

# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन एवं राजमार्ग मंत्रालय) National Highways Authority of India दूरभाष /Tel : 0141-2292049 : 0141-2292054 फैक्स /Fax : 0141-2292049 ईमेल /Eail : rojaipur@nhai.org

(Ministry of Road Transport & Highways) क्षेत्रीय कार्यालय (राजस्थान) /Regional Office (Rajasthan)

एफ-120, जनपथ, श्याम नगर, जयपुर-302019

F-120, Janpath, Shyam Nagar, Jaipur-302019

No:NHAI/18013/1/2021-ROJ/Permission-OH Crossing-400KV/PGCIL/203/NH-754K, km 194 & 194.100/3055 Date:24.01.2023

## INVITATION OF PUBLIC COMMENTS

- Sub.: Proposal for grant of permission for overhead transmission line crossing at Km. 194+00 to 194+100 near Village-Bhojera, Tehsil & Distt-Bikaner on Sangariya-Rasisar PKG-AJ/SR-07 of Amritsar-Jamnagar, NH-754K by 400 KV 2x D/C Line (Twin HTLS) Bikaner-II SEZ PP-Khetri Transmission line (Part-I) associated with transmission scheme for evacuation of power from Solar Energy Zones in Rajasthan (8.1 GQ) under Phase-II-Part-F through Tariff Based Competitive (TBCB) Route by M/s. PGCIL reg.
- Ref.: 1. DGM Bikaner-II, Powergrid Corporation of India Ltd. Letter no. 235 dated 31.03.2022 and letter no. 413 dated 01.11.2022.
  - 2. PD, PIU-Hanumangarh letter no. NHAI/13025/1/2019/NOC(AJ/SR/Electrical/ 4679 dated 10.01.2023.

Sir,

It is to inform all concern that DGM Bikaner-II Powergrid Corporation of India Ltd. (PGCIL), Bikaner vide letter under reference (1) above has submitted a proposal for the subjected work and PD, NHAI, PIU, Hanumangarh has submitted the above proposal vide letter under reference (2) for approval of the Competent Authority, Highway Administration.

2. The proposal is regarding grant of permission for overhead transmission line crossing at Km. 194+00 to 194+100 near Village-Bhojera, Tehsil & Distt-Bikaner on Sangariya-Rasisar PKG-AJ/SR-07 of Amritsar-Jamnagar, NH-754K by 400 KV 2x D/C Line (Twin HTLS) Bikaner-II SEZ PP-Khetri Transmission line (Part-I) associated with transmission scheme for evacuation of power from Solar Energy Zones in Rajasthan (8.1 GQ) under Phase-II-Part-F through Tariff Based Competitive (TBCB) Route by M/s. PGCIL.

3. As per Para-4 of Ministry's Circular No. RW/NH-33044/29/2015S&R(R) dated 22.11.2016, the Highway Administration 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, before approval of the competent authority, the comments/objections of affected public is hereby invited with reference to the Ministry's circular dated 22.11.2016 due to OH Crossing of 400 KV D/C transmission line on the subjected stretch. The objections/comments may be addressed to the below mentioned address upto 23.02.2023, beyond due date, no comments/objections will be accepted.

## The Regional Officer, Regional Office - Jaipur

National Highways Authority of India,

F-120, Janpath, Shyam Nagar, Jaipur (Raj.)-302019,

### Tel : 0141-2292049, 2292054 Email : rojaipur@nhai.org

This issues with the approval of Highway Administration-cum Regional Officer, NHAI, Jaipur

Yours faithfully, Manoj Khoda) Manager (Tech.)

Copy to: (i) Web Admn., NHAI, HQ, New Delhi - for uploading in NHAI's website [webadmin@nhai.org]

- (ii) Director, NIC, New Delhi for uploading in Ministry's website. [mansoor@nic.in]
- (iii) PD, PIU-Hanumangarh: for information.
- (iv) DGM Bikaner-II, M/s. PGCIL, Bikaner: for information

मुख्यालयः जी–5 एवं 6, सेक्टर–10, द्वारका, नई दिल्ली – 110075, दूरभाष : 011–25074100, 25074200 फैक्स : 011–25093507 / 25093514 Corporate Office: G-5 & 6, Sector-10, Dwarka, New Delhi-110075, Phone: 011-25074100, 25074200 Fax : 011-25093507/25093514



- Sub: Construction of 6-lane access controlled Greenfield highway from Km 170+000 to Km. 200+000 of Sangariya (near Chautala)-Rasisar (near Bikaner) section of NH-754K as a part of Amritsar-Jamnagar Economic Corridor in the State of Rajasthan on EPC mode under Bharatmala Pariyojana(Phase-I) (AJ/SR-Package-07): Proposal for overhead crossing at Km. 194+000 to 194+100 Near Village Bliojera Tehsil Bikaner by 400 KV 2xD/C Line (Twin HTLS) Bikaner-II SEZ PP-Khetri Transmission line (Part-I) associated with transmission scheme for evacuation of power from solar energy zones in Rajasthan (8.1GW) under phase-II Part-F through tariff based competitive bidding (TBCB) route-Reg.
- Ref: [1] Application Ref. No.: 20220621/3/1/15292/23745 submitted on 05.07.2022.
  - [2] DGM Bikaner-II PGCIL letter no. 225 dated 31.03.2022.
  - [3] This office email dated 30.07.2022.
  - [4] Authority Engineer M/s. LEA Associates South Asia Pvt. Ltd. in association with Pioneer Infra Consultant Pvt. Ltd., Bikaner letter no. LASA/Highways/73720/A-J/Bikaner/1455 dated 05.08.2022.
  - [5] This office letter no. NHAI/13025/1/2019/NOC-SR/Powerdrid-Elect/3985 dated 22.08.2022.
  - [6] DGM Bikaner-II PGCIL letter no. 413 dated 01.11.2022
  - [7] CANARA Bank, Hanumangarh Junction letter no. CB/HMH/BG/2914/2/2021-22 dated 20.12.2022.

Sir,

Please refer to application ref. no.: 20220621/3/1/15292/23745 submitted on 05.07.2022 and letter under reference [2] above vide which the proposal for overhead crossing at Km. 194+000 to 194+100 Near Village Bhojera Tehsil Bikaner by 400 KV 2xD/C Line (Twin HTLS) Bikaner-II SEZ PP-Khetri Transmission line (Part-I) associated with transmission scheme for evacuation of power from solar energy zones in Rajasthan (8.1GW) under phase-II Part-F through tariff based competitive bidding (TBCB) route had been received from DGM Bikaner-II PGCIL, Bikaner.

This office vide email reference [3] above has sent the proposal to Authority Engineer of the project highway M/s. LEA Associates South Asia Pvt. Ltd. in association with Pioneer Infra Consultant Pvt. Ltd., Bikaner to examine the proposal as per Ministry Guidelines & site condition and to submit their comments/recommendations.

The Authority Engineer of the project high way M/s. LEA Associates South Asia Pvt. Ltd. in association with Pioneer Infra Consultant Pvt. Ltd., Bikaner vide reference [4] had examined the proposal and stated that:

- 1 Vertical clearance between 400KV bottom conductors to the top surface of NH-754K is 14.172m.
- 2. Crossing angle between conductor and NH-ROW is 87° 59'12.

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- 3. The horizontal distance from the central line of NH-754K and towers No.34A(LHA) & 348 (RHS) is respectively 95.592 m and 151.339 m.so the total length of the crossing span is 246.931m
- 4 The adjacent crossing tower on both sides of NH-754K is to be a D-type tower installed according to the submission of the plan & profile.

Further, the following is submitted for perusal please:-

2-

- 1. Proof of submission of online proposal at MoRTH Portal. The same has also been received at MoRTH NOC Portal vide Application Ref. No.: 20220621/3/1/15292/23745 submitted on 05.07.2022.
- The Processing charges amounting to Rs. 10,000/- has also been deposited by PGCIL on 05.07.2022. The copy of the same is attached herewith.
- 3. Bank Guarantee issued by State Bank of India of amounting to Rs. 3,22,000/- on 10.10.2022 & valid up-to 30.09.2023. The confirmation of the above BG has also been received from CANARA Bank Hanumangarh Junction through SFMS. Copy of the same is enclosed herewith.
- Receipt for deposition of Rs. 5,00,000/- on Bharatkosh Portal vide transaction no. 0310220006638 dated 03.10.2022 as per NHAI guideline dated 03.11.2020

Further, DGM-II Bikaner vide its letter no. 413 dated 01.11.2022 had also submitted that "as per clause 5.2 of MORTH circular number RW/NH-33044/29/2015/S&R(R) dated 22 November, 2016 the license fee for public utilities will be charges only for area below the support system/tower. Any tower of above said line are not place on the area which is defined by NHAI for NH754K. So no license fee is applicable."

In view of the above, following is submitted for kind consideration, perusal, further examination & approval of the Competent Authority please:-

- i. Issue the provisional NOC for overhead crossing at Km. 194+000 to 194+100 Near Village Bhojera Tehsil Bikaner by 400 KV 2xD/C Line (Twin HTLS) Bikaner-II SEZ PP-Khetri Transmission line (Part-I) associated with transmission scheme for evacuation of power from solar energy zones in Rajasthan (8.1GW) under phase-II Part-F through tariff based competitive bidding (TBCB) route.
- ii. Authorization for Signing of the agreement between NHAI & PGCIL.
- iii. Authorization to PIU for issue the final permission/approval to the subjected proposal subject to fulfillment of MoRTH guidelines and execution of work as per approved drawings.

Thanking you.

Encl.: As above.

Yours Faithfully, Lol ol 2023 Project Director

Copy to:

DGM, Biakner-II, PGCIL: for information please.

Guide	<u>C</u> elines for processing for laying of Utility line in the land along National	HECK — LIST Highway's vested with NHAI/P	WD/BRO.								
Gene	ral Information:										
I Name and Address of the Applicant (Agency		Name: Sarnam Singh Meena, DGM Bikaner II Bhiwadi Transco Limited. Address: B-129,Kanta-Khaturia Colony Bikaner-334003									
3.State 4.Location		NH- 754A Bharatmala U/C									
		RAJASTHAN near Bhojera village, Bikaner. IN B/w mile STONE 194000 to 194100.									
								246.91 Mtr.			
						6.Ler	ngth in M.	Over Head Crossing			
7.Wi	dth of available ROW in both side		-								
airection)		Across the National Highwa	y								
		NHAI Hanumangarh.									
10. H	ighway Administration address										
Sr No.	ltem *	Measurement Observations as per site conditions	MORTH Norms	Whether complying wi MORTH Norn							
1	Details of already laid utility service if any	NA	Enclosed								
	Whether up gradation of the stretch in near future is proposed or not.	NO	1								
2	a) If yes, provision of utility adversely affects the plan of up- gradation.	-	Not affect plan of up – gradation								
3	Laying of the utility service along the National Highways.	Over Head Crossing on NH - 754A Bharatmala U/C									
3.1	Location of proposed utility service along the stretch.	Near Village Khara, Bikaner, between ston no- 194000- 194100, (Tower No: AP 34A/0 – AP 34B/0) (Drawing Enclosed)	Utility Duct /beyond the toe line of the embankment and drains, and close to the extreme edge of the ROW.								
3.2	Depth of top of utility service from ground level.	-	0.6 M	NA							
3.3	Mechanism for crossing water channel.	No	Through utility duct (if provision exists) or beneath the bed of water channel.	NA							
3.4	Whether ROW is restricted in this stretch?	Yes 30 mtr. From the center line at both sides.	Enclosed	YES							
3.4.1	If Yes, whether provision of land acquisition is required to lay utility.	-		NO							
	(a). If yes, whether undertaking for land acquisition along with relevant L.A. details has been furnished.	e.		NA							
3.4.2	Width of concrete duct, if utility services are proposed to be laid in concrete ducts.	As per Drawing	Not less than one lane	NA							



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	4.1 Whether Existing drainage structures is allowed to carry the utility lines.		-	Not to be allowed	YES
	4.2	Proposed crossing of utility service.	Yes	Perpendicular to NH	YES
	4.3	Type of casing pipe/conduit carrying the utility line.	Over Head HTLS conductor crossing	Steel, cast iron, or reinforced cement concrete and have adequate strength.	YES
	4.4	Whether ends of the casing/conduit pipe are sealed from the outside.	No.	Sealed	NA
	4.5	Length of casing / Transmission Line crossing NH.	Overhead Line	Extended from drain to drain in cuts and toe to toe of slope in the fills	
	4.6	Depth of top of the casing / conduit pipe.	-	At least 1.2 m. below the top of subgrade	140
	4.7 Crossing method in case of CC pavement.		No. (B/T) Overhead Line	Only boring method (HDD)	
	4.8 Horizontal and vertical clearances in case utilities are allowed overhead.		Mentioned in the Drawing.	In accordance with IRC Codes	
	5	Document / Drawings enclosed with the proposal.	Yes.	Enclosed	
511		Cross – Section showing the size of trench for open trenching method.	Overhead Line	Enclosed, if applicable	
2		(a)Trench width	Overhead Line	Way leaves clearance 30 m. either side from CL of tower	
		(b)Filling of trench	RCC	As per Ministry guidelines vide letter No-RW/NH- 33044/29/2015/S&(R)Dated- 22/11/2016	I
		(c) Location of trench	-Do-		
	5.2	.2 Cross section showing the size of pit and location of conduit for -Do-		Enclosed, if applicable	
5.3 ROW, impor		Strip plan / Route plan showing utility line, chainage, width of ROW, distance of proposed utility from the edge of ROW, important mile stone, intersections, cross drainage works etc.	Yes.	Enclosed	
		Plan and profile drawing of stretch showing cross section of road at 20m distance along with ROW and proposed utility.	Yes.	Enclosed	
1	6	Methodology for laying of utility line	Over Head	N/A	
	7	Draft License Agreement is as per Ministry guidelines vide letter No. RW/NH – 34044/29/2015/S&R (R)dated 22.11.2016 and signed by two witnesses.	Yes.	Enclosed	
		License fees in Favor of MORTH RPAO Jaipur.	At the time of Permission issued	As per Ministry vide circular no. RE/NH-33044/29/2015/S&(R)dated 22.11.2016	
		Whether Bank Guarantee has been obtained.	-	As per Ministry vide circular no. RE/NH-33044/29/2015/S&(R)dated 22.11.2016	
		(a)If yes, whether Confirmation of BG has been obtained as per MORTH / NHAI guidelines.	-		
1	10	Affidavit / Undertaking from the Applicant for			
1	0.1	Undertaking for not to damage others utility, if damaged then to pay the loses to either to MORTH/NHAI or to the concerned agency.	Enclosed	Enclosed	
1	0.2	Undertaking for renewal of bank guarantees and when asked by NHAI/MORTH.	Enclosed	Enclosed	
1		Undertaking for confirming all standard condition of MORTH/NHAI guidelines.	Enclosed	Enclosed	
1	<u>n 1 i</u>	Undertaking for shifting of utility as and when asked by MORTH/NHAI within a month at their own cost.	Enclosed	Enclosed	
	10.5	Undertaking for indemnity against all damages and claims.	Enclosed	Enclosed	
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106	Undertaking for management of traffic movement during laying of utility line without hampering the traffic	Enclosed	
	Undertaking that if any claim rised by the Concessionaire/contractor then the same has to be paid by the applicant	Enclosed	
10.8	Undertaking that the applicant has obtained various safety clearances from the respresentative authorities such as Director of Electricity, Chief controller of explosives, Petroleum and Explosive safety Organization, Oil industry Safety Directorate, State/Central pollution control board and any other statutory clerances appliocable, before applying to highway administration.	Enclosed	

The right of the way (ROW) of the National Highway available at the proposed location from the center line of divided carriageway is (\_ \_) m (from the center of ROW to edge of ROW to edge of ROW towards proposed utility.)

The above particulars along with the drawings and documents have been verified and certified of correct as per prevailing site conditions.

सिंह मीना [Name Designation of POWERGRID [Name Designation of POWERGRID representative of applicant]

[Name Designation and signature of concerned field authority of NHAI/PWD/BRO



Electrical Engineer LEA Associates South Asia Pvt. Ltd. Bikaner (Rajasthan)





## Methodology for laying of Utility Transmission Line

<u>STUB SETTING</u> :- it is the process of tower foundation which is already beyond the range of ROW of NH 754A Bharatmala U/C and do not affect /damage the NH 754A Bharatmala U/C in any circumstances

<u>TOWER ERECTION</u>: - it is the process of building the tower only casted foundation which is also beyond the range of ROW NH 754A Bharatmala U/C.

CONDUCTOR LAYING:-

- 1. It is the process of laying an overhead conductor between two tower locations
- 2. The conductor is an over head conductor not an underground cable
- 3. Both the towers are already be on the range of ROW of NH 754A Bharatmala U/C and do not affect / damage the NH 754A Bharatmala U/C in any circumstances

#### WORKING METHODOLOGY

- 1. Two numbers tower on both side of NH 754A Bharatmala U/C already erected as per approved drawing
- 2. Thereafter the traffic will be stopped by the help of traffic stopper of NHAI Hanumangarh, Red Tapes and Red Flags holding by manpower etc. on the both side of Road at both direction

For safety purposes we will also engage the local police for avoiding any kind of practical issue and 2-3 government vehicle will also be available at location for attending an emergency if occurs.

3. Then the conductor will be placed from one side of tower structure to other side of tower structure and actual stringing will be subsequently made without any delay. The details of slots and its timing is as follows.

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S.NO	Slot Details	Slot Period in (Approx.)	No of Conductors in each Slot	Deatails of Conductor
1	Slot -1	20 Minutes	4 conductors	Top Conductors of 2xD/C Line
		Gap of 1 H	lour	
2	Slot -2	20 Minutes	4 conductors	2 <sup>nd</sup> Top Conductors of 2xD/C Line
	η	Gap of 1 H	lour	
3	Slot -3	20 Minutes	4 conductors	3 <sup>rd</sup> Top Conductors of 2xD/C Line
	h	Gap of 1 H	lour	1
4	Slot -4	20 Minutes	4 Earth Wire	4 <sup>th</sup> Top Conductors of 2xD/C Line
		Gap of 1 H	our	
5	Slot -5	20 Minutes	4 conductors	5 <sup>th</sup> Top Conductors of 2xD/C Line
		Gap of 1 Ho	our	
6	Slot -6	20 Minutes	4 conductors	Bottom Conductors of 2xD/C Line
		Gap of 1 Ho	bur	
7	Slot-7	10 Minutes	1 conductor	Earth wire
Total Tir	ming	130 minutes		

In above mentioned task 60-70 working manpower will be involved for execute the crossing work with the proper safety all the safety

All the safety precaution will be adopted for proper execution of work

## Note:-

If in case any emergency occurred during the execution of work between any slot timing we will immediately cut the placed conductor in the mid by cutting tools and on the spot we will provide the clean road for attending an emergency situation.

4. Then the required line hardware fitting will be fixed in both throughout the span as and where necessary and stringing will be completed

5. After completion of stinging work the all the temporary arrangement shall be removed



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Electrical Engineer LEA Associates South Asia Pvt. Ltd. Bikaner (Rajasthan)

## Calculation of license Fee for laying of 400kv 2xD/C line through NH 754A Bharatmala U/C

License Fees = (Utilizes NH Area X Prevalling Circle Rate of Land per Unit Area)/(10\*12)

Utilized NH Land area = (ROW width of the utility line ) X length

ROW width of 400KV 2xD/C over head line = 46 Meter

Length of utility line crossing NH	= 70 Meter
Utilized NH Land area	= 46X70 meter
	= 3220 sq. meter

= 34659.79 sq.ft

Circle Rate of Land (copy enclosed)

= 123296 Rs/Hectare (1 hectare =10000 sq mtr.) = 12.3296 Rs/sq mtr. → 67.30 Rs. as per Award

216706

License Fees (Rs/month)

= 380.844/- => (3220 × 67.30) / (10×12)

= (3220\*12.3296)/(10\*12)

License fee for 5 years

= 12x5x380.844 12 × 5 × 1805.88 =22850.64/-

= 1,08, 353/2 =22050

33% of license fee for 5 years for public utility = 0.33x22850.64/-

=7540.7112/-

0.33 × 1083 53/2 = 35756/2

dated 10/09/2018

= 1805.88/2

Note:- As per Guideline issued by MoRTH Circular RW/NH-33044/29/2015/S&R(R) dt. 22.11.2016 license fee for public utilities shall be 33% of the fee prescribed for industrial utility(i.e. calculated as above)

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