

## **BRIEF NOTE ON THE PROJECT**

At present TSTRANSCO transmitting power from power plants and various sub-stations to various consumers, DISCOMS at 132KV, 220KV & 400KV level voltages depend upon the capacity of generation of power plants and requirement by consumer.

The Telangana State Government has taken decision to supply the power to the people of Telangana uninterruptedly. Accordingly, establishment of new power generation stations and laying of new power lines have been proposed and approved.

One of the important approved power generation plant is KTS Thermal Power Plant with capacity of 1X800MW (800 MW) is approved at Paloncha in Khammam District.

This power has to be transmitted at 400 KV level only (as per norms) to the National Grid for further distribution. Power systems wing conducted joint system studies along with PGCIL & CEA for execution of 1X800MW proposed (under construction) KTS Power Plant at Paloncha in Telangana State. The scheme consists of one No's 400/220 kV Substation at Julurupadu (Bommanapally), one No's 400 KV QMDC Line (Incoming) from the proposed KTS at Paloncha to Julurpadu SS and two No's outgoing 400 KV QMDC Lines from Julurpadu SS i.e., one to the Existing 400kV PGCIL substation in Khammam and another to the under construction 400kV Substation at Suryapet in Nalgonda District.

The detailed survey for laying of 400KV QMDC line from the proposed 1x800 MW Power Plant at KTS Paloncha to the proposed 400/220KV SS at Padamati Narsapuram (V) Julurupadu (M) of Khammam (Dist) has been conducted and found that the total length of the line is about 38.601 km as against the straight line length of 26 km. As Bee line of 26 km is passing completely through heavy forest it is proposed to avoid the forest of about 12 km. It is a well-known fact that the power losses will be more at low voltages and for long distances also. However, to avoid the forest areas to minimum, it was decided to increase the bee line length upto 38.601 km against Bee line length of 26 km as normally which should not exceed 10%. But at some stretches it is must cross the forest as there is no corridor. By this the length of the alignment from 12 km inside forest is reduced to about 8.2 km i.e., about 80% is reduced. The details of forest area required are as follows:


S. No.	Division	RF Name	Status	Length in m	Width in m	Area in ha
1	Kothagudem	Non-RF	Non-RF	12848.3	46	59.1021
2	Kothagudem	Non-RF	ESZ	9516.0	46	43.7736
3	Kothagudem	Chatakonda RF	ESZ	4170.91	46	19.186
4	Paloncha WLM	Non-RF	Enclosure in WLS	1781.0	46	8.1926
5	Paloncha WLM	Chatakonda RF	WLS	2283.0	46	10.5018
6	Paloncha	Non-RF	ESZ	7534.0	46	34.6564
	Total			38133.21		175.4125

The abstract is as follows:

Description / Division	Length in m	Width in m	Area in ha	Approval required
Passing through RF (excluding WLS & ESZ)	0.0	46	0.0000	Diversion under F©Act1980
Passing through WLS with RF / Paloncha WLM	2283.0	46	10.5018	Diversion under F©Act1980 and W(P)Act1972
Passing through ESZ with RF / Kothadudem	4170.91	46	19.186	Diversion under F©Act1980 and Permission from NBWL
Passing through Enclosure in WLS without RF / Paloncha WLM	1781.0	46	8.1926	Permission from NBWL
Passing through ESZ without RF / Kothagudem & Paloncha	17050.0	46	78.4300	Permission from NBWL

The TSTRANSCO accorded the Administrative Approval for the above line vide T.O.O. (CE-Construction) Ms.No.107, dt.18.06.2015. The total cost of the project is estimated around Rs. 63.25 Crores.

The proposed forest length is the barest minimum length and there are no other alternative possible routes. Hence, the forest area is unavoidable. So it is proposed to submit proposals for diversion of 29.6878 Ha of forest land under F©Act 1980 and W(P)Act,1972.

  
Chief Engineer  
Projects – II/TS TRANSCO  
Vidyut Soudha, Hyderabad.

  
Superintending Engineer  
400KV/Construction Circle  
TS TRANSCO, Warangal.

  
Executive Engineer  
400KV/Construction  
TS TRANSCO, Warangal