

**Full Title of the Project** : Construction 400 kV D/C North Karanpura to Chandwa transmission line  
**File No.** : FP/JH/TRANS/40694/2019  
**Date of Proposal** : 15/06/2019

**JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST LAND**

**Name of Company:** North Karanpura Transco Limited

**Name of Project:** 400 KV D/C (Quad Moose) North Karanpura to Chandwa Transmission Line

The introduction of Electricity act 2003, competition was brought into power sector and its sub sectors. Power generation business was delicensed which led to huge capacity addition by the private sector and this warranted transmission network to be reinforced so that all the power generated could be supplied to the end users. The provision for independent transmission licenses were created for private sector to get in to the business.

The Government of India, Ministry of Power, vide Gazette Notification dated July 08, 2014 has notified REC Transmission Project Company Ltd. to be the Bid Process Coordinator (BPC) for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish Transmission System for "Immediate Evacuation for North Karanpura (3X660MW) generation project of NTPC along with creation of 400/220kV Substation at Dhanbad (ERSS-XIX)" through tariff based competitive bidding process. As part of said project the Special Purpose Vehicle (SPV) "North Karanpura Transco Ltd" formed to develop the proposed project.

The objective to plan, promote and develop an integrated and efficient power transmission system network in all its aspects including planning, investigation, research, design and engineering, preparation of preliminary, feasibility and definite project reports, construction, operation and maintenance of transmission lines, substations, load dispatch stations and communication facilities and appurtenant works, coordination of integrated operation of regional and national grid system, execution of turn-key jobs for other utilities/organizations and wheeling of power in accordance with the policies, guidelines and objectives laid down by the Central Government from time to time.

In this context, the Central Electricity Authority (CEA), Ministry of Power, Government of India has issued the administrative approval under Section 14, 68(1) & 164 of Electricity Act, 2003 in favour of the North Karanpur Transco Limited to establish "Immediate Evacuation for North Karanpura (3X660MW) generation project of NTPC along with creation of 400/220kV Substation at Dhanbad (ERSS-XIX)".

North Karanapura to Chandwa 400 kV D/C Transmission line with bee line distance between the two points is about 29.789 kms. All the efforts were made to find a most feasible route which may involves minimum / least forest land through various alternative routes.

  
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Central Coalfields limited (CCL) and Ministry of Coal (MOC ) has issued NOC for construction of the project through route-1 considering the minimum coal blockage. Hence, Route-1 is the only option for the project.

**For selection of optimum routes following points are taken into consideration:**

- ✓ Minimum route length
- ✓ The transmission line is away from the major settlement areas
- ✓ No wildlife sanctuary / Biosphere/ Protected Areas / Aetiological sites.
- ✓ Least forest involvement
- ✓ No involvement of Defence & Airport authority of India sites
- ✓ Higher density tree patches avoided
- ✓ No involvement of temples/ Cultural Habitats/ Schools & colleges.
- ✓ Road connectivity to project sites to avoid construction of temp roads
- ✓ No involvement of Industrial corridor

  
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**Annexure – I**

**COMPARATIVE STATEMENT OF ALTERNATIVE ROUTES**

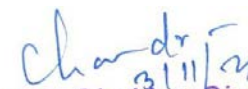
Sl. No.	DESCRIPTION	Route-I	Route-II	Route-III
1	Route Particulars			
	(i) Bee Line (KM)	29.789 KM	29.789 Km	29.789 Km
	(ii) Length (KM)	38.068 KM	36.449 Km	38.699 Km
	(iii) Angle Points	51 Nos	52 Nos	56 Nos
	(iv) Terrain	Plain Terrain- 95% Hilly / Undulation terrain- 5%	Plain Terrain- 90% Hilly / Undulation terrain- 10%	Plain Terrain- 85% Hilly / Undulation terrain- 15%
2	Environmental Impact	Minimum	Moderate	Moderately High
3	Houses within R.O.W.	No house falls within ROW corridor.	Few house falls within ROW corridor.	Few house falls within ROW corridor. But close to populated areas
4	Forest involvement			
	Details of Forest involved	<ul style="list-style-type: none"> <li>Most of the forest involved are of Protected forest &amp; some parts of Revenue forest. No reserved forest, Archeological / Defence/ Aviation sites, wildlife Sanctuaries, national parks, Eco sensitive zone, Buffer Zone, Biosphere is involved in this alignment.</li> <li>Central Coalfields limited (CCL) and Ministry of Coal (MOC ) has issued NOC for construction of project on route-1 considering minimum coal blockage Hence, Route-1 is the only option for the project</li> </ul>	<ul style="list-style-type: none"> <li>Most of the forests involved are of Protected forest &amp; Revenue forest. No reserved forest, Archeological / industrial Defence/ Aviation sites, wildlife Sanctuaries, national parks, Eco sensitive zone, Buffer Zone, Biosphere is involved in this alignment</li> <li>As the most of the route-II length is passing through coal bearing area, hence, CCL and MoC has denied to issue NOC for construction of the project</li> </ul>	<ul style="list-style-type: none"> <li>More forest area involved compared to route 1 &amp; 2 most for the forests are of Protected forest &amp; Revenue forest. No Reserved forest, Archeological / industrial Defence/ Aviation sites, wildlife Sanctuaries, national parks, Eco sensitive zone, Buffer Zone, Biosphere is involved in this alignment</li> <li>As the most of the route-III length is passing through coal bearing area, hence, CCL and MoC has denied to issue NOC for construction of the project</li> </ul>

  
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Sl. No.	DESCRIPTION	Route-I	Route-II	Route-III
	State Involved	Jharkhand	Jharkhand	Jharkhand
	Length of forest area	12.244 Km	13.526 Km	14.561 Km
	Reserved Forest	Nil	Nil	Nil
	Protected Forest	34.0673 Ha	37.6741 Ha	38.8369 Ha
	Revenue Forest	22.2581 Ha	24.5455 Ha	28.1437 Ha
	<b>Total Forest area</b>	<b>56.3254 Ha</b>	<b>62.2196 Ha</b>	<b>66.9806 Ha</b>
	Flora	Sparse flora through most of the alignment commonly found species Like Palash, Sakua, Kendu, Ghamhar, Siddha , Mahua, Asan Etc., found	Dense and diverse flora in the alignment species like Like Palash, Sakua, Kendu, Ghamhar, Siddha , Mahua, Asan Etc., found	Very Dense and diverse flora in the alignment species Like Palash, Sakua, Kendu, Ghamhar, Siddha , Mahua, Asan Etc., found
	Fauna	Chital, Nilgai, Sambar, Sloth Bear, Wild Boar Rabbit, Fox ,common monkey, Squirrel, etc.,	Chital, Nilgai, Sambar, Sloth Bear, Wild Boar Rabbit,	Fox ,common monkey, Squirrel, etc.,
5	Railway Crossing	1 No	3 Nos	1 No
6	Highway Crossing	2 Nos	2 Nos	2 Nos
7	Power Line Crossing:	3 Nos	3 Nos	3 Nos
8	Industrial Corridor	01 ( Patches of industries)	01 ( Patches of industries)	01 ( Patches of industries)
9	Site Connectivity	Good	Moderately Good	Not Good

  
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Sl. No.	DESCRIPTION	Route-I	Route-II	Route-III
10	Recommendations	<p>This route length are comparable minimum crossings, well connected by road network which is convenient for construction /O&amp;M. this route has no wildlife sanctuaries Biosphere, ESZs, Defence &amp; Aviation zones, Industrial corridors. This route has less vegetation, away from settlements areas and least forest land involved Least no of trees will be impacted. Hence this route is more feasible economical, environment friendly and beaning recommended.</p>	<p>This route is ruled out due to ecological reasons as forest land involved is more compared to Route I, The proposed corridor is passing through some of the settlements areas and no proper approach roads to project sites alternative route is uneconomical &amp; unfeasible.</p>	<p>This route is ruled out due to longest route length compared to Route I &amp; II Impact on ecology is expected to be high due to higher forest area, Involvement of Industrial corridor and involvement most of the area is not feasible in terms of constructability and approach roads.</p>

  
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