



# 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)

19001/1/RO-W-UP/NH-93/137.526/400KV/680.

दूरभाष / Phone : 0522-4960291

टेलीफैक्स / Fax : 0522-4950680

ई-मेल / E-mail : rowestup@nhai.org

rowestup@gmail.com

वेबसाइट / Website : www.nhai.gov.in

Dated: 23.03.2021

### Invitation of Public Comments

**Sub:** Proposal for permission for overhead crossing of 400 KV D/C Shamli-Aligarh Transmission Line at km. 137.526 on NH-93 between Pilauna and Raipur-reg.

The Executive Engineer, UPPTCL, Khurja has submitted the proposal for permission for overhead crossing of 400 KV D/C Shamli-Aligarh Transmission Line at km. 137.526 on NH-93 between Pilauna and Raipur

2. From the submitted proposal, it is seen that structures (Transmission Towers) on either side are being erected at distance of 143m & 63m respectively from either side of NH boundary. Crossing span of the structure is 250m. Further, the minimum vertical clearance of 29.60m 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 89° degree.

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 issues with the approval of RO-West (UP).

**Encl:** As above.

*Singh* 23/03/21  
(Anuj Kumar Singh)  
Manager (T)  
For RO-UP (West)

#### 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 Executive Engineer, UPPTCL, Khurja for information.
4. The Project Director, NHAI, PIU-Moradabad 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

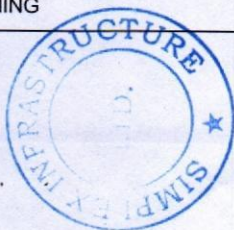
Head Office : Plot No. G-5 & 6, Sector - 10, Dwarka, New Delhi - 110 075 Phone : 91-11-25074100/200

### CHECK LIST

FOR NH ROAD CROSSING BY 400 KV D/C TWIN MOOSE SHAMLI-ALIGARH.

Name of Transmission Line : 400 KV D/C TWIN MOOSE SHAMLI-ALIGARH TRANSMISSION LINE

SL NO.	DESCRIPTION	DETAILS
1	NATIONAL HIGHWAY NO.	NH-93
2	CROSSING LINE NAME	Aligarh - Moradabad
3	CROSSING CHAINAGE	250 M
4	SYSTEM OF SUPPLY (e.i VOLTAGE, FREQUENCY, NO. OF PHASE, WHETHER NEUTRAL IS EARTHED OR NOT)	400 KV, 6 PHASE DOUBLE CIRCUIT LINE WITH ONE OPGW
5	POSITION OF TOWER	Tower Location.AP-60 DD+25 Tower Location.AP-61 DD+09
6	NORMAL SPAN AT TWIN MOOSE CONDUCTOR	400m
7	MAXIMUM SAG AT NORMAL SPAN	12.87 m
8	CROSSING SPAN	250 m
9	PRECEEDING SPAN WITH LOC	SPAN = 242 m
10	HEIGHT OF TOWER STRUCTURE ABOVE GROUND AND BELOW SEPERATELY AND DETAILS OF FOUNDATION	FOR- LOC . NO. AP-60 (DD+25) HT ABOVE GROUND LEVEL = 71.15 M , HT BELOW GL = 3.0M FOR- LOC . NO. AP-61 (DD+09) HT ABOVE GROUND LEVEL = 55.15M, HT BELOW GL = 3.0M
11	SUCCEEDING SPAN WITH LOCATION.	SPAN = 398 m
12	MAXIMUM SAG AT NORMAL SPAN FOR MOOSE CONDUCTOR AT 85° C	12.87 m
13	CLEARANCE OVER ROAD	29.60 m
14	HEIGHT OF LOWER CONDUCTOR FROM GROUND LEVEL AT TOWER	30.90 meter
15	HEIGHT OF LOWER CONDUCTOR FROM LEVEL OF ROAD AT CROSSING	29.60 m
16	ANGLE OF ROAD CROSSING	89 Degree
17	DISTANCE FROM NH BOUNDARY FROM CENTRE OF TOWER	FROM AP-60 DISTANCE = 143 m FROM AP-61 DISTANCE = 63 m
18	PRERPENDICULAR DISTANCE FROM CENTRE OF TOWER TO CENTRE OF ROAD	FROM AP-60 PERPENDICULAR DISTANCE = 165.00 m FROM AP-61 PERPENDICULAR DISTANCE = 85 m
19	ANTICLIMBING DEVICE	AT FIRST BELT LEVEL DRG SHOWN IN PROPOSAL
20	FOUNDATION TYPE	FS TYPE FDN
21	NO. OF STAY REQUIRED	NONE (SELF SUPPORTING TOWER)
22	MIN FACTOR OF SAFETY	2
23	SIZE OF POWER CONDUCTOR	Conductor - ACSR MOOSE Conductor dia= 31.77 MM; Cond.weight=2.004 kg/m
24	SIZE OF OPGW	OPGW - 48 FIBRE, UNIT WT= 0.583Kg/meter
25	TWO LEGS OF TOWER EARTHED	EARTHING IN TWO DIAGONAL LEGS
26	PLAIN PAPER DIAGRAM	GROUND PROFILE ENCLOSED
27	EARTHING	PIPE TYPE EARTHING



map  
800

परियोजना निदेशक / Project Director  
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण  
National Highway Authority of India  
मुरादाबाद / Moradabad  
Executive Engineer  
Electricity Transmission Division  
KHURJA

# UTTAR PRADESH POWER TRANSMISSION CORPORATION LIMITED

Crossing of National Highway-93 (Aligarh-Moradabad) for construction of 400 kv D/C Twin Moose Shamli-Aligarh Tr. Line

Name of Transmission Line : 400 kv D/C Twin Moose Shamli-Aligarh Transmission Line

1	Situation of the EHV transmissin line crossing on National Highway-93.	On National Highway-93 (aligarh-moradabad) between pilauna (approx 2 km) and raipur (3 km).
2	Site plan showing location of crossing (with Highway boundaries) in reference Highway Mileage and Telegraph posts or electric stucture on electric transaction area to be supplied on quarduplicate.	Site plan enclosed
3	Angle of crossing of the transmission line with the National Highway at crossing point.	At 89°00'00" Angle
4	The length of the span at the crossing and also those on either side of the crossing.	Crossing span = 250M Preceeding span = 242M Succeeding span = 398M
5	In the event of the transmission line deviating at any of the supports crossing necessitating one of the structure to be a corner structures, state angle of such deviation. The deviation of the span on either side of crossing shall be illustrated in the sketch mentionaed in the clausd 3above.	For Loc No. AP-60 Angle of deviation = 12°49'29 " LT For Loc No. AP-61 Angle of deviation = 04°39'51 " LT
6	The number, size and the material of the conductors and wires crossing the tracks each wire under phase, neutral each guard,bearer and ground , cross wire should be separately described and their dispoision indicated by means of sketch.	Conductor - ACSR MOOSE Conductor dia= 31.77 MM; Cond.weight=2.004 kg/m No of conductor = 6x1 = 6 nos) One Earthwire & OPGW. 48 FIBRE ; OPGW weight = 0.46 kg/m;
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 3 above.	Enclosed in sketch.
9	System of supply (I.e. voltage) .No. of phases, whether neutral is earthed or not.	400 KV,6 Phase Double Circuit tower with 1 OPGW
10	Height of strcuture above ground and below ground separately and details of foundation.	Angle Tower Location No. AP-60 ; Tower type - DD+25 m ; Heght above GL=71.15 m ; Foundation depth below GL-3.00M. Angle Tower Location No. AP-61 ; Tower type - DD+09 m ; Heght above GL=55.15 m ; Foundation depth below GL-3.00M.
11	Height above ground level of (1) Lowest conductor on insulator.	Angle Tower Location No. AP-60 ; Tower type - DD+25 m Angle Tower Location No. AP-61 ; Tower type - DD+09 m ; Heght above GL- to lowest conductor point =30.8 m
12	Height of road level above ground level measured at the foot of the structure.	From angle Tower Location.AP-60 DC+10 =2.64 m. From angle Tower Location.AP-61 DC+15 =2.58 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 un-earthed neutralsystem).	At Crossing Point=29.60

*Signature*

परियोजना निदेशक / Project Director  
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण  
National Highway Authority of India  
आगरा / Moradabad

*Signature*  
Executive Engineer  
Electricity Transmission Division  
KHURJA

# UTTAR PRADESH POWER TRANSMISSION CORPORATION LIMITED

Crossing of National Highway-93 (Aligarh-Moradabad) for construction of 400 kv D/C Twin Moose Shamli-Aligarh Tr. Line

Name of Transmission Line : 400 kv D/C Twin Moose Shamli-Aligarh Transmission Line

14	Ultimate tensile stress of the steel wire used for guard for earth wire in tones per Sq.Cms.	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. AP-60 ; DD+25 - 143m. Angle Tower Location No. AP-61 ; DD+09 - 63m.
16	Are the proposed structure is in NH boundary	Outside NH boundary
17	Are approved ACD devises and warning notices provided on the erected structure	Anti climbing devices and warning boards are to be provided on both the towers
18	Estimated block time to finish the job	Not required, we shall take precautions to provide supporting structures both side of roads.
19	Dimensions and types of brackets used for the cross arms as well as the guard wires	Please see the enclosed drawings. Not applicable for transmission line.
20	In each structure of the crossing span independently earthed by means of an earth plate.	Yes , each structure wil be independently earthed by pipe type of earthing as shown in the drawing.
21	In each structure supported by means of stage in three direction's give the size of guy wires ( the neglected in calculating the strength of structure)	No guys or stays are provided as structures are self supported.
22	If no guard wire is provided, in the transmission line protected by device to ensure instanтенous isolation is conduction?	Yes , the transmission line is protected instanтенously by high speed protection relays with carrier equipment.
23	Type of insulators used	23x2 nos 160 KN Disk insulator for Double Tension string.
24	state the methoid of maintainance to be employed to ensure the following protections	
a	From overhanging or decaying trees which might fall on the line.	Tree clearance to a distance of 26 m is kept on both side from the centre of tower.
b	To reduce the hazzard to life and property	Warning boards are provided
c	supporting structure includeing guys, from the bdanger of being struck by moving road vehicle.	Structures are at safe distance from road
25	Drawing showings details of crossing disturbanсe of road ground or attachment that may be necessary ( to be in quadruplicate)	Enclosed

परियोजना निदेशक / Project Director  
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण  
National Highway Authority of India  
मुरादाबाद / Moradabad

*Anshu*

*mgl*

*800*

**SIMPLEX INFRASTRUCTURE LTD.**

*Am*

**Executive Engineer**  
**Electricity Transmission Division**  
**KHURJA**