



# 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-पश्चिम उ०प्र०, लखनऊ

Regional Office - West UP, Lucknow.

3/248, विशाल खण्ड, गोमती नगर, लखनऊ-226010 (उ.प्र.)

3/248, Vishal Khand, Gomti Nagar, Lucknow-226010 (UP)

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19001/1/RO-W-UP/NH-2/Km. 227&228/765KV/OH/ 198.

Dated: 14.05.2020

### Invitation of Public Comments

**Sub:** Submission of overhead power line crossing proposal of NH-2 between km. 227 and km. 228 near village Hazratpur, Tehsil Tundla, Distt. Firozabad by U/C 765 KV S/C Agra (UP)-Gr. Noida (WUPPTCL) Transmission line in the State of Uttar Pradesh.

The Authorized Signatory M/s Ghatampur Transmission Limited, Greater Noida (UP) has submitted the proposal for permission for overhead power line crossing proposal of NH-2 between km. 227 and km. 228 near village Hazratpur, Tehsil Tundla, Distt. Firozabad by U/C 765 KV S/C Agra (UP)-Gr. Noida (WUPPTCL) Transmission line in the State of Uttar Pradesh.

2. From the submitted proposal, it is seen that the position of Tower is outside of NH ROW. Length of crossing Span is 246.16m & Towers are at a distance of 91.46m & 75.81m from either side of NH boundary while height of towers is 59.43m & 53.43m. Angle of crossing is 76°0'00" Vertical Clearance between road level & the lowest conductor is 24.3m.

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 General Manager cum Regional Officer,  
National Highways Authority of India  
Regional Office, UP-West, Lucknow  
3/248, Vishal Khand, Gomti Nagar  
Lucknow-226 010

This issue with the approval of RO-West (UP).

**Encl:** As above.

*Pankaj*  
14/5/2020  
(Pankaj Kumar)  
DGM (T)  
For RO-West, UP

#### Copy to:

1. Web Admin, NHAI-HQ- with request for uploading on the NHAI website.
2. The Technical Director, NIC, Transport Bhawan, New Delhi- with request for uploading on the Ministry's website.
3. The Authorized Signatory M/s Ghatampur Transmission Limited, Greater Noida (UP) for information.
4. The PD, PIU-Agra for information.

*"Building a nation, not just Roads."*

मुख्यालय : प्लॉट सं० जी-5 एवं 6, सेक्टर-10, द्वारका, नई दिल्ली - 110 075, दूरभाष : 91-11-25074100 / 200

Head Office : Plot No. G-5 & 6, Sector - 10, Dwarka, New Delhi - 110 075 Phone : 91-11-25074100/200

## CHECK LIST

**Project Director for processing the Proposal of lane over head electrical line crossing national highways vested with NHAI.**

**Circular / Codes:-**

**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**

**For getting approval for layering of overhead electrical line along the National Highways NH-2, vested with NHAI.**

S.NO	Item	Information/ status	Remarks
1	General Information	765 KV S/C (QUAD) <del>AGNTL</del> <b>AGNTL</b>	
1.1	Name and address of the applicant	Ghatampur Transmission line, B-218, Sector Sigma 1, Gautam Budh Nagar, Greater Noida - 201308	
1.2	National Highway No	NH - 2	
1.3	State	Uttar Pradesh	
1.4	Location	Hazratpur Village, Firozabad district.	
1.5	Type of electric including carrying voltage details and purpose	765 KV S/C (QUAD) AGNTL	
1.6	Chain -age in Kilometers		
1.7	Length in Metre	246.16	
1.8	Width of available ROW	29.55 Mtr.	
	(a). Left side from Center Line towards increasing chainage / KM Direction	2.28 Mtr.	
	(b) Right side from Center Line towards increasing chainage / KM Direction	27.27 Mtr.	
1.9	Proposal to lay Overhead		
	(a) Left side from Center Line towards increasing chainage / KM Direction	AP89/0 at a distance of 118.41 Mtr. from centre of Road.	
	(b) Right side from Center Line towards increasing chainage / KM Direction	AP90/0 at a distance of 127.75 Mtr. from centre of Road.	
	(c) Erection of Electrical line along the NH 509	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. Crossing the National Highway. Towers shall be constructed outside NHAI Land Boundary.	
1.12	Details of Already laid services (overhead telecommunication line, overhead electric line etc), if any , along the proposed route / proposed crossing	.	
1.13	NO of lanes (2/4/6/8 lanes ) existing	04 lane.	
1.14	Proposed number of lanes (2 lanes with paved shoulder 4/6/8 lanes )	N/A	

  
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1.15	Service Road existing or not	No Service Road.	
	If yes then which side		
	a) Left side from center line	N/A	
	b) Right side from center line	N/A	
1.16	Proposed Service Road	N/A	
	a) Left side from center line		
	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 .	Overhead Electric Transmission Line crossing the NH-02	
1.19	I- 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 from the existing / proposed structure for National Highways.	Yes  (a) 76°0'00", 246.16 Meters (b) Distance more than 91.46 Mtr & 75.81 Mtr. from centre of Road. (i) HT Tower (ii) 118.41 Mtr & 127.75 Mtr. from centre of the NH.	
	(c)- The overhead lines and their supporting poles / towers should ordinarily be placed at the extreme edge of the road land boundary. In any case, these shall be atleast 10 meter away for the edge 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.  What is the horizontal clearance from the extreme edge of the road land boundary?	N/A. Towers shall be constructed at a distance of 127.75 Mtr. (RS) & 118.41 Mtr. (LS) towards increasing chainage direction from centre of Road towards increasing Chainage direction.	
	(d) The overhead lines and their supporting poles/ towers should originally be placed at the minimum distance of 5.0 m from the nearest line of avenue trees.  What is the horizontal clearance from the nearest line of avenue trees?	N/A. Towers shall be constructed at a distance of 127.75 Mtr. (RS) & 118.41 Mtr. (LS) towards increasing chainage direction from centre of Road towards increasing Chainage direction.	
	(e)- in mountainous / hilly terrain the over head lines should be erected preferably on the valley side as far away as practicable .In hilly region, 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 area?	No	
	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 300mm from the Raised kerbs 300mm from the edge of nearest kerb Preferably 600mm	N/A	

  
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	ii- For roads with raised kerbs	At least 1.5m from the edge of the carriage way , subject to minimum of 5.0 from the central line of the carriage way .	N/A	
	(g) the Pylons of HT lines along crossing the road shall be located outside the NH land		N/A	
	(h) for crossing the line of same voltage or lower voltage , suspension/ tension tower with suitable extensions shall be used .		YES. Tension Towers with suitable extension shall be used.	
	(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 volts varies depending upon the voltage transmitted and these are stipulated in Indian standard. Codes is 56130-1976 part 1 to IV and Indian Electricity Rules 1956 as under.		24.3 Mtr. Ground Clearance shall be taken jointly with GTL and NHAI after completion.	
<u>2</u>	<b>Affidavit / Under taking to be obtained from (to be furnished by the applicant).</b>		Yes	
<u>2.1</u>	Not to damage to other utility , if damaged then to pay the losses either to NHAI or to the concerned agency		Yes	
<u>2.2</u>	Under Taking for Renewal of Bank Guarantee if required.		Yes	
<u>2.3</u>	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 I to IV of (NHAI )		Yes	
<u>2.4</u>	Shifting of overhead Electrical line at their own cost as an when required by (NHAI )		Done by GTL electrical Department by own cost	
<u>2.5</u>	Shifting of overhead Electrical line at their own cost as an when required due to 4/ 6 lanning/ widening of NH		Done by GTL electrical Department by own cost	
<u>2.6</u>	Indemnity against all damage and claims whatsoever kind that may be to NHAI or to any third party in the row during installation, operation and maintenance		Done by GTL electrical Department by own cost	
<u>2.7</u>	Traffic movement during laying of OFC/Cable to be managed by the applicant		Done by GTL electrical Department by own cost	
<u>2.8</u>	If any claim is raised by the concessionaire then the same has to be paid by the applicant.		Done by GTL electrical Department by own cost	
<u>2.9</u>	Prior approval of the NHAI shall be obtained before undertaking any work of installation, shifting or repairs , or alterations to the overhead electrical line located in the National Highway right of way.		Yes	
<u>2.10</u>	Expenditure, if any , incurred by electric department for repairing any damage caused to the National Highway by the laying , maintenance or shifting of the overhead electrical line located in the National Highway right of the way		Yes.	

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2.11	If the NHAI considers it necessary in future to move the utility line for any work of improvement or repairs to the road , it will be carried out as desired by the NHAI at the cost of the electric department owing the utility line within a reasonable time (not exceeding 60 days) of the intimation given	Yes	
2.12	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. (ii) For 4/6 laning <b>"we do undertake that I will relocate service road/ approach road, utilities at my own cost, notwithstanding the permission granted within such time as will be stipulated by NHAI"</b> for future 6 laning or any other development .	Yes	
2.13	The transmission line installation shall be carried out by trained and experienced personnel and supervised by technically qualified persons competent to undertake such work.	Yes	
2.14	The applicant ensures the safety of the Highway traffic against the Hazards of the high voltage lines during installation , operation and maintenance	Yes	
2.15	Undertaking the compliance with Indian electricity rules and other authorities, regulations- all over head lines shall comply with the requirement of the Indian electricity act and rules made their under and the regulations or specification as laid down by NHAI .	Yes	
	<b>Other documents and drawing to be furnished by the applicant</b>	Yes	
3.1	Methodology for laying of overhead electric line.	Yes	
3.2	Draft license agreement	Yes	
3.3	Performance bank guarantee in favor of 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 NHAI to the license for clearing debris/ loose earth.	N/A	
3.4	Strip plan/ route plan showing overhead electrical line, chainage with of ROW, distance of proposed, structure(tower, pole and for HT Line only tension towers) from the edge of ROW, important milestone, intersections, cross drainage works any other structure existing of proposed etc.	Yes	
4	<b>Certificate from the Project Director</b>		
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 (NHAI ) and NHAI's guideline.	Yes	
4.2	Certificate from PD In the following format:- (i)- <b>"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 &amp; traffic safety of the highway nor the likely future improvement such as widening of the carriage way easing of kerb , etc."</b>	N/A	

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	(ii) for 6- laning (a) Where feasibility is available " I do certify that there will no hindrance to propose 6 laning based on the feasibility report considering proposed structures at the said location " (b) In case feasibility report is not available "I do certify that sufficient ROW is available at site for accommodating of six - laning"		
<u>5</u>	If NH section proposed to be taken up by 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 granted as a right of way to the concessionaire under the concession agreement for up-gradation of.  (Etawah - Bhind section from KM 71 to Km 72 NH no 92, on build operate and transfer basis) and therefore the licensee shall honour the same."	N/A	
<u>6</u>	Who will supervise the work of laying of overhead electrical line.	GTL	
<u>7</u>	Who will the sign the agreement on behalf of overhead electrical line agency	Associate Manager, GTL	
<u>8</u>	Who will ensure that the defect in road portion after laying of over head electrical are corrected and if not corrected that what action will be taken.	GTL	
<u>9</u>	Who will pay the claims for damages done / disruption in working of concessionaire, if asked by the concessionaire.	GTL	
<u>10</u>	A certificate from PD that he will enter the proposed permission in register of record of the permission in the prescribed performa (copy enclosed)	NHAI	
<u>11</u>	If any previous approval for laying of overhead electrical line then photocopy of register of records of permission accorded as maintained by PD may be enclosed.	N/A	

  
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**GHATAMPUR TRANSMISSION LIMITED.**

**ALIGARH-AGRA National Highway-2** crossing between Mile Stone 227 -228 for construction of 765 kV S/C Agra (UP)-Gr. Noida Transmission Line between Angle Tower No. - AP-89/0(SB+6) & AP-90/0(SC+0).

**Name of Transmission Line: 765 kV S/C Agra (UP)-Gr. Noida Transmission Line.**

1.	Situation of the EHV transmission line crossing on National Highway.	On AGRA- FIROZABAD National Highway-2 near Hazratpur village
2.	Site Plan showing location of crossing (with NH boundaries) in reference to NH Mileage to be supplied on quadruplicate.	Site Plan Drawing is enclosed showing the NH boundaries & NH Mileage.
3.	Angle of crossing of the transmission line with the National Highway at crossing point	76° 00' 00"
4.	The length of the span at the crossing and also those on either side of the crossing	A) Crossing span 246.16 Mtr. B) Preceding span 474.31 Mtr. C) Succeeding span 370.00Mtr.
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, National 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-89/0(SB+6) = 11° 10' 09" RT AP-90/0(SC+0) = 29° 59' 45" LT
6.	The number, size and the material of the conductors and wires crossing the NH / SH 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 Bersimis Conductor dia 35.050 mm, No. of Conductor - 3 x 4 Nos. Unit Weight 2.181 Kg/m, ultimate strength - 15704 kg. B) Aluminum - 42/4.57 mm, Steel - 7/4.57 mm C) Earthwire - 7/4.57 mm (Steel), no. of Earthwire -1 Nos. D) OPGW-8.6 To 9.5 μm
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.
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.	765 KV, 50 Hz, 3 Phase Single Circuit with 1 earth wire & 1 OPGW.
10.	Height of structure above ground and below ground separately.	A) Angle tower location no. AP-89/0(SB+6) heights above GL 59.43m. Depth below GL = 3.5m. B) Angle Tower Location no. AP-90/0(SC+0) heights above GL 53.43m. Depth Below GL = 3.5m.
11.	Height above ground level of (1) Lowest conductor on insulator and (2) guard wire on bracket above ground level.	11. Angle Tower Location No. = AP-89/0(SB+6) (1) 36.00 m, (2) 59.43m.  Angle Tower Location No. AP-90/0(SC+0) (1) 30.0 m. (2) 53.43m.
12.	Height of road level above ground level measured at the foot of the structure.	Angle Tower Location No. AP-89/0(SB+6) = 1.01 M. Angle Tower Location No. AP-90/0(SC+0) = 1.22 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).	24.30 Mtr.
14.	Ultimate Tensile stress of the steel wire used for guard for earth wire in tones per Sq. Cm.	Not applicable
15.	Approximate distance of each of the structures to the nearest NH (marked by pillars/ Fencing) measured along the alignment of the transmission line.	Angle Tower Location No. AP-89/0(SB+6) = 91.46 M. Angle Tower Location No. AP-90/0(SC+0) = 75.81 M.
16.	Are the proposed structure is in NH boundary.	No, Both structures are Outside of NH boundary.
17.	Are approved anticlimbing devices and warning notices provided on the structures erected	Anticlimbing devices & Warning boards are provided on both the Towers.
18.	National / 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 approved design confirming with I.S.I code of practice for use of structural	Tested steel quality Lattice steel structure made of mild steel and high tensile steel in confirmly with clause 4.0 of I.S. 226- 1975 and with a tensile strength of 15704 Lbs/Sq Inch.

	steel in general building construction (IS 800 1965).	
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.	Polymer discs of electromechanical strength of single disc =160 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 64M+3M is done.
b)	To reduce the hazard to life and property.	Warning boards are provided.
c)	Supporting structure including guys, from the danger of being struck by moving road vehicle.	Structures are at safe distance from road.
25.	Drawing showing details of crossing disturbance of road, ground or attachment that may be necessary	Enclosed.

  
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