

CHAPTER – 1

INTRODUCTION

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

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

The KPTCL is a Company registered under the Companies Act, 1956, incorporated on 28th July, 1999 and having commenced its operations from 1st August, 1999. It continued to perform the functions of Transmission and Distribution utilities, which were carried out by the erstwhile the Karnataka Electricity Board (KEB).

The KPTCL became a Transmission Company due to unbundling of transmission and distribution business in Karnataka, effective from 1st June, 2002. The Distribution business was vested with the newly created Distribution Companies (ESCOMs).

Thereafter, as per the Electricity Act, 2003, the KPTCL became an exclusive wires company, with effect from 10th June, 2005 and its bulk power purchase activity was vested with the newly formed Power Company of Karnataka Ltd., (PCKL).

The KPTCL enables the ESCOMs to serve nearly 221 lakh consumers of different categories spread all over the State covering an area of 1.92 lakh square kilometers. To transmit power the KPTCL operates 1088 sub-stations and 34237.35 CKms of transmission lines with voltages of 66 kV and above.

To enable operation and maintenance of the system, KPTCL has six transmission zones, each headed by a Chief Engineer; fifteen circles, each headed by a Superintending Engineer; and forty-seven divisions, each headed by an Executive Engineer. There are thirty-two Transmission line and substation maintenance sub-divisions which are involved in operation and maintenance of the transmission system in Karnataka. Besides this, there are fifteen Transmission works divisions to take care of the construction activities related to intra-state transmission system across the State of Karnataka.

There are fourteen relay Testing Divisions for maintenance of protective relays, and meters and to conduct pre-commissioning tests of all new sub-stations, besides calibrating all interface meters on periodical basis.

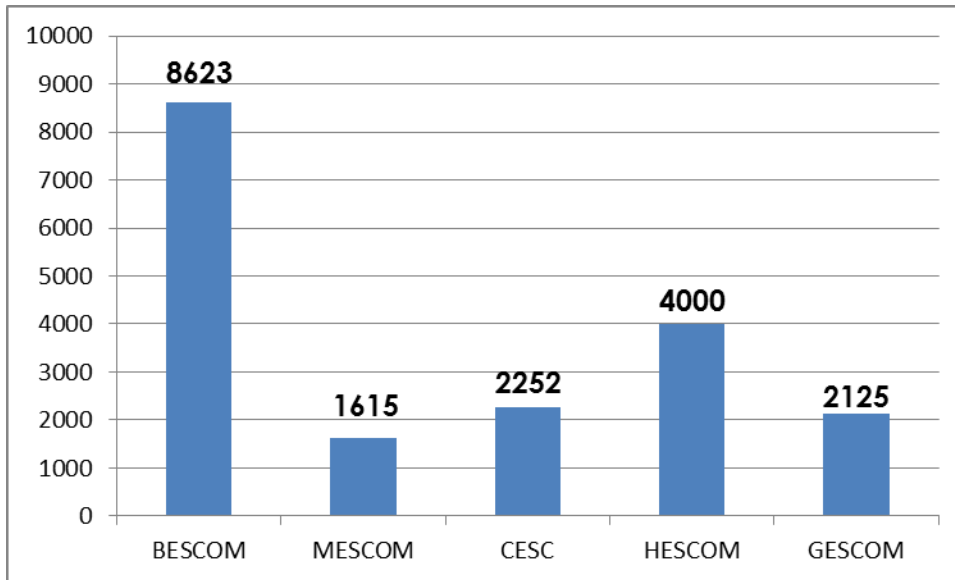
1.1 KPTCL at a glance:

Sl. No	Particulars (As on 31-03-2016)		2015-16
1.	Generation Capacity (connected to Transmission System)	MW	17827.40
	a) KPC Hydro and Thermal	MW	7232
	b) CGS (Karnataka Share)	MW	2694
	c) NCE, IPPs and Others	MW	7901
2.	No. of Receiving Sub-Stations /Length of Tr. Lines	Nos./CKms.	
	a) 400 kV	Nos./CKms.	4/2683
	b) 220 kV	Nos./CKms.	97/10970
	c) 110 kV	Nos./CKms.	388/10237
	d) 66 kV	Nos./CKms.	604/10449
3.	Assets as at the end of FY16	Rs. in Crores	14048
4.	Total employees:		
	a) Sanctioned	Nos.	10858
	b) Working	Nos.	10384
5.	Demand Charges for Transmission of Power to ESCOMs (FY16)	Rs. in Crores	2606.51
6.	Collections of transmission charges	Rs. in Crores	2483.45

Source: KPTCL Annual Accounts

1.2 Transmission capacity of KPTCL in FY16:

The total transmission capacity in the State was 18615 MW during FY16 and the ESCOM-wise transmission capacity for FY16 is as follows:

ESCOM WISE TRANSMISSION CAPACITY IN MW – FY16

Source: KPTCL Replies to Preliminary Observations-Annexure- H