

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 Bhadradri Thermal Power Plant with capacity of 4X270MW (1080 MW) is approved at Manuguru 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 4X270MW proposed (under construction) Bhadradri Thermal Power Plant at Mangugoor 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 BTPP at Manugoor to Julurupadu SS and two No's outgoing 400 KV QMDC Lines from Julurupadu 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 4x270 MW Bhadradri TPP Manugoor 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 110.513 km as against the straight line length of 70 km. As Bee line of 70 km is passing completely through heavy forest it is proposed to avoid the forest of about 50 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 110 km against Bee line length of 70 km as normal 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 50 km inside forest is reduced to about 8.2 km i.e., about 80% is reduced. The details of the total length of the line and the forest areas 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	14381.1	46	66.1530
2	Kothagudem	Non-RF	ESZ	8768.0	46	40.3328
3	Kothagudem	Chatakonda RF	ESZ	4176.0	46	19.2096
4	Paloncha WLM	Non-RF	Enclosure in WLS	1950.0	46	8.9700
5	Paloncha WLM	Chatakonda RF	WLS	2782.61	46	12.8
		Punukula RF	WLS	167.39	46	0.77
6	Paloncha	Non-RF	ESZ	15543.0	46	71.4978
7	Paloncha	Non-RF	Non-RF	17694.1	46	81.3928
8	Paloncha	Non-RF	ESZ	8580.0	46	39.468
9	Paloncha	Chintiryala RF	ESZ	132.0	46	0.6072
10	Paloncha	Non-RF	ESZ	3230.0	46	14.858
11	Paloncha	Non-RF	Non-RF	10911.5	46	50.1929
12	Paloncha	Ratnagutta RF	RF	941.0	46	4.3286
13	Paloncha	Non-RF	Non-RF	22248.5	46	102.3431
	Total			111505.2		512.9238

The abstract is as follows:

Description / Divisions	Length in m	Width in m	Area in ha	Approval required
Passing through RF (excluding WLS & ESZ) / Paloncha	941.0	46	4.3286	Diversion under F©Act1980
Passing through WLS with RF / Paloncha WLM	2950.0	46	13.5700	Diversion under F©Act1980 and W(P)Act1972
Passing through ESZ with RF / Kothagudem & Paloncha	4308.0	46	19.8168	Diversion under F©Act1980 and Permission from NBWL
Passing through Enclosure in WLS without RF / Paloncha WLM	1950.0	46	8.9700	Permission from NBWL
Passing through ESZ without RF / Kothagudem & Paloncha	36121.0	46	166.1566	Permission from NBWL

The TSTRANSCO accorded the Administrative Approval for the above line vide T.O.O. (CE-Construction) Ms.No.103, dt.05.06.2015. The total cost of the project is estimated around Rs. 253 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 37.7154 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