Justification for locating the project in proposed forest land

- 1. The mentioned allocated transmission line is partially in the forest area, and to carry moving of train that includes lighting, Water Supply, running of all railways station facilities etc. that requires Electricity and the East Central Railways, Dhanbad has approached to DVC to provide the same.
- The DVC has consented to provide power from its 132/33 KV sub-station at Northkaranpura (Piperbar) by laying a 132 KV EHV transmission line to the TSS Balumath of ECR (Dhanbad).
- 3 The site condition of proposed TSS at Balumath, P.S- Balumath, Dist.- Latehar and DVC'S Northkaranpura (Piperbar) sub-station is such that if the forest land any how is avoided from the route of transmission line, the length of line will be increase approximately 40 to 50 times of its original length. Increase in line not only increase the total cost of project but also increase the transmission loss too much high which is not economical for the project.
- 4 Several alternative routes have been explored to avoid the forest land but no such route is feasible, however, utmost effort has been made to minimize the forest land.
- 5. Therefore, a route survey was conducted to establish to draw the EHV transmission line and the present option is found to be optimum/minimum from the prospective of forest land use. As such minimum forest land has been proposed for the diversion.

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JUSTIFICATION FOR OPTIMUM ROUTE SELECTION AMONG THREE ROUTE (AS ROUTE 1 IS FINAL)

1.Among three routes (Route-1, 2 & 3), Route-1 is shortest in length.

2.Less Angle point in Route-1 as compare to Route- 2 & 3.Due to less angle point, the project cost is economical and electrically stable with less maintains expenditure.

3. The forest land areas in the final route (i.e route-1) were optimum in comparison to other routes and hence, less forest land is to be diverted for non forest work for this project.

THE COMPARATIVE FEATURES OF ALTERNATIVES FOR SELECTING THE OPTIMUM ROUTE ARE AS UNDER

| SI. No. | Items | Route –1 (Final Route) | Route -2 | Route –3 |
|---------|---|---------------------------|-----------|--------------------|
| 2) | Route Length | 39.188 | 40.177 KM | 54.954 KM |
| 3) | No. of Angle Points(excluding Tapping Point & dead end) | 37 Nos. | 38 Nos. | 79 Nos. |
| 4) | Forest(Approx) | 17.940 KM | 19.50 KM | 19.00 KM |
| 5) | Tough Hilly Terrain | | | ' |
| 6) | Power Line Crossing : | 4 | | |
| 5 | 400 KV Transmission Line | 1 | 9.5 | |
| | 220 KV Transmission Line | | / | |
| | 132 KV Transmission Line | 02 Nos. | 02 Nos. | |
| | 33 KV Transmission Line | | | 04 Nos. |
| | 11 KV Transmission Line | 1 No. | 2 Nos. | 3 Nos. |
| | 440 Voltage LT Line | | | |
| | 220 Voltage LT line | 1 No. | 1 No. | 1 No. |
| 7) | Trolley Line(ropeway) | | · ··· | |
| 8) | Railway Line Crossing | | | 04 Nos. |
| 9) | Major River Crossing (DVC Canal) or Nala | 3 Nos. | 4 Nos. | |
| 10) | National Highway | 14.8 A. 150 A. | | 2 Nos. |
| 11) | State Highway | 1 No. | 1 No. | · |
| 12) | Defence Area | | 2 | na dita ana sita a |
| 13) | Transportation & Maintenance | Good Accessibility | | |

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