



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)

National Highways Authority of India

(Ministry of Road Transport & Highways, Govt. Of India)

क्षेत्रीय कार्यालय, उ०प्र० (पूर्व) वाराणसी

Regional Office - U.P. (East), Varanasi

एस- 2/656, ए-3 बी, वरुणा विहार कॉलोनी, द्वितीय एवं तृतीय तल, वन प्लेस टावर
(जे०पी० मेहता सीनियर सेकेंडरी स्कूल के पीछे), सिकरौल, वाराणसी-221002 (उ०प्र०)

S-2/656, A-3B, Varuna Vihar Colony, 2nd & 3rd floor, one place Tower

(Behind J.P. Mehta Sr. Secondary School), Sikraul, Varanasi-221002 (U.P.)

दूरभाष / Phone : 91-542-2280243

: 91-542-2280372

ई-मेल/E-mail : rovaranasi1@gmail.com

: rolucknow@nhai.org

वेबसाइट/Website: www.nhai.org

Date: 03.11.2020

No. 14011/42/RO/UP(E)/2020/3380

Invitation of public comments

Sub.: Proposal for overhead crossing of NH-335 by 132KV DC Pailani- Aaugasi Transmission Line at Chainage 31.110 Km, near Village Jauharpur- Reg. [Raebareli-Banda Section]

The Executive Engineer, Electricity Transmission Division, U.P. Power Transmission Corp. Ltd., Banda has submitted the subject proposal through PIU- Raebareli Notesheet No- 19540 dated 16.10.2020, for granting permission for overhead crossing of 132 KV line in the subject cited stretch.

2. From the submitted proposal, it is seen that the height of both proposed structures (Transmission Towers) on which the proposed overhead line is hanging is 41.915M. The structures (Towers) on either side are being erected at distance of 105.5M (LOC No. 27/0) & 122.5M (LOC No. 28/0) respectively from the centre line of National Highway. Further, the minimum clearance of 19.60 M between the lowest conductor of the proposed line and NH carriageway shall be maintained. However, the proposed transmission line shall be crossing the National Highway at 83° 20'.

3. As per the guidelines, issued by the Ministry vide OM No.RW/NH-33044/29/2015/S&R(R) dated 22.11.2016, the application shall be put out in the public domain for 30 days for seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

4. In view of the above, comments of the public on the above application is invited to the below mentioned address, which should reach by this office within 30 days from the date of publication beyond which no comments shall be entertained.

The Regional Officer,
National Highways Authority of India
Regional Office, UP-East, Varanasi
S-2/656, A-3B, VarunaVihar Colony, 2nd & 3rd Floor, One Place Tower,
Behind J.P. Mehta Sr. Secondary School, Sikraul, Varanasi-221002

This issue with the approval of Regional Officer.

Encl: As above

C. M. Dwivedi
3/11
(C.M. Dwivedi)
General Manager (Tech.)

Copy to:

- Web Admin, NHAI-HQ- with request for uploading on the NHAI website
- The Technical Director, NIC, Transport Bhawan, New Delhi - with request for uploading on the Ministry's website.
- Project Director, NHAI, PIU-Raebareli- for information please.
- The Executive Engineer, ETD, UPPTCL, Banda- for information please

U.P. POWER TRANSMISSION CORPORATION LIMITED

उपग्रो पावर ट्रांसमिशन कारपोरेशन लिमिटेड

(उपग्रो सरकार का उपक्रम)

OFFICE OF THE EXECUTIVE ENGINEER
ELECTRICITY TRANSMISSION DIVISION
220 KV SUB-STATION, TINDWARI ROAD
BANDA-210001

Tel.No. 8874204454

e-mail:- eeetdbanda@upptcl.org
GST No.09AAACU8823E1Z9



कार्यालय अधिशाषी अभियन्ता
विद्युत प्रेषण खण्ड,
220 केवीओ उपकेन्द्र, तिन्दवारी रोड,
बौदा-210001

दूरभाष- 8874204454
e-mail:- eeetdbanda@upptcl.org
जीएसटीएन नं०-09AAACU8823E1Z9

No. 235 /ETDB/

Date: 18/08/2020

Subject:- Regarding NOC for overhead crossing of NH-335 by 132 kV DC Pailani-Augasi Transmission Line at Chainage 31.110 Km

The Project Director (PIU)
NHAI, 257 Vishnu Nagar
Raebareli-229001

(Signature)

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
परियोजना कार्यान्वयन इकाई, रायबरेली
प्राप्ति संख्या... 317.23
फाइल संख्या... 21-08-2020
दिनांक...

In reference to the subject, we would like to submit that UPPTCL is constructing 132 kV DC Pailani-Augasi Line under Electricity Transmission Division, Banda which is crossing NH-335. Details given as below;

Sl. No.	Name of Transmission Line	Name of NH	Crossing Place	UPPTCL proposed Tower No.
1	132KV D/C Pailani (220)-Aaugasi Line.	NH-335 (Banda-Fathepur)	Chainage 31.110 Km, Near village Jauharpur	Location no. 27 (DD+12) & Location no. 28 (DD+12)

The aforesaid line is being constructed and crossing is to be done as per Electrical Safety Rules & Guideline. Online application has been applied and entire case is enclosed with this letter.

Thanking you in anticipation of an early approval.

Enclose: As above.

(Signature)
(Ravi Kant)
Executive Engineer
Electricity Transmission Division
U.P. Power Transmission Corp. Ltd.
Banda

No. /ETDB/

Copy to following for information & necessary action:-

1. S.E (ETC) Banda.

Please submit your comments/
recommendation.

(Signature)
24/8/20

(Ravi Kant)
Executive Engineer

TL, m/s Theme KBLT-BANDA

NHAI /PIU-RBLY /19062 DT. 24-08-2020

FOR NH -335 ROAD CROSSING BY 132 D/C PAILANI- AUGASI T/ LINE

NO.	DESCRIPTION	DETAILS
1.	National Highway Number	NH-335
2.	Name of Crossing Line	132 D/C PAILANI- AUGASI T/ LINE
3.	SYSTEM OF SUPPLY (i.e VOLTAGE) FREQUENCY NO.OF PHASES,WHETHER NEUTRAL IS EARTHED OR NOT	132K V D/C 3 phase 50 cycles A.C. AND 1 OPGW
4.	Position of towers	BETWEEN LOC. NO.27 (DD+12) AND LOC 28(DD+12)
5.	NORMAL SPAN AT LAPWING CONDUCTOR	300 M.
6.	MAX.SAG AT NORMAL SPAN	7.8 M.
7.	CROSSING SPAN	228 M. ✓
8.	Preceding span	281 M.
9.	Succeeding span	296 M.
10.	Height of structure above ground and below ground separately and details of foundation	A) Location No.27 (DD+12) height above GL 41.915 M depth 2.40M. B) Location No. 28(DD+12) height above GL 41.915M depth 2.40M
11.	Milestone NO.	31 KM & 32 KM
12.	CLEARANCE OVER ROAD	19.60 M. ✓
13.	Height above ground level of (1) Lowest conductor on insulator and (2) guard wire on bracket above ground level	26.333M.
14.	Height of road level above ground level measured at the foot of the structure.	Location No. 27 D+12 = 2.50M. Location No. 28 D+12 = 2.46 . M
15.	Angle of road crossing	83° 20' 00" ✓
16.	Distance from NH Boundary From center of tower	Loc. No. 27(D+12) = 87 M. ✓ Loc. No. 28 (D+12) = 104 M ✓
17.	Perpendicular distance from center of tower to center of road	Loc. No. 27(D+12) = 105.5 M. Loc. No. 28 (D+12) = 122.5 M
18.	Protection of assembly to the line	Anti Climbing devices provided
19.	No. of stay required	NO.
20.	Minimum Factor of Safety	2.
21.	Size of power conductor mm.	ACSR ZEBRA(Conductor dia.28.62MM)
22.	Size of OPGW/EARTHWIRE	OPGW 24 FIBER (OVERALL DIAMETER -12MM)
23.	FOUNDATION TYPE	FS
24.	PLAN PAPER DIAGRAM	PROFILE(ENCLOSED)
25.	EARTHING	PIPE TYPE EARTHED



प्रबंधक (तकनीकी)
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
परियोजना कार्यान्वयन इकाई
सयमरेली


Executive Engineer
Electricity Transmission Division
Power Transmission Corp. Ltd.
Banda

Annexure-A

Subject: Crossing of 132 KV D/C Palaini-Augasi over Head High Tension Transmission Line Over NH-335.(Banda - Fathepur section)

Details regarding Over Head Transmission Line Crossing

1	a	Name of Company asking for permission	Executive Engineer, Electricity Transmission Division, 220KV Substation Tindwari road Banda
	b	Full Address	220KV Substation Tindwari road Banda
	c	Details and purpose of laying OverHead Transmission Line	Transmission of 132KV line to Augasi Substation.
	d	01. dist.ance of propose site from centre of the road at Extreme edge with boundary 02. Whether it is possible to lay propose line or not	NA Crossing
2		Details Road Aligment where Over Head Transmission Line is laid	
	a	Name of Road	NH-335(BANDA-Fathepur) Near Bendaghat)
	b	Category of Road (to be ascertained from km stone road side)	Crossing at chainage 31.110 KM
	c	Width of Road	
		1. Formation width measured from Earthen Blank	
		2. Black Topped carriageway width	
		3. Road Boundary	37 M
		4. Location of Over Head Transmission Line along the road side or crossing to be mentioned	Crossing
3		Details to be supplied on along the drawing	Attached
4		Geographics of Over Head Transmission Line	Attached


Executive Engineer
Electricity Transmission Division
P. Power Transmission Cor.
Banda

Annexure-C

Condition for the agencies seeking permission for Crossing of 132 KV D/C Palaini-Augasi over Head High Tension Transmission Line Over NH-335.

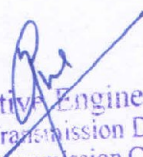
1. The Over Head Transmission Line should cross the NH- 335 (Banda- Fathepur) Section at normal to it.
2. Over Head Transmission Line should not be near the existing structure.
3. The Over Head Transmission Line shall be is laid over head in full lane width NH-335
4. The top of Over Head Transmission Line should be at height 9m over the surface of the road.
5. Any damaging during the crossing of Over Head Transmission Line (Gas Pipeline, water supply line, Electricity agency other line) should be got repaired immediately at the agency's own risk and cost.
6. Necessary precaution should be taken to avoid accident during crossing work.
7. Cautionary board where required should be kept on site before starting the work of laying Transmission Line.
8. Prior approval of department shall be obtained before undertaking the work installation, shifting, repairs or alternating to the utility line location in the NHAI RIGHT-OF-WAY.
9. Beforestarting the work, prior written information by registration post AD should be given to NHAI.
10. If NHAI consider it necessary in future to remove the pipe line for any work of improvement/repair of road, it will be carried out desired by NHAI at the agency cost within a responsible time.
11. NHAI does not guarantee the preservation of agencies. Property from any type of damage that may occur due to road work carried out a later date.
12. If any accident is occur during the execution ot completion of work by the agency, the completed responsibility shall be fully on the head of agency.
13. In Future and the time of widening the road or any work of NHAI, lines shall have to be shifted by agency at their on cost without claim of compensation will 60 days.
14. An agreement in stamp paper of Rs. 100/- is required to be made between NHAI and agency before start of work. This shall also include No Claim Certificate.


Executive Engineer
Electricity Transmission Division
U.P. Power Transmission Corp. Ltd.
Banda.

Annexure-B

Information to be furnished along with proposal for Crossing of 132 KV D/C Palaini-Augasi over Head High Tension Transmission Line Over NH- 335.

1	Exact location of crossing with Chainage of National Highway and Right-of Way of NHAI at crossing	Proposed Over Head Transmission Line Over NH-335 at Chainage No. 31.110 KM
2	Table showing distance of Over Head Cable from centerline of Highway. (Minimum distance of Over Head Cable- 9m over head edge of ROW edge.	Drawing attached
3	Methodology of crossing in Expressway by Over Head.	Agreed
4	Crossing Details: Plan & Cross section drawing showing height of crossing at a minimum of 9m from existing ground level.	Drawing attached
5	Route index plan along with Highway showing the following- A. Existing ROW of NHAI/NH Land. B. Over Head Transmission Line.	Plan attached
6	Undertaking that you shall take care of existing line that have been laid previously.	Undertaking attached


Executive Engineer
Electricity Transmission Division
U.P. Power Transmission Corp. Ltd.
Banda

132 KV D/C PAILANI(220)- AUGASI TRANSMISSION LINE

SAG CALCULATION WITH CLEARANCE

BETWEEN LOC.NO. 27/0 TO 28/0 AT 75°

RL OF LOC NO. 27	=		103.96
RL OF LOC NO. 28	=		104.00
RL OF CROSSING POINT	=	(106.46+0)	106.46
BOTTOM CROSS ARM RL OF LOC NO. 27	=	(103.96+26.33)	130.29
BOTTOM CROSS ARM RL OF LOC NO. 28	=	(104.0+26.33)	130.33
TENSION AT 75°C	=		2494 KG
CROSSING SPAN LENGTH(L)	=		228 M
CONDUCTOR WEIGHT(W) FOR ACSR ZEBRA	=		1.623 KG/M
HEIGHT DIFFERENCE OF BOTTOM CROSS ARM BETWEEN LOC NO 27 AND 28			
130.29 - 130.33	=		-0.04
	H	=	-0.04
NULL POINT	=		(TH/WL)+L/2
	=	(2494x-0.04)/(1.623x228)+228/2	
	=		113.730 Mtr
L1=2X NULL POINT	=	2x	113.730 = 227.46
MAX. SAG AT NULL POINT	=		WL ² /8T
	=		(1.623x227.46 ²)/(8x2494)
	=		4.208 Mtr
RL OF NULL POINT = BOTTOM CROSS ARM RL OF LOC 27 – MAX . SAG AT NULL POINT OF BOTTOM			
CONDUCTOR	=		130.29 - 4.208
	=		126.082 Mtr
DISTANCE OF CROSSING POINT TO NULL POINT	=		100 - 113.730
	=		13.730
½ SAG	=		(1.623x13.730 ²)/(2x2494)
	=		0.0613 Mtr
MAX. SAG AT CROSSING POINT RESPECT TO LOC 27	=		4.208 - 0.0613
	=		4.147 Mtr
RL OF BOTTOM CONDUCTOR AT CROSSING POINT	=		126.082 + 0.0613
	=		126.1433 Mtr
CLEARANCE BETWEEN BOTTOM CONDUCTOR TO CROSSING POINT=(126.143 – 106.46)	=		19.680 Mtr
CLEARANCE UNDER MAX. SAG	=		19.68 Mtr

Executive Engineer
Electricity Transmission Division
Power Transmission Corp., Ltd.
Banda

U.P. POWER TRANSMISSION CORPORATION LTD.

PROPOSAL FOR OVERHEAD CROSSING OF NH-335

(BANDA - FATEPUR SECTION)

AT CHAINAGE 31.110 KM.


BY

132 KV D/C PAILANI(220) -AUGASI

TRANSMISSION LINE

OF

**UTTAR PRADESH POWER TRANSMISSION CORPORATION
LIMITED, 220 KV SUBSTATION TINDWARI ROAD BANDA**


Executive Engineer
Electricity Transmission Division
U.P. Power Transmission Corp. Ltd.
Banda

U.P. POWER TRANSMISSION CORP.LTD.

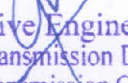
Banda to Fatehpur N.H-335 Crossing at Chainage 31.110 KM for construction of 132 KV D/C PAILANI - AUGASI TRANSMISSION LINE between Location No.27 (DD+12) & Location No 28(D+12).

Name of Transmission Line: 132 KV D/C PAILANI-AUGASI TRANSMISSION LINE.

1.	Situation of the EHV transmission line crossing on National Highway.	ON BANDA – FATEHPUR SECTION National Highway – 335 crossing at chainage 31.110 KM from (BANDA SIDE) near village Joharpur.
2.	Angle of crossing of the transmission line with the National Highway at crossing point	83° 20' 00"
3.	The length of the span at the crossing and also those on either side of the crossing	A) Crossing span 228 Mtr. B) Preceding span 281 Mtr. (DB+3) C) Succeeding span 296 Mtr. (DB+9)
	In the event of the transmission line deviating at any of the supports of the crossing necessitating one of the structures to be corner structures, 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.	Location No. 27 DD+12 < 08° 23' 24" RT' 28 DD+12 < 34° 04' 33" LT'
5.	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) ACSR ZEBRA Conductor dia 28.62 mm, No. of Conductor –06 Nos. Unit Weight 1.621 Kg/m, Ultimate Strength 13290 kg. B) Aluminum – 54/3.18 mm, Steel –7/3.18 mm C) Overall Diameter of Earth wire/OPGW –12 mm (24 FIBER)
6.	Indicate whether the proposed guard is to be restricted to the crossing span or it is to be continued over the adjacent span.	Not Applicable
7.	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.
8.	System of supply (i.e. Voltage) frequency, No. of phases, whether neutral is earthed or not.	132 KV, 50 Hz, 03 Phase Double Circuit with 1 OPGW.
9.	Height of structure above ground and below ground separately and details of foundation.	A) Location No.27 (DD+12) height above GL 42.145 M depth below GL 3.00M. A) Location No.28 (DD+12) height above GL 42.145 M depth below GL 3.00M.
10.	Height above ground level of (1) Lowest conductor on insulator and (2) guard wire on bracket above ground level.	Location No. 27 DD+12 = 26.333 M. Location No. 28 DD+12 = 26.333 M
11.	Height of road level above ground level measured at the foot of the structure.	Location No. 27 DD+12 = 2.50 M. Location No. 28 DD+12 = 2.46 M.
12.	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 = At Road = 19.60 M


 Executive Engineer
 Electricity Transmission Division
 U.P. Power Transmission Corp. Ltd.
 Banda

13.	Ultimate Tensile stress of the steel wire used for guard for earth wire in tones per Sq. Cms.	Not applicable
14.	Approximate distance of each of the structures to the nearest NH Boundary (marked by pillars/ Fencing) measured along the alignment of the transmission line.	Location No. 27 DD+12 = 87 M. Location No. 28 DD+12 = 104 M.
15.	Are the proposed structure is in NH boundary.	Outside NH boundary.
16.	Are approved anticlimbing devices and warning notices provided on the structures erected.	Danger boards are provided on both the Towers.
17.	Dimensions and types of brackets used for the cross arms as well as for the guards wires.	Not applicable for transmission Line.
18.	In each structure of the crossing span independently earthed by means of an earth plate.	Yes, each structure is earthed.
19.	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.
20.	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.
21.	Type of insulators used.	22. Glass discs of electromechanical strength if single disc = 120 KN.
22.	State the method of maintenance to be employed to ensure the following protection.	
a)	From overhanging or decaying trees which might fall on the line.	
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.
23.	Drawing showing details of crossing disturbance of road, ground or attachment that may be necessary (To be supplied in quadruplicate.)	23. Enclosed.


 Executive Engineer
 Electricity Transmission Division
 U.P. Power Transmission Corp. Ltd.
 Banda