No. RW/PAT/NH/139/27.28/Over Head Crossing/2020- 1134

Government of India

Ministry of Road Transport & Highways

(Regional office-Patna)

Vill-Chakmusa, Near Nakati Bhawani mandir on NH-98

Post- Mohammadpur Kurji Via Khagaul, Patna- 801105, Bihar

Dated:-14.10.2020

Invitation of public comments

Sub: - Proposal for permission for over head crossing of 220 KV D/C Naubatpur to Bhusaula transmission line near Bhusaula Village at Ch. 27.280 on NH-98 (New NH-139).

Bihar Grid Company Ltd. has submitted the subject proposal for permission for over head crossing of 220 KV D/C Naubatpur to Bhusaula transmission line near Bhusaula Village at Ch. 27.280 on NH-98 (New NH-139) through CE NH (South Wing), RCD Bihar vide letter no. 1874 (WE) dated 26.08.2020 to this office.

2. In this regard, objection of the public if any on grounds of public inconvenience, safety and general public interest, are invited on the subject proposal and hard copy of the same should reach to below mentioned address within 30 days from the day of uploading, beyond which no objection will be considered.

Address:-

The Regional Office,
Ministry of Road Transport & Highways,
(Regional office, Patna)
Vill-Chakmusa, Near Nakati Bhawani mandir on NH-98
Post- Mohammadpur Kurji Via Khagaul, Patna- 801105, Bihar

Yours Faithfully,

(Mridul Rakesh Mishra)
Assistant Executive Engineer,
For Regional officer,
Patna

Copy to:-

1. Senior Technical Director, NIC, Transport Bhawan, New Delhi-110001.- For uploading on Ministry's website.
2. EE, NH Division, Aurangabad for information.
3. Bihar Grid Company Ltd. for information.

मुख्य अभियंता का कार्यालय

राष्ट्रीय उच्च पथ (दक्षिण) उपभाग, पथ निर्माण विभाग, बिहार, पटना

अनिल कुमार सिन्हा
मुख्य अभियंता

☎ : 0612- 2545592 (O)
Fax : 0612- 2546231
Email-cenhsouthbihar@gmail.com

पत्र संख्या–एन0एच0–25 / परि0–01–04 / 2019 - 1874 (27) दिनांक– 26-8-20

सेवा में,

मुख्य अभियंता –सह– क्षेत्रीय पदाधिकारी,
सड़क परिवहन एवं राजमार्ग मंत्रालय, बिहार, पटना।

विषय– **Proposal for permission of over head crossing of Patna – Aurangabad NH-98/139 at Sharma Bhadsara (Chainage 27.28) by 220 KV DC and Naubatpur, Bhusaula (Chainage – 6.7) by 220 KV DC and Naubatpur -Bihta Transmission line.**

प्रसंग– अधीक्षण अभियंता, राष्ट्रीय उच्च पथ अचंल, डेहरी ऑन सोन का पत्रांक–325 (अनु0) दिनांक–02.07.2020.

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र द्वारा **Proposal for permission of over head crossing of Patna – Aurangabad NH-98/139 at Sharma Bhadsara (Chainage 27.28) by 220 KV DC and Naubatpur, Bhusaula (Chainage – 6.7) by 220 KV DC and Naubatpur –Bihta Transmission line** प्रतिवेदन प्रस्ताव अधीक्षण अभियंता के माध्यम से समर्पित किया गया है, जिसमें विषयांकित कार्य के Authority's Engineer / Supervision Consultant के द्वारा जाँच प्रतिवेदन समर्पित किया गया है।

उक्त के आलोक में प्रस्ताव की स्वीकृति हेतु सभी अनुलग्नको के साथ आवश्यक कार्रवाई हेतु सलग्न कर समर्पित की जा रही है।

अनु० यथोक्त।

विश्वासभाजन

26.08.20

(अनिल कुमार सिन्हा)
मुख्य अभियंता
रा0उ0प0 (दक्षिण) उपभाग, प0नि0वि0, बिहार, पटना।

26/8/20

27.1

BIHAR GRID COMPANY LIMITED

(Joint Venture of Bihar State Power (Holding) Company Limited & POWERGRID)
2nd Floor AlankarPlace,Boring Road,Patna-Bihar-800001,Tel-0612-2530477.
Email-bihargrid@gmail.com

बिहार ग्रिड

Ref: - JV/PT/BG/NH-Proposal/2241 **Date:-** 04.09.2019

To,

The Executive Engineer cum P.I.U Head
NHIIP, NH-98
National Highway Division, Aurangabad
Near Nav Vihar Times Office
Aurangabad, Bihar-824101

Sub: Proposal for permission of overhead crossing of Patna-Aurangabad–NH-98 at Bhusaula (Chainage NA) by AP31/0 to AP32/0, AP34/0 to AP35/0 and AP35/0 to AP36/0 for **220KV DC Naubatpur – Bhusaula Transmission Line**

Dear Sir,

For strengthening of Power Transmission network in the State of Bihar, Bihar State Power (Holding) Company Limited and Power Grid Corporation of India Limited have formed a joint Venture Company in the name of Bihar Grid Company Limited (BGCL)

Accordingly, BGCL had been issued the requisite Transmission License under Section 14 of Indian Electricity Act'2003 by Bihar Electricity Regulatory Commission and authorization conferred by Govt. of Bihar for laying of transmission lines under Section 68 &164 of Indian Electricity Act'2003 for the transmission scheme covered under Phase-IV, Part-I and II.

As a part of the scheme, BGCL is constructing a **220 KV D/C Naubatpur – Bhusaula Transmission Line.**

In view of the above, we are submitting overhead crossing proposal in prescribed format along with necessary drawing, data according to NH-norms and clearance for crossing the NH-98 by **220 KV DC Naubatpur – Bhusaula Transmission Line.**

Crossing Village:-

1. At Bhusaula Village.

This is for your information and necessary action please.

Thanking you.

With Regards,

Sinha 04.09.19

(A.K.Sinha)
Dy. General Manager (Projects)

BIHAR GRID COMPANY LIMITED, PATNA

PATNA-AURANGABAD National Highway -98 crossing at Village Bhusaula for Construction of 220 KV D/C Naubatpur to Bhusaula transmission line between Angle Tower No:- AP 31/0 (MPD+18), & AP 32/0 (MPD+18).

Name of Transmission Line: - 220 KV D/C Naubatpur to Bhusaula transmission line (PKG TW02)

1.	Situation of the EHV transmission line crossing on National Highway.	PATNA-AURANGABAD National Highway (NH -98) near Bhusaula Village
2.	Site Plan showing location of crossing (with NH boundaries) in reference to NH Mileage to be supplied on quadruplicate. .	Drawing No. BEL/BGCL/
3.	Angle of crossing of the transmission line with the National Highway at crossing point	70°00' 00"
4.	The length of the span at the crossing and also those on either side of the crossing	A) Crossing span 88.00Mtr.
		B) Preceding span 98.00Mtr.
		C) Succeeding span 70.00Mtr.
5.	In the event of the transmission line deviating at any of the supports of the crossing necessitating one of the structures to be a corner structure, state angle of such deviation the deviation of the span on either side of crossing shall be illustrated in the sketch mentioned in the clause 2 above.	Angle Tower Location No.
		AP-31/0 MPD+18- 52°38'06"RT
		AP-32/0 MPD+18- 59°05'57"RT
6.	The number, size and the material of the conductors and wires crossing the NH each wire under phase, neutral each, guard, bearer and ground cross wire should be separately described and their disposition indicated by means of sketch.	A) ZEBRA Conductor dia 28.62 mm, No. of Conductor - 6 Nos. Unit Weight 1.621 Kg/m, Ultimate Strength 13288.5 kg.
		B) Aluminum - 30/3.00 mm, Steel - 7/3.00 mm
		C) Earth wire - 7/3.00 mm (Steel), no. of Earth wire -1 No.
7.	Indicate whether the proposed guard is to be restricted to the crossing span or it is to be continued over the adjacent span.	No guard wire is provided.

Sanjeev Kumar Garg
Manager, TLT EPC
Bajaj Electricals Ltd.

A.K. Sinha
Manager

8.	The deviation of the span on either side on the crossing shall be illustrated in the sketch mentioned in the clause 2 above.	Enclosed in sketch.
9.	System of supply (i.e. Voltage) frequency, No. of phases, whether neutral is earthed or not.	220 KV, 50 Hz, 3 Phase double Circuit with 1 earth wire.
10.	Height of structure above ground and below ground separately and details of foundation.	A) Angle Tower Location No: - 31/0 (MPD+18) height above GL 48.90 M depth below GL 7.00M.
		A) Angle Tower Location No:- 32/0 (MPD+18) height above GL 48.90 M depth below GL 7.00M.
11.	Height above ground level of (1) Lowest conductor on insulator and (2) guard wire on bracket above ground level.	Angle Tower Location No.
		31/0 MPD+18 = 30.344 M.
		Angle Tower Location No.
		32/0 MPD+18 = 30.344 M
12.	Height of road level above ground level measured at the foot of the structure.	Angle Tower Location No.
		31/0 MPD+18 = 3.310 M.
		Angle Tower Location No.
		32/0 MPD+18 = 3.96 M.
13.	Clearance under maximum sag condition between road level and the lowest live conductors & between road level and lowest guard wire (State if "box" type guarding is provided in case of adoptions of unearthed neutral system).	At Null Point = 25.810 M
		At Road = 25.810 M
14.	Ultimate Tensile stress of the steel wire used for guard for earth wire in tones per Sq. Cm.	14. Not applicable
15.	Approximate distance of each of the structures to the nearest NH Boundary (marked by pillars/ Fencing) measured along the alignment of the transmission line.	Angle Tower Location No.
		31/0 MPD+18 = 43.750 Mtr
		Angle Tower Location No.
		32/0 MPD+18= 14.205 Mtr
16.	Are the proposed structure is in NH boundary.	Outside NH boundary.
17.	Are approved anticlimbing devices and warning notices provided on the structures erected	Anti climbing devices & Warning boards are provided on both the Towers.
18.	State the tensile strength and dimension of the steel used for construction of each member of the supporting structures. It is to be noted that supporting structure must be of	Tested steel quality Lattice steel structure made of mild steel and high tensile steel in confirm with clause 4.0 of I.S. 226-1975 and

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	approved design confirming with I.S.I code of practice for use of structural steel in general building construction (IS 800 1965).	with a tensile strength of 55 kg/Sq mm.
19.	Dimensions and types of brackets used for the cross arms as well as for the guards wires.	Not applicable for transmission Line.
20.	In each structure of the crossing span independently earthed by means of an earth plate.	Yes, each structure is earthed.
21.	In each structure supported by means of stage in three directions give the size of guy wires, (the neglected in calculating the strength of structure).	No. guys or stays are provided structures are self supporting.
22.	If no guard is provided, in the transmission line protected by device to ensure instantaneous isolation is conduction?	Yes, the transmission line is protected instantaneously by high speed protection relays with carrier equipment.
23.	Type of insulators used.	Glass discs of electromechanical strength if single disc = 120 KN.
24.	State the method of maintenance to be employed to ensure the following protections.	
a)	From overhanging or decaying trees which might fall on the line.	Tree clearance to a width of 27.00M is done.
b)	To reduce the hazard to life and property.	b) Warning boards are provided.
c)	Supporting structure including guys, from the danger of being struck by moving road vehicle.	c) Structures are at safe distance from road.
25.	Drawing showing details of crossing disturbance of road, ground or attachment that may be necessary **(To be supplied in quadruplicate.)**	Enclosed.

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Manager, TLT EPC
Bajaj Electricals Ltd.

CHEK LIST

1.	National Highway Number	:	NH – 98
2.	Name of Crossing	:	PATNA-AURANGABAD(NH-98)
3	Crossing at Chainage	:	(Near Bhusaula village)
4.	Position of towers	:	Outside the ROW of NH
5.	Crossing Span	:	88.00 M
6.	Clearance over the road level	:	25.810 M
7.	Angle of road crossing	:	70⁰ 00' 00"
8.	Distance from NH Boundary to center of tower	:	Loc. No.31/0 (MPD+18) = 43.750 Mtr Loc. No.32/0 (MPD+18) = 14.205 Mtr
9.	Perpendicular distance from center of tower to center of road	:	Loc. No.31/0 (MPD+18) = 61.500 Mtr. Loc. No.32/0 (MPD+18) = 26.500 Mtr
10.	Protection of assembly to the line	:	Anti Climbing devices provided
11.	No. of stay required	:	No Required
12.	Minimum Factor of Safety	:	2.0 (Normal condition)
13.	Size of power conductor mm.	:	ACSR ZEBRA (Conductor dia. 28.62mm, Al. : 30/3.00 mm., Steel : 7/3.00 mm.
14.	Size of Earth Wire	:	7/3.00 mm. (Steel)

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