# IV). Justification for selecting the Route/ Line: -

### a. Information in brief about alternative lines.

#### Line No. - I: -

The Length of the transmission Line - I is 2.6646 Km covering a total area of 12.257 ha, which includes Revenue Forest of 0.828 ha and non-forest land about 11.429 ha. The length of the said transmission line in forest area is only 0.1800 Km. In toto, 9 numbers of Angle Points (AP) & 11 numbers of towers are to be constructed. This line is also passing through the plain area. The estimated cost is about 6,47,01,000.00 (Rupees Six Crore Forty Seven Lakh One Thousand) only. Line No. - II:-

The total length of the transmission **Line - II** is **2.5926 Km** covering an area of **11.926 ha**, which includes Revenue Forest of **0.455 ha** and non-forest land **- 11.471 ha**. The length of the said transmission line in forest area is only **0.0989 Km**. Totally, 8 (eight) numbers of Angle Points (AP) and 11 numbers of towers are to be erected. This line is passing through the plain area. The estimated cost is about **Rs. 5,96,28,000.00** (Rupees Five Crores Ninety Six Lakhs Twenty Eight Thousand) only.

## Line No. - III:-

The Length of the transmission **Line - I** is **1.7456 Km** covering **8.030 ha** area, which includes only the Revenue/ Village Forest of **0.378 ha** and non-forest land **of 7.652 ha**. The length of the said transmission line in forest area is only **0.0822 Km**. The proposed diversion requires only 6 (six) nos. of Angle Points (AP)/ Towers to be constructed/ erected. This line is passing through mostly on plain land. The estimated cost for this project is **Rs. 4,23,88, 000.00** (Rupees Four Crores Twenty Three Lakh & Eighty Eight Thousand) only.

## b. Justification for selecting Line III: -

This Forest Diversion Proposal is formulated to avoid the crossing of 400 kV DC line (Talcher – Meramundali Power Line) of PGCIL over the Railway Station Yard near Kamalang village (PLATE - 3). This power line is required to be diverted (from existing A.P. Tower No.- 117 to 121) mainly due to crossing over the Station Yard at Railway Ch: 4746 of Kamalang to Rly Ch: 5126 – 5226 (as in Appendix – IV of Regulation for Power Line Crossings of Railway Tracks, 1987) in connection to Angul – Sukinda new BG Railway link. For the purpose, walk over survey was conducted by PGCIL and three alternative lines were identified. The detail description about the forest area and other techno-commercial information involved in three alternative Lines are compared in TABLE - A. EHT Transmission line can't take frequent turn because of limitation of maximum 60° turn and other technical constraints. After avoiding human settlements, hilly terrain, forest plantation, local

(R. L. Panda) Signature Attested ponds, etc; alternate **Line No. - III** is considered as the best alternative for the transmission line, since there is no scope to avoid the forest land covering the barest minimum area of **0.933 Acre or 0.378 ha (less than 1.00 ha)** and due to other techno-economic reasons. The project can also supply electricity to different state grid sub-statio of Odisha and other state also.

(R. L. Panda) Signature Attested