profit	2086.25
Total Equity	4268.57
`	661.63
Allowable RoE	661.63

Thus, the Commission decides to approve an amount of Rs.661.63 Crores as the RoE for FY19.

### xi) Provision for Taxation:

#### **KPTCL Submission:**

The KPTCL in its application for approval of revised ARR for FY19 under the APR, has claimed an amount of Rs.125.92 Crores towards Income Tax for FY19 and requested the Commission to allow the same.

The Commission, in its preliminary observations, had directed KPTCL to furnish the details of actual tax paid to the income tax authorities, with supporting documents. The Commission notes, the reply along with relevant documents submitted for having claimed the income tax for FY19.

The Commission notes that KPTCL in claiming the income tax of Rs.125.92 Crores, has included an amount of Rs.52.61 Crores of deferred tax. After disallowing the deferred tax, the actual income tax paid by KPTCL is Rs.73.30 Crores. Thus, as per the provisions of Regulation 3.13.6 as amended by KERC (Terms and Conditions for Determination of Transmission Tariff) (Second Amendment) Regulations, 2015. The Commission decides to allow the actual income tax paid by KPTCL to the income tax authorities.

Thus, the Commission decides to allow an amount of Rs.73.30 Crores, towards Income Tax for FY19.

## xii) Net Prior Period Income and Expenses /Losses:

The KPTCL in its filing as per the audited accounts, has not claimed the net prior period income and expenses / losses for FY19. The Commission notes that as per the audited accounts of KPTCL for FY19, an amount of Rs.20.01 Crores is the income relating to previous years (prior period income) and Rs.22.09 Crores as the prior period expenses / losses, which resulted in the net prior period income of Rs.2.08 Crores for FY19.

Thus, the Commission decides to allow a net amount of Rs.2.08 Crores as the net prior period expenses/losses for FY19.

### xiii) Other Expenses Capitalized:

The KPTCL, as per the audited accounts, has factored capitalization of Rs.65.55 Crores towards employee cost, R & M expenses, A & G expenses and depreciation for FY19. The KPTCL in its ARR computations for FY19 has claimed Rs.64.99 Crores towards other expenses capitalized (excluding the capitalization of Rs.0.56 Crores towards depreciation).

The Commission decides to allow the actual amount of other expenses capitalized of Rs.65.55 Crores including Rs.0.56 Crores towards capitalized amount of depreciation for FY19.

Thus, the Commission decides to allow the total amount of Rs.65.55 Crores towards capitalization of other expenses for FY19.

### xiv) Other Income:

The KPTCL in its application has claimed, as per the audited accounts, an amount of Rs. 103.06 Crores towards Other Income for FY19, after deducing the withdrawal of depreciation amount of Rs.72.05 Crores on assets created out of consumer contribution / grants. This amount of Rs.103.06 Crores which mainly includes the rent from staff quarters and others, interest on bank fixed deposits, income from investment, profit on sale / hire of apparatus, profit on sale of stores / scrap, miscellaneous recoveries and interest on staff loans etc.

The Commission notes the other income of Rs.103.06 Crores earned by KPTCL as per the audited accounts for FY19. Thus, the Commission decides to allow an amount of Rs.103.06 Crores as other income (non-tariff income) for FY19.

### xv) SLDC Charges:

The KPTCL, in its application has indicated the SLDC charges separately for FY19 as detailed below:

**TABLE - 4.15** SLDC Charges for FY19-KPTCL's Submission

**Amount in Rs. Crores** 

SI. No.	Particulars	FY19
1	Employee cost	19.34
2	A & G Expenses	8.38
3	Repairs & Maintenance Expenses	0.02
4	Depreciation	0.22
	Total	27.96

The Commission in its Order dated 14.05.2018 had approved the revised SLDC Charges of Rs.28.32 Crores for FY19. However, considering the actual SLDC charges of Rs.27.96 Crores incurred during FY19, as per KPTCL's application, the Commission decides to allow the adjustment of the reduced SLDC charges of Rs.0.36 Crores to be shared by the ESCOMs, are as follows:

**TABLE - 4.16** Allowable SLDC Charges for FY19

Amount in Rs. Crores

Particulars	Capacity Allocation in MW for FY19	SLDC Charges for FY19 as per APR	SLDC Charges for FY19 as approved in Order dated 14.05.2018	Difference to be adjusted in FY21
BESCOM	10324	13.86	15.03	-1.17
MESCOM	1615	2.17	2.09	0.08
CESC	2252	3.02	3.01	0.01
HESCOM	4085	5.48	5.30	0.18
GESCOM	2550	3.42	2.89	0.53
TOTAL	20826	27.96	28.32	-0.36

Thus, the Commission decides to consider the actual SLDC charges of Rs.27.96 Crores for FY19 and the difference of Rs. (-)0.36 Crores in SLDC charges shall be adjusted in the SLDC charges payable by ESCOMs to KPTCL in FY21 as discussed in the subsequent Chapter of this Order.

### xvi) Revenue:

KPTCL in its application has considered an amount of Rs.2952.12 Crores as the Revenue from Transmission Charges and miscellaneous charges as per the audited accounts for FY19.

The Commission in its preliminary observation has noted that the KPTCL, has considered an amount of Rs.151.38 Crores towards withdrawal of revenue for FY19. As such, the Commission directed the KPTCL to furnish the reasons thereof besides furnishing the year-wise breakup of the amount considered as revenue in the respective year's audited accounts for the period FY12 to FY19. KPTCL in its replies has submitted as follows:

CERC issued Orders in Petition No. 225/TT/2013 approved Yearly Transmission Charges (YTC) for the period 01.07.2011 to 31.03.2014 on 28.01.2016 in respect of Natural ISTS lines. Accordingly, KPTCL has accounted transmission charges of ISTS lines on YTC basis with effect from 01.07.2011 to 31.03.2014 amounting to Rs.160.68 Crore at the rate Rs.32.13 Crore per annum.

- a. Further, KPTCL accounted revenue from transmission charges of Natural ISTS lines on provisional basis for the period 01.04.2014 to 31.03.2019 by adopting the YTC which was approved for the year 2013-14 by CERC, in the absence of specific orders from CERC for that period.
- b. CERC vide Order dated 12<sup>th</sup> June 2019, issued rate of transmission charges to be demanded from respective States for the period from 01.04.2014 to 31.03.2019. CERC determined tariff for such lines from 01.04.2014 to 31.03.2019 is Rs.9.30 Crores. KPTCL has filed Appeal against the Order of CERC and Orders are awaited. Based on the said orders of CERC, KPTCL has withdrawn excess transmission charges already demanded and

accounted in the books of KPTCL. Accordingly, KPTCL has withdrawn transmission charges income of Rs.151.37 Crore from the accounts.

The yearly demand raised for are as follows:

**Amount in Rs. Crores** 

Financial Year	Already demanded	Revised Demand	Demand withdrawn
2014-15	32.1355991	2.1242000	30.0113991
2015-16	32.1355991	2.1676000	29.9679991
2016-17	32.1355991	2.2106000	29.9249991
2017-18	32.1355991	1.3748000	30.7607991
2018-19	32.1355991	1.4210000	30.7145991
Total	160.6779955	9.2982000	151.3797955

The Commission has noted the above replies furnished by KPTCL and decides to consider Rs.2952.12 Crores as the revenue for the purpose of APR for FY19.

# xvii) Abstract of Approved ARR for FY19 as per APR:

Based on the above decisions the consolidated Statement of approved ARR as per APR for FY19 is as follows:

TABLE – 4.17
Abstract of approved ARR for FY19 as per APR

Amount in Rs. Crores

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		As Appd.		
SI.		(T.Os Dated		
	Particulars	30.03.2016 &	As filed	As per APR
No.		14.05.2018)		
1	Energy available for transmission in MU	75447	76145.50	76145.50
2	Energy sold at IF Points in MU	72980	73738.69	73738.69
3	Transmission Losses in MU	2467	2406.81	2406.81
4	Transmission Loss in %	3.27%	3.161%	3.161%
5	Installed Capacity in MW	21420	21420	20826
6	Revenue from Transmission of		2952.12	
	power and other operative	2975.91		2952.12
	income			
7	Expenditure in Rs. Crores			
i	Employee Cost	1326.85	1198.52	
ii	Repairs & Maintenance		273.08	
iii	Administration & General		125.83	
	Expenses			
	Total O&M Expenses	1326.85	1597.43	1597.44
8	Depreciation	786.95	782.70	783.03
9	Interest & Finance Charges	671.07	461.75	461.76
10	Interest on working capital	93.54	7.54	47.66

11	Return on Equity	764.01	662.78	661.63
12	Income Tax	0.00	125.92	73.30
13	Other Debits	0.00	8.32	8.32
14	Extraordinary items	0.00	0.00	0.00
15	Less			
16	Interest & Finance Charges	-60.26	-77.75	-77.75
	capitalised			
17	Other Expenses capitalised	-51.91	-64.99	65.55
18	Other Income	-57.66	-103.06	-103.06
19	Net Prior Period Charges (Debit)	0.00	0.00	2.08
21	Surplus as per APR for FY17	-496.69	0.00	0.00
22	Disallowance towards imprudent			
	capital works for FY17 & FY18	0.00	0.00	-0.04
23	Net ARR	2975.91	3400.64	3388.83
24	Deficit for FY19 (Sl. No. 6-22)	0.00	-448.52	-436.71

As per the above computations, the Commission hereby approves Net ARR of Rs.3388.83 Crores for FY19, after undertaking the Annual Performance Review of FY19, as per the audited accounts. After considering the actual Revenue from Transmission business of Rs.2952.12 Crores for FY19, as per the audited accounts, there is a net deficit of Rs.436.71 Crores for FY19.

# 4.4 Treatment of Gap in Revenue for FY19:

As against the approved ARR of Rs.2975.91 Crores as per Commission's Order dated 14.05.2018 (MYT Order) and KPTCL has proposed revised ARR of Rs.3400.64 Crores, as per APR for FY19. The Commission, after the Annual Performance Review, decides to allow revised ARR of Rs.3388.83 Crores for FY19. The net Revenue Gap for FY19 is worked out at Rs.436.71 Crores.

The Commission decides to carry forward the said deficit of Rs.436.71 Crores, to the ARR for FY21, as discussed in the subsequent Chapter of this Order.