भारत सरकार सड़क परिवहन एवं राजमार्ग मन्त्रालय क्षेत्रीय कार्यालय नन्दी विला (1 फ्लोर) 199/सी, विद्यालय मार्ग, रोड न01,अशोक नगर, राँची-834002.



GOVERNMENT OF INDIA
Ministry of Road Transport & Highways
Regional Office
Nandi Villa (1st Floor) 199/C, Vidyalaya
Marg, Road No.1 Ashok Nagar, Ranchi-02

E-Mail- roranchi03@gmail.com Ph: (0651) - 2240223, 2240222

Dated: 16th June, 2020

No. RW/Ranchi/OFC/60/JHR/2019-20/143

#### Invitation of public comments

Sub: Proposal for crossing 400 KV DC North Karanpura -Chanwa transmission line in NH-99 between mile stone no. 98 to 99 (838 meter) and 400 KV DC North Karanpura - Chandwa transmission line in NH-99 between mile stone 108 to 109 (573.41 meters).

The Chief Engineer (NH), RCD, Ranchi vide letter no. CE/NH/Misc.77/19/981 (WE) dated 26.12.2019 has forwarded therewith a proposal to this office for Crossing 400 KV DC North Karanpura - Chandwa Transmission line in NH No. 99 between Mile stone no. 98 to 99 (838) mtr and 400 KV DC North Karanpura Chandwa Transmission Line in NH-99 between Mile stone 108 to 109 (573.41 meter) submitted by the North Karanpura Transco Ltd. (NKTL) i.e the applicant on above mentioned subject.

- 2. As per Ministry OM vide no. 33044/29/2015/S&R(R) dated 22.11.2016, the Highway Administration will make available the proposal seeking permission for utility services for public comments for 30 days on ground of public interest.
- 3. In view of the above, the comments of public are invited on captioned proposal and the same should reach to below mentioned address till 17.07.2020 beyond which no comments will be considered.

The Regional Officer,
Regional Office, M/o RT&H,
Government of india,
Nandi Villa (1<sup>st</sup> Floor), 199/C,
Vidhyalaya Marg, Ashok Nagar, Ranchi, Jharkhand -834002.

Email Id: roranchi03@gmail.com

4. This is issued with the approval of Highway Administrator cum Regional Officer, MoRT&H, Ranchi.

Encl. As above

Amit Kumar Singh) Executive Engineer, For, Regional Officer.

Your's faithfully

#### Copy to:

- (i) The Technical Director, NIC, Transport Bhawan, New Delhi-110001 for uploading on Ministry's website.
- (ii) The Chief Engineer (NH), Road Construction Department, Engineer's Hostel, HEC Campus, Dhurwa, Ranchi-834004.
- (iii) Shri Ankit Singh, Associate Manager-Projects, North Karanpura Transco Limited, Sunita Sadan, 1<sup>st</sup> Floor, Ashram Marg Bariatu, Near Military Firing Range, Ranchi-834009.

#### **CHECK LIST**

Executive Engineer for processing the Proposal of land overhead electrical line crossing national highways vested with NH Dept.

#### Circular / Codes : -

Ministry Circular No NH-III/P/20/77 dated 08-04-1982

Indian Electricity Act 1910 Indian Electricity Rules 1965

IRC: 32-1969

IS:5613-1976 Part I to IV

For getting approval for layering of overhead electrical line along the National Highways NH-99, vested with NH Dept.

Sr.No.	ltem	Information / Status	Remarks
1	General Information	400 kV D/C Northe Karanpura - Chandwa Transmission Line	
1.1	Name and address of the applicant	North Karanpura Transco Ltd	
1.2	National Highway No.	NH - 99	
1.3	State	Jharkhand	
1.4	Location	Near Jogiadih village between Mile stone 98 to 99	
1.5	Type of electric including carrying voltage details and purpose	400 kV D/C (Quad)	
1.6	Chain - age in Kilometers	837.09 mtr from Mile stone No. 98 161.91 mtr from Mile stone No. 99	
1.7	Length in Meter	202.7	
î.8	Width of available ROW	46	
	(a) Left side from center line towards increasing chainage / KM direction	23	
	(b) Right side from center line towards increasing chainage / KM direction	23	
1.9	Proposal to Lay Overhead		
	<ul> <li>(a) Left side from center line towards increasing chainage / KM direction</li> <li>(b) Right side from center line towards increasing chainage / KM direction</li> <li>(c) Erection of Electrical line along the NH 99</li> </ul>	As above As above NA	
1.10	Proposal to acquire land	NA	
	(a) Left side from Center Line	-	
	(b) Right side from Center Line	-	
1.11	Whether the proposal is a - in the same side where land is not to be acquired b - Crossing the National Highway If not then where to lay the overhead electrical line	Yes	

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1		Details of Already laid services (overhead		<b>]</b>
	1.12	telecommunication line, overhead electric line etc), if any, along the proposed route / proposed crossing	NA	
ľ	1.13	No of lanes (2/4/6/8 lanes) existing	2	
	1.14	Proposed No of lanes (2 lanes with paved shoulder 4/6/8 lanes)	NA	
	1.15	Service Road existing or not	NA	
t		If Yes then which side		
Ī		(a) Left side from Center Line		
Ī		(b) Right side from Center Line		
Ī	1.16	Proposed Service Road	NA	
		(a) Left side from Center Line		
Ī	-	(b) Right side from Center Line		
	1.17	Whether proposal to lay overhead electric line is after the service road or between the service road and main carriage way, or crossing for approval / rejection based on the Ministry circulars and relevant codes mentioned as above.		
	1.18	If crossings of the roads involved (a) Crossing angle for NH and provide length along the Highway (b) Structure (Tower, Pole and for HT Line only tension towers) for crossings Shall not be too near the existing structures on the National Highway, The minimum distance being 15 meter. (i) Type of Existing / proposed structure for National Highways. (ii) What is the distance of tower, pole and tension tower lying form the existing / proposed structure for NH.	Yes (a) 62° 07' 14" . 202.70 (b) Tower No. AP 32 & AP 33 placed at a distance of 79.90 mtr & 111.30 mtr	
	C	(c) The overhead lines and their supporting poles / towers should ordinarily be placed at the extreme age of the road land boundary. In case, these shall be at least 10 mater away for the age of the existing shoulders of extreme traffic lane. Where the existing road way is narrower than the minimum according to standard or where the widening is proposed for any reason the lateral clearance shall be reckoned with respect to ultimate road way.	NA	
		What is the horizontal clearance form the extreme edge of the road iand boundary?	NA	

ANKIT SINGH
Associate Manager-Projects
North Karanpura Transco Limited
Ranchi

		(d) The overhead line and their supporting poles / tower should originally be placed at the minimum distance of 5.0 meter from the nearest line of avenue trees. What is the horizontal clearance from the nearest line of avenue trees?	NA	
		(e) in mountainous / hilly terrain the over head lines should be erected preferably on the valley side as far away as practicable. In hilly reason, label of ground at a suitable distance below the outer conductor on either side from the central line is also to be noted and marked in profile so as to ensure required ground clearance underneath conductor and side clearances in swung conditions. Is the proposal in hilly under: -	Plain terrain	
		The horizontal clearances in respect of poles erected for the purpose of street lighting in Urban situations shall be as under :- i- For roads with Minimum 300 mm form the Raised kerbs 300 mm from the edge of nearest kerb preferably 600 mm	NA	
	. '	ii- For roads with at least 1.5 m from the edge of the carriage way, raised kerbs subject to minimum of 5.0 from the center line of the carriage way.	NA	
		(g) The pylons of HT line along crossing the road shall be located outside the NH land.	NA	,
		(h) For crossing the line of same voltage of lower voltage, suspension / tension tower with suitable extensions shall be used.	NA	
		(i) The vertical clearance of the overhead lines crossing the road shall be reckoned from the top of the crown of the road taking into account the anticipated final top level due to future raising of road level, strengthening of pavement etc. The actual ground clearance of High Tension line for voltage above 650 voltage varies depending upon the voltage transmitted and these are stipulated in India standard. Codes is 56130-1976 part I to IV and Indian Electricity Rules 1956 as under.	Ground clearance shall be taken jointly with NKTL and NHAI after completion	
	2	Affidavit / Undertaking to be obtained from (to be furnished by the applicant.)	Yes	
	2.1	Not to damage to other utility, if damaged then to pay the losses either to NH, PWD or to the concerned agency	Yes	
	2.2	Under Taking for Renewal of Bank Guarantee if required.	Yes	
	2.3	Confirming all standard conditions as laid down in ministry circular no - NH III/P/20/77 dated 08-04-1982 Indian Electricity Act 1910 Indian Electricity Rules 1956 IRC: 32-1969, IS: 5613-1976 part   to IV of (NHAI)	Yes	
٦		Company of the Compan	2104	

2.4	Shifting of overhead Electrical line at their own	Done by NKTL electrical
	cost as an when required by (NH Dept.,NHAI)	Department own cost
2.5	Shifting of overhead Electrical line at their own	Done by NKTL electrical
2.5	cost as an when required due to 4/6 lanning / widening of NH.	Department own cost
	Indemnity against all damage and claims	
	whatsoever kind that may be to NH Dept. NHAI or	Done by NKTL electrical
2.6	to any third party in the row during installation,	Department own cost
	operation and maintenance.	S Sparation S S S S S S S S S S S S S S S S S S S
	Traffic movement during laying of OFC / Cable to	Done by NKTL electrical
2.7	be managed by the applicant	Department own cost
	If any claim is raised by the concessionaire then the	Done by NKTL electrical
2.8	same has to be paid by the applicant.	Department own cost
	Prior approval of the NH Dept. NHAI shall be	
	obtained before undertaking any work of	
2.9	installation, shifting or repairs, or alterations to the	Yes
	overhead electrical line located in the NH right of	
	way.	
	Expenditure, if any, incurred by electric department	
2.10	for repairing any damage caused to the NH by the	Yes
	laying, maintenance or shifting of the overhead electrical line located in the NH right of way.	
	If the NH, PWD considers it necessary if future to	
1	move the utility line for any work of improvement	
·	or repairs to the road, it will be carried out as	
2.11	desired by the NH, PWD at the cost of the electric	Yes
	department owing the utility line within a	
	reasonable time (not exceeding 60 days) of the	
	intimation given	
1	Certificate from the applicant in the following	
	format :- (i) Laying of overhead electrical will not have any	
	deleterious effects on any of the bridge	
	components and roadway safety for traffic.	
2.12	(ii) For 4/6 lanning "we do undertake that I will	Yes
	relocate service road / approach road, utilities at	
	my own cost, notwithstanding the permission	
	granted within such time as will be stipulated by	
	NH Dept. NHAI for future 6 laning or any other	
	development. The transmission line installation shall be carried	
	out by trained and experienced personnel and	
2.13	supervised by technically qualified persons	Yes
	competent to undertake such work.	
	The applicant ensures the safety of the Highway	
2.14	traffic against the Hazards of the high voltage lines	Yes
	during installation, operation and maintenance.	
	Undertaking the compliance with Indian electricity	
	rules and other authorities, regulations- allover	Y
2.15	head lines shall comply with the requirement of the	e
	Indian electricity act and rules made their under	s
	and the regulations or specification as laid down by	
-	NH Dept, NHAI. Other documents and drawing to be furnished by	
	the applicant	Yes
3.1	Methodology for laying of overhead electric line.	Yes
3.2	Draft license agreement	Yes
_ ک.د	Digit wense agreement	153

ANKIT SINGH
Associate Manager - Projects
North Karanpura Transco Limited
Ranchi

3.3	Performance bank guarantee in favor of NH Division, (NHAI) has to be obtain at the Rs 100/- per running meter (Parallel to NH) and Rs 1,00,000/- per crossing of NH, for a period of one year initially (extendable if required till satisfactory completions of work) as a security for insuring / making good the area, clearing debris / loose earth etc produced in the right of way. No payment shall be payable by the NH, PWD to the license for clearing debris / loose earth.	Yes
3.4	Strip plan / route plan showing overhead electrical line, chain-age with of RoW, distance of proposed, structure (tower, pole and for HT line only tension tower) from the edge of RoW, important milestone, intersections, cross drainage works any other structure existing of proposed etc.	Yes
4	Certificate from the Executive Engineer	
4.1	Certificate for confirming that the proposal has been examined with respect to the structures and developmental work considered at this location and compliance of the standard conditions issued vide ministry circular No-NH-III/P/20/77 dated 08-04-1982 Indian Electricity Act 1910 Indian Electricity Rules 1956 IRC: 32-1969, IS: 5613-1976 part I to IV of (NH, PWD) and NH, PWD's guideline.	Yes
4.2	Certificate from EE in the following format:- (i)- "It is certified that any other location of the electric line would be extremely difficult and unreasonable costly and the installation of electric line within RoW will not adversely affect the design, stability & traffic safety of the highway nor the likely future improvement such as widening of the partiago way easing of kerb, etc."	Yes
5	If NH section proposed to be taken up by NH Division, NHAI on BOT basis-a-clause is to be inserted in the agreement "The permitted highway on which licensee has been granted the right to lay over head electrical line has also been agranted as a right of way to concessionaire under the concession agreement for up-gradation.	N/A
6	Who will supervise the work of laying of overhead electrical line	NKTL
7	Who will the sign the agreement on behalf of overhead electrical line agency	AVP, NKTL
8	Who will ensure that the defect in road portion after laying of overhead electrical line are corrected and if not corrected that what action will be taken.	NKTL
9	Who will pay the claims for damages done / disruption in working of concessionaire, if asked by the concessionaire.	NKTL
	ANIM DOORS	Man Man

Associate Manager - Ptolegi North Karanpura Transco -Ranchi

10	A certificate from EE the he will enter the proposed permission in register of record of the permission in the prescribed Performa (copy enclosed)	NHAI	
11	If any previous approval for laying of overhead electrical line then photocopy of register of records of permission accorded as maintained by EE may be enclosed.	No	

ANKIT SINGH
Associate Manager - Projects
North Karanpura Transco Limited
Ranchi

# DETAILS FOR CROSSING OF NATIONAL HIGHWAY-99 BY OVERHEAD 400 KV DC QUAD NORTH KARANPURA-CHANDWA TRANSMISSION LINE

1	Name of the Line	400 kV DC Quad North Karanpura - Chandwa
		Fransi nission line
2 !	Location or the crossing	Near Jogiadih Village between Mile Stone – 98
		8. 99 at chainage 838 mtrs. Tahsii -Balumath,
:	!	DistLatehar (JS). Village Jogia-lih, Tahsil
		Balumath, Dist. –Latehar (JS)
	six decreasing of crossing	Foclosed.
23	Site plan snowing location of crossing	Drg. No 400 kV DC/QUAD/NK-C/TL/NH-
		99/PLAN-01
i		
04	Angle of crossing	Crossing at 62° 7′14′ to the NH 99.
C-5	The leasing of the span at the crossing and also	Crossing span 202.70 mtrs.
	these either side of the crossing	Precedi <b>নিষ্ট</b> span <b>365</b> ./8 mtrs. 🥏 🕏
	the second of second se	Succeeding span 283.04 mtrs.
<i>c. c</i>	The deviation of the spans on either side of the	A: AP No.32/0 - 27° 30' 7"RT
06		At AP No.33/0 - 6° 57' 35"LT
	crossing	24 Nos. MOOSE ACSR Conductor of 54/3.53
C7	The number size and materials of the	nim AL + $7/3.53$ mm steel.
	conductors and wire crossing the tracks.	1 Nos Earth wire of 7/3.66mm GSS, 1Nos.
		Great Wire 24 core.
		400 KV (Line to Line and Value), 50HZ AC, 3
(8	System of Juppiy (i.e. voltage, frequency, No.	
	of phase.	phases
09	Height : Estructures above ground	Above GL =AP32/0 QC+6 53.60 mtrs.
( )	110.51	=AP33/0 QD+18 65.85 intrs
. 10	Height above ground level of Lowest	29. <b>54</b> mtrs.
10	conductor (Vertical Clearance)	
	Conducted (vertical cical and crossing will be	13.260 Mts. (85° temperature)
11		
	maintaine I.	1 29.54 mtrs
12	Clearance under maximum sag conditions	As per CEA (measures relating to safety and
	between road level and lowest live conductor.	electric supply) regulations 2010, vertical
	i	clearance requirement from ground is 18.8
:		1 control of the state of the s
		mitrs, for 400 KV level.
13	Approximate distance of each of the tower on	From AP No. 32/0:77.20 mtrs.
•	both see measured at right angle of the road	From AP No. 33/0: 105.30 mtrs.
	i.e. How pital Greatance from Road Poundary	
1.	f the modern	2022 mitrs. 25 1403. 78
1.1	in the decision and	7.5
, 15	Are approved unincumoning devices and	
İ	warning notices provided on the towers?	
1	6 Is each structure of the crossing span	YES
•	independently earthed by means of an earth	 
į	plate 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	
	7 Is the term mission line protected by a device	<del></del>

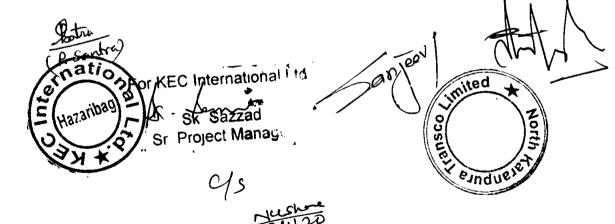


Executive Engineer
National Highway Division
Ranchi



a į

18	to ensure instantaneous tripping in case of breakage of any conductors? Give details.  Type of insulations	Line will be controlled by sensitive fast operating relays, with a tripping time of less than 15ms to 20ms.  160 KN Long rod silicone composite insulator, 4 nos. per string.
19	State the method of maintenance to be employed to ensure the following protections. from over hanging or decaying trees which might fall on the line to reduce the hazard of life and property. Supporting structures including guys from the danger of being struck by moving road vehicles.	Way leave clearance of 46 mtrs. to either side to be maintained.  Adequate electrical clearances maintained.  NA  Sufficient vertical clearance will be maintained from the road
20	Whether the proposals conform to the regulation guidelines issued by MOSRT&H Circular no. NH-III/P/20/77/ dated 08 April 1982 and Standards have been followed as per Indian Rule Congress (IRC) 32: 1969	Yes. Undertaking Given.
21	Additional remarks if any	The proposal is in accordance with the standard practice and satisfactory to the stipulated design. The 400 kV DC North Karanpura –Chandwa AC Tr. line is being erected from North Karanpura Transco Ltd. S/S(JS) to Chandwa Power Grid S/S in Jharkhand state.





### OFFICE OF THE CHIEF ENGINEER

National Highway Wing, RCD, Jharkhand Engineer's Hostel, Dhurwa, Ranchi – 834004

Email id: cenh-jhr@nic.in; Tele Fax: 0651-2400863

(3)

Letter No: - CE/NH/Misc-77/19 9 8/ (WY)

Ranchi, Date 26/12/19

12/12/19

The Regional Officer,

Ministry of Road Transport & Highways,

Government of India,

Regional Office,

Ranchi.

Sub.: Regarding proposal for crossing 400 KV DC North Karanpura-Chandwa transmission line in Nh-99 between mile strone no. 98 to 99 (838 metre) and 400 KV DC North Karnpura-Chandawa transmission line in NH-99 between mile stone 108 to 109 (573.41 metre)

Ref.: RW/Ranchi/OFC/60/JHR/2019-20/666 dated 24.10.2019

Sir,

Please find enclosed herewith the subject proposal as submitted by Executive Engineer, NH Division, Ranchi vide his letter no. 1138(WE) dated 10.12.2019.

It is being submitted for further necessary action at the admininstrator level.

Encl:- As above.

Yours faithfully,

(Om Prakash Vimal)
Chief Engineer
NH Wing, Jharkhand,

Ranchi

## Office of The Executive Engineer National Highway Division, Din Dayal Nagar, Booty Road. Ranchi - 834008

Letter No: 1138WE

Date: 10/12/2019

From,

Sub:-

Sir.

Executive Engineer, National Highway Division, Ranchi.

Chief Engineer, National Highway Wing, Jharkhand, Ranchi.

Regarding proposal for Crossing 400 KV DC North Karanpura - Chandwa Transmission line in NH No. 99 between Mile stone no. 98 to 99 (838mtr) and 400 KV DC North Karanpura - Chandwa Transmission line in NH No. 99 between Mile stone 108 to 109 (573.41 mtrs).

North Karanpura Transco Ltd, Ranchi No. NKTL/NKC/PLC/NNHAI/2019/03 Dated 02.08.2019 and NKTL/NKC/PLC/NNHAI/2019/09 Dated 24.08.2019

With reference to above mentioned subject the proposal for crossing 400 KV DC North Karanpura - Chandwa transmission line at Ch. 98.838 between mile stone 98 and 99 of NH-99 at village Jogiadih of Balumath and at Ch. 108.573 between mile stone 108 and 109 at village Ambadohar of Chandwa has been received. The proposed site has been jointly inspected by NKTL authority and A.E. Latehar with J.E. Balumath on 26.09.2019 and found same as per proposal submitted by NKTL. Joint inspection report is attached.

Therefore, the proposal is being submitted in three copies of each for necessary action.

Encl. :- Each proposal in 3 copies (Total 6 copies).

Yours faithfully

Executive Engineer, N.H. Division, Ranchi

Telephone/Fax: - 0651-2360428

E-mail: eenhranchi-jhr@nic.in