



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सडक परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

National Highways Authority of India

(Ministry of Road Transport and Highways, Government of India)

श्रेत्रीय कार्यालय : 41-29-45A, सर्वे नं: 373/2A, कोदंडरामालयम्, चलासानी नगर,
रानीगारीतोटा, कृष्णालंका, विजयावाडा - 520 013, आन्ध्र प्रदेश

Regional Office : D.No. 41-29-45A, RS.No. : 373/2A, Kodandaramalayam, Chalasani Nagar,
Ranigari Thota, Krishna Lanka, Vijayawada - 520 013, Andhra Pradesh.

फोन / Tel : 0866-2483910, ई-मेल/e-mail: rovijayawada@nhai.org, nhairovja@gmail.com

वेब/ web: www.nhai.gov.in



Ref: NHAI/RO-VJA/PIU - ATP/NOC/APTRANSCO/2023-24/ 4171

Dt.22.11.2023

To

The Sr. Technical Director,
NIC, Transport Bhawan,
New Delhi- 110001.

Sub: **RO - Vijayawada** - Permission for crossing of 220 KV SMDC line from 400 KVSS Hindupur to the proposed 220 KVSS Penukonda across NH-44 (Hyderabad to Bangalore) near Vadigepalli (Village), Gorantla (Mandal), Sri Satya Sai (district) in the State of Andhra Pradesh - **Public comments** - Reg.

Sir,

Please find enclosed herewith a proposal submitted by M/s. APTRANSCO for permission for crossing 220 KV SMDC line from 400 KVSS Hindupur to the proposed 220 KVSS Penukoda crossing of NH-44 near Vadigepalli Village, Gorantal Mandal of Sri Satya Sai District in the State of Andhra Pradesh.

2. As per MORTH guidelines vide letter No.RW/NH-33044/29/2015/S&R(R) dated 22nd November 2016, the application along with the recommendations of PD, PIU-Anantapur are enclosed herewith with a request to host the same in the Ministry's website for 30 days seeking claims and objections (on grounds of public inconvenience, safety and general public interest), for taking further necessary action.

Encl: As above

Yours faithfully,

(R.K. Singh),
Regional Officer
RO - Vijayawada

Copy to:

- (i) PD, PIU - Anantapur
- (ii) M/s. APTRANSCO - for information.



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सडक परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

National Highways Authority of India

(Ministry of Road Transport and Highways, Government of India)

श्रेणीय कार्यालय : 41-29-45A, सर्वे नं: 373/2A, कोदंडरामालयम्, चलासानी नगर,

रानीगारीतोटा, कृष्णालंका, विजयावाडा - 520 013, आन्ध्र प्रदेश

Regional Office : D.No. 41-29-45A, RS.No. : 373/2A, Kodandaramalayam, Chalasani Nagar,

Ranigari Thota, Krishna Lanka, Vijayawada - 520 013, Andhra Pradesh.

फोन / Tel : 0866-2483910, ई-मेल/e-mail: rovijayawada@nhai.org, nhairovja@gmail.com

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Ref: NHAI/RO-VJA/PIU - ATP/NOC/APTRANSCO /2023-24/ 4172

Dt.22.11.2023

INVITATION OF PUBLIC COMMENTS


Sub: RO - Vijayawada - Permission for crossing of 220 KV SMDC line from 400 KVSS Hindupur to the proposed 220 KVSS Penukonda across NH-44 (Hyderabad to Bangalore) near Vadigepalli (Village), Gorantla (Mandal), Sri Satya Sai (district) in the State of Andhra Pradesh - Public comments - Reg.

The Project Director, PIU - Anantapur submitted a proposal of M/s. APTRANSCO for permission for crossing 220 KV SMDC line from 400 KVSS Hindupur to the proposed 220 KVSS Penukonda crossing of NH-44 near Vadigepalli Village, Gorantal Mandal of Sri Satya Sai District in the State of Andhra Pradesh.

As per MORTH guidelines vide letter No.RW/NH-33044/29/2015/ S&R(R) dated 22nd November 2016, the Highway Administration will put out the application in the Ministry's website for 30 days seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

In view of the above, the comments of public, if any, on the above mentioned proposal is invited on below mentioned address.

Regional Officer - Vijayawada,
National Highways Authority of India,
Regional Office, Dr. No.41-29-45A, R. S. No.373/2A
Near Kodandaramalayam, Chalasani Nagar,
Ranigarithota, Krishnalanka, Vijayawada - 520 013.
Email: rovijayawada@nhai.org


(R.K. Singh),
Regional Officer
RO - Vijayawada



राष्ट्रमेव जयते

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

NATIONAL HIGHWAYS AUTHORITY OF INDIA

(Ministry of Road Transport & Highways, Government of India)

परियोजना कार्यान्वयन इकाई - अनंतपुरम्

6-4-239, तीसरा क्रॉस, मारुति नगर, अनंतपुरम्

PROJECT IMPLEMENTATION UNIT ANANTAPURAMU

6-4-239, 3rd Cross, Maruthi Nagar, Anantapuram - 515 004.

टेली / Tele : 91-8554-275589 ई-मेल / Email: anantapur@nhai.org nhaiuiatp@gmail.com



NHAI/PIU-ATP/11021/22/NOC/1143

18.11.2023

Regional Officer

National Highways Authority of India

Door No.41-29-45A, 3rd & 4th floors

Near Kodandaramalayam

Chalasani Nagar, Ranigarhota

Krishnalanka, VIJAYAWADA - 520 013



Sub: Operation and Maintenance of Hyderabad - Bangalore section from Km 211.000 to Km 462.164 of NH-44 (Total length 251.164 Km) in the state of Andhra Pradesh - Crossing of 220 KV SMDC line from 400 KVSS Hindupur to the proposed 220KV SS Penukonda-crossing of National Highway NH-44 (Hyderabad to Bangalore) near Vadigepalli (Village), Gorantla (Mandal), Sri Satya Sai (district) - Approval for NH crossing- Requested- reg.,

Ref: 1. This office letter no. 1080 dtd 26.10.2023
2. Executive Engineer, APTRASCO, letter no. 1294 dtd 18.10.2023.

Sir,

This has reference to Executive Engineer, Construction Division, APTRANSCO, Ananthapur letter under reference 2nd cited above requesting to accord the permission for crossing of 220 KV SMDC line from 400 KVSS Hindupur to the proposed 220KV SS Penukonda at Km.445.550 across National Highway 44 on Hyderabad - Bangalore section.

2. In this regard, the DPR Consultant vide letter no.5490 dtd 31.10.2013 has informed that they have examined the subject proposal and submitted the following comments:
- Applicant has furnished the proposal for 1 nos. HT line crossing in between Km.445.300 & 445.400 on Hyderabad-Bangalore section of NH 44.
 - It is noted that the said location is falling in design Km.445.550 as per theDraft DPR.
 - The approximate level difference between existing road level to proposed finished road level is given below.

S.No.	Location	Vertical clearance proposed, m	Existing Ground level in, m	Finished Road level, m	Approximate level difference between existing road to proposed FRL in m,
1	445.550	16.25	675.728	676.030	0.302

- a) In view of above the Electrical crossing proposal is recommended by the DPR Consultant.
3. Further, the SC of the subject stretch vide letter no.283 dtd 31.10.2023 has informed that as per norms, the actual required height from FRL to the lowest conductor is satisfied. As such, the proposal of Electrical line crossing was recommended.

Cont...2

Building a Nation, Not Just Roads

कारपोरेट कार्यालय : जी-5 एवं 6, सेक्टर- 10, द्वारका, नई दिल्ली - 110075. वेबसाइट : <http://www.nhai.org>

Corporate Office: G-5 & 6, Sector - 10, Dwaraka, New Delhi - 110 075 Website : <http://www.nhai.org>

NHAI/PIU-ATP/11021/22/NOC/

18.11.2023

-2-

4. The proposal for stringing the electrical line submitted by Executive Engineer is as under.
- (a) The location of power line crossing is at design chainage at Km 445.550 near Vadigepalli village on Hyderabad - Bangalore section is furnished in the drawing.
 - (b) No part of the foundation of electrical tower will fall in ROW of NHAI.
 - (c) The electrical towers are erected at more than 30 m from the centre of ROW. i.e., at a distance of 101 mts on LHS & 83 mts on RHS from centreline of median.
 - (d) After accounting the maximum possible sag in bottom conductor, the vertical clearance at road crossing point is 16.25 m.
 - (e) Executive Engineer, Construction Division, APTRANSCO, Ananthapur, has ensured that they will follow the provisions of IRC 32-1969, CEA Regulations/Statutory provisions of Indian Electricity Rules and other relevant guidelines issued.
5. Further, the Executive Engineer, Construction Division, APTRANSCO, Ananthapur have submitted the following.
- (i) Undertakings on Non-judicial stamped paper of Rs. 50/-.
 - (ii) License deed for laying overhead electric power line across NH land on Non-judicial stamped paper of Rs. 100/-.
 - (iii) Check list for getting approval for laying of overhead electric power line across NH land.
 - (iv) Crossing details at NH.
 - (v) Sketch showing crossing of overhead line.
6. The location of crossing the 220 KV line was inspected and the following are submitted.
- (a) There is no habitation around the proposed location to the vertical clearance of the Electrical line proposed is 16.25 m, which is more than the suggested clearance for 220 KV line.
 - (b) Executive Engineer, Construction Division, APTRANSCO, Ananthapur has proposed to erect the towers on both ends in the private land to maintain 16.25 m clearance from FRL of the road.
7. In view of the above, it is requested to accord approval for the proposal for crossing of 01 nos of 220 KV line at the above location, please.

Encl: As above

Yours faithfully


(A. Tarun Kumar)

DGM (Tech.) & Project Director

Letter No. AA/HW/NHAI/2446/2023-24/**5490**

Date 31.10.2023

To,
The Project Director
Project Implementation Unit (PIU),
National Highways Authority of India,
Anantapur, Andhra Pradesh.
E-mail: nhaipiatp@gmail.com

Sub: DPR - Consultancy Services for preparation of DPR for "Augmentation of existing 4 lane Section of NH-44 from Km.211.00 (Kurnool) to Km. 534.72 (Devanahalli Village in the State of Karnataka) to 6 lane Partial Access Controlled Highway in the State of Andhra Pradesh & Karnataka"-
APTRANSCO - Crossing of 220 KV SMDC line from 400 KVSS Hindupur to the proposed 220KV SS Penukonda-crossing of National Highway NH-44 (Hyderabad to Bangalore) near Vadigepalli (Village), Gorantla (Mandal) between the KM stones 445/300 to 445/400- Report submitted

Ref: 1. NHAI/PIU-ATP/11021/23/NOC/**1080** dt.26.10.2023

Dear Sir,

This has reference to the letters cited, wherein it has been requested to furnish the comments on the above mentioned proposed Electrical crossing. In this regard, proposal has been examined and following comments are herewith furnished.

- (i) Applicant has furnished the proposal for 1 No's HT line crossing at between existing Chainage Km.445+300 to Km.445+400.
- (ii) It is noted that the said location is falling at Design Km.445+550 as per the Draft Detailed project report.
- (iii) The approximate level difference between existing road level to proposed finished road level is given below.

Sl.No.	Design Km	Vertical clearance proposed, m	Existing Ground level in 'm'	Finished Road level in 'm'	Approximate level difference between existing road to Proposed FRL in m,
1	445+550	16.25	675.728	676.030	0.302

In view of the above the above Electrical Crossing proposal may be recommended subject to the following conditions:

- (i) Applicant must ensure that the vertical clearance be maintained as per the standards with respect to the proposed finished road level.
- (ii) During six-laning of the Project Highway, if required, applicant must shift/upgrade the electrical crossings at their own cost and shall not be claimed from the Authority.

- (iii) Applicant shall be responsible for the safety of all construction works, such as erection of towers, stringing of line along and across the NH Road.
- (iv) Applicant shall inform to the Authority and Concessionaire prior to execution of the erection works.

This is submitted for taking further necessary action.

Thanking you and assuring you of our best services at all times,

With Best Regards,

for M/s. Aarvee Associates Architects Engineers & Consultants Pvt. Ltd.,



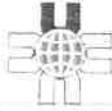
(S. S Reddy)

Team Leader cum Senior Highway Engineer

Copy to: Regional Officer, NHAI, Vijayawada – for kind information.



In
Association
with



UPHAM INTERNATIONAL
CORPORATION
Engineers, Economists and Project Managers

Project Office :
First Floor, D. No. 6-2-994, Plot No. 4&5,
Survey No. 55.28, Ramnagar, Anantapur.
Distt. - Anantapur. (Andhra Pradesh) - 515 001
Phone No.: +91 8554796783
Email: tl.amthdbtr@sainfra.co.in

Letter No. SAICPL-UIC/ATP/NHAI/2023/283

To,

The Project Director

National Highways Authority of India,
6-4-239, 3rd Cross Maruti Nagar,
Ananthapuram - 515004.

Dear Sir,

NHAI, PIU, Anantapur	
Inward No :	3615
E-Mail dad :	
Original dtd :	31.10.23
P.S / P.A	
S.E : -1	
S.E : -2	
Rt. Tahsildar	
Accountant	
Data Lake	
IT Expert	

Date: 31.10.2023

Sub: Consultancy Service of Supervision Consultancy Services (SC) for Operation and maintenance of Hyderabad - Bangalore section from Km.211.000 to Km.462.164 of NH 44 (Old NH 7) in the state of Andhra Pradesh: **Crossing of 220 KV SMDC line from 400 KVSS Hindupur to the proposed 220KV SS Penukonda-crossing of National Highway NH-44 (Hyderabad to Bangalore) near Vadigepalli (Village), Gorantla (Mandal) between the KM stones 445/300 to 445/400 towards Bangalore- Approval for NH crossing- Requested- reg.**

Ref: 1. NHAI/PIU-ATP/11021/23/NOC/1080 dated: 26.10.2023.

In the reference 1st cited above, the Project Director NHAI - PIU, ATP, duly enclosing the letter regarding Crossing of 220 KV SMDC line from 400 KVSS Hindupur to the proposed 220KV SS Penukonda-crossing of National Highway NH-44 (Hyderabad to Bangalore) near Vadigepalli (Village), Gorantla (Mandal) between the KM stones 445/300 to 445/400 towards Bangalore- Approval for NH crossing. In this connection it is to submit that the joint inspection conducted on 28.10.2023. In the Presence of AP TRANCO Department and SC team and observations are as follows:

1. The subjected location is at km.445.300 on NH-44 of Hyderabad- Bangalore Section.
2. The electrical towers erection and the strengthening work beyond the NH- RoW has been completed.
3. The connection from LHS to RHS is to be commenced with the clearance of Authority. Hence the representative is seeking for the help of partial stoppage of NH-44 traffic to energise the towers.
4. The representative is to be instructed to maintain the vertical clearance as per IRC-32-1969 and safety precautions while crossing the towers.

[Handwritten Signature]

5. No damage shall be occurred while work in progress.

6. Necessary sign boards of electric line crossing shall be installed by the representative.

Hence, the subjected work may be approved and representative may be instructed to mobilize the work with prior information to the NHAI & SC.

This is for your information and necessary action please

Thank you and assuring you of our best professional services at all times.

**For SA Infrastructure Pvt. Ltd., in association
With Upham International Corporation.**

 **Team Leader**

Encl ; Photographs.

Copy to: 1) Authorised Signatory SA Infrastructure Pvt. Ltd. Noida.

CHECK LIST

Guide lines for Project Director for processing the Proposal of laying over head electrical lines across
National High ways vested with NHAI

S.No	Item Description	Information/ Status	Remarks
1	General Information		
1.1	Name and address of the applicants	Executive Engineer, Construction Division, APTRANSCO, Ananthapur.	
1.2	National High Way Number	NH-44	
1.3	State	ANDHRA PRADESH	
1.4	Location	Near VADIGEPALLI Village, Gorantla Mandal, Satya sai Dist.	
1.5	Chainage in KM	Between KM stone 445/300 KM, 445/400 KM,	
1.6	Width of available ROW	60 Mtrs	
1.7 a)	Left side from centre line towards increasing Chainage / KM direction	30 Mtrs	
b)	Right side from centre line towards increasing Chainage / KM direction	30 Mtrs	
1.8	Proposal to lay over head electrical line		
a)	Left side from centre line towards increasing Chainage / KM direction	83 Mtrs	
b)	Right side from centre line towards increasing Chainage / KM direction	101 Mtrs	
c)	Angle of crossing	76.32	
1.9	Proposal to acquire land	Not Applicable	
a)	Left side from centre line	-----	
b)	Right side from centre line	-----	
1.10	Whether proposal is in the same side where land is not to be acquired, if not then where to lay cable	-----	
1.11	Details of already laid services, if any along the proposed route	-----	
1.12	Number of lanes (2/4/6/8 lanes) existing	4 lanes	
1.13	Service road existing or not , if yes then which side	No	
a)	Left side from centre line	-----	
b)	Right side from centre line	-----	
1.14	Proposed service road	-----	
a)	Left side from centre line	-----	
b)	Right side from centre line	-----	
1.15	Whether proposal to lay cable is after the service road or between the service road and main carriage	Not Applicable	
1.16	The permission for laying over head electrical line shall be considered for approval/ Rejection based on the Ministry circulars mentioned above	Not Applicable	
2	Document/ Drawing enclosed with the proposal	Drawing Enclosed	
			Contd..2

Project Director
NHAI P.I.U., Anantapur.

TEAM LEADER
O&M Hyd-Bng NH-44
SA INFRASTRUCTURE CONSULTANTS PVT LTD,
D.No. 6-2-994, 1st Floor,
Ram Nagar, ANANTHAPURAM,
Andhra Pradesh - 515 001.

2.1	Cross section showing the size of the trench for open trenching method (is it normal size of 1.2 m deep X 0.3 m wide) i) Should be greater than 60 cm wider than the outer diameter of the pipe .ii) Located as close to the extreme edge of the ROW as possible but not less than 15m from the center lines of the nearest carriage way. iii) Shall not be permitted to run along the National High ways when the road formation situated in double cutting nor shall be laid over the existing culverts and bridges. iv) These should be so laid that their top is atleast 0.6m below the ground level so as not to obstruct drainage of	Not Applicable	
2.2	Cross section showing the size of the pit and location of cable for HDD method	Not Applicable	
2.3	Strip plan/ Route plan showing over head electrical line , chainage width of ROW , important mile stone, inter section etc..	Yes	
2.4	Methodology for laying of over head electrical line	220 KV EHT Line	
2.4.1	Open trenching method (May be allowed in utility corridor only where cement is neither cement concrete nor dense bituminous concrete type). If yes methodology of refilling of trench	Not Applicable	
3	Draft licence agreement signed by two witness	Enclosed	
4	Performance bank guarantee in favour of NHAI has to be obtained @ 50 % 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 completion of work) as a security for ensuring / making good the excavated trench for laying the cables/ ducts by proper fillings and compaction, cleaning debris/ loose earth produced due to execution of trenching at least 50 m any from the edge of the right of way. No payment shall be payable by the NHAI to the license for clearing debris/ loose earth.	Not Applicable	
4.1	Performance bank guarantee as per above is to be obtained.	Not Applicable	
4.2	Conformation of BG has been obtained as per NHAI guidelines	Not Applicable	
5	Affidavit/ Under taking from the applicant for obtaining approval is enclosed or Not	Under taking is enclosed here with	
5.1	Not to damage to other utility, if damaged then to pay the losses either to NHAI or to the concerned	YES	
5.2	Renewal of Bank Guarantee	Not Applicable	
5.3	Conforming all standard condition of NHAI's	YES	
5.4	Shifting of over head electrical line as and when required at their own cost	YES	
5.5	Shifting due to 6 lanning/ widening of NH	YES	
5.6	Indemnity against all damages and claims clause (xxiv)	YES	Contd..3

Project Director
NHAI P.I.U., Anantapur.

TEAM LEADER
O&M Hyd-Eng NH-44
SA INFRASTRUCTURE CONSULTANTS PVT LTD,
D.No. 6-2-994, 1st Floor,
Ram Nagar, ANANTHAPURAM,
Andhra Pradesh - 515 004

V. G. M.
PROJECT ENGINEER
Construction
AP Highway

5.7	Traffic movement during laying of over head electrical line to be managed by the applicant	YES	
5.8	Prior approval of the NHAI shall be obtained before undertaking any work of installation, shifting or repairs , or alteration to the over head electrical line located in the National Highway Right of Ways	YES	
5.9	Expenditure if any incurred by NHAI for repairing any damage caused to the National High ways by the laying maintenance or shifting of the over head electrical line will be borne by the agency owning the line	YES	
5.10	If the NHAI considers if 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 agency owing the utility line within a reasonable time of the intimation	YES	
5.11	Certificate from the applicant in the following format (i) Laying of OH electrical lines will not have any deleterious effects on any of the bridge components and roadway safety for traffic (ii) For 6	YES	
6	Certificate from the project director	YES	
6.1	Certificate for conforming of all standard condition issued vide Ministry circular Not applicable NH-111/P/66/76 dated 19.11.1996, Ministry circular Not applicable RW/NH-111/P/66/76 dated 11.05.1982 and Ministry circular Not applicable RW/NH-11037/1/86/DOI dated 19-01-1995	YES	
6.2	Certificate from the PD in the following format " It is certified that any other location of the Electric cable would be extremely difficult and unreasonable costly and the installation of electric cable with in ROS will not adversely affect the design, stability & traffic safety of the high way nor the likely future improvement such as widening of the carriage way, easing of curve etc., (b) For 6 lanning (i) where feasibility is available " I do certify that there will be no hinderance to proposed structure as the said location (ii) in case feasibility report is not available " I do certify that sufficient ROW is available at site for accomidating proposed 6- lanning.	Not Applicable	

Project Director
NHAI P.I.U., Anantapur.

TEAM LEADER
O&M Hyd-Bng NH-44
SA INFRASTRUCTURE CONSULTANTS PVT. LTD.
D.No. 6-2-994, 1st Floor,
Ram Nagar, ANANTHAPURAM,
Andhra Pradesh - 515 001.

EXECUTIVE ENGINEER
Construction Division
A.P. Transport

7	If NH section proposed to be taken up by NHAI on BOT basis a clause is to be inserted in the agreement "The permitted high way on which license has been granted the right to lay cable /duct has also been granted as a right of way to the concessionaire under the concession agreement for upgradation of (NH 205 section at APTRANSCO crossing section of NH not applicable build , operate and Transfer basis) and there fore , the license shall honour the same"	Not Applicable	Contd..4
8	Who will supervise the work of laying of Over Head Electric line	Executive Engineer, Construction Division, APTRANSCO, Ananthapur.	
9	Who will ensure that the defects in the road portion after laying of OH electric line are corrected and if not corrected the action will be taken	Executive Engineer, Construction Division, APTRANSCO, Ananthapur.	
10	Who will pay the claims for the damages done/ disrupted in working of concessionaire if asked by the concessionaire	Executive Engineer, Construction Division, APTRANSCO, Ananthapur.	
11	A certificate from the PD that he will enter the proposed permission in the register of records of the permissions in the prescribed proforma (copy enclosed)	YES	
12	If any previous approval is accorded for laying of OH electrical line then photo copy of register of record of the permission accorded as maintained by OD may be enclosed	N A	

Project Director
NHAI P.I.U., Anantapur.

TEAM LEADER
O&M Hyd-Bng NH-44
SA INFRASTRUCTURE CONSULTANTS PVT LTD.
D.No. 8-2-994, 1st Floor,
Ram Nagar, ANANTHAPURAM,
Andhra Pradesh - 515 001.

V. N.
Executive Engineer
Construction Division
APTRANSCO, Anantapur.

TECHNICAL PARTICULARS OF EARTH WIRE

Sl No	TECHNICAL PARTICULARS	GS EARTH WIRE SIZE
		7/3.15mm
		Kg/mm ²
1	Indian standard to which earth wire conforms	IS:2141
2	Area of cross-section (Sq mm)	54.52
3	Nominal overall diameter(mm)	9.45
4	Maximum working tension(Kg)	5811
5	Guaranteed UTS	5811
6	Weight of Earth wire(Kg/ km)	430
7	Modulus of Elasticity E (Kg/mm ²)	19330




Executive Engineer
Construction Division
AP Transport & Roadways

TECHNICAL PARTICULARS OF ACSR MOOSE CONDUCTOR

Sl No	TECHNICAL PARTICULARS	ACSR Moose Conductor
		54+7/3.53mm
1	Indian standard to which earth wire conforms	IS:2141
2	Area of cross-section (Sq mm)	597
3	Nominal overall diameter(mm)	31.77
4	Maximum working tension(Kg)	16438
5	Guaranteed UTS	16438
6	Weight of Earth wire(Kg/ km)	2004
7	Modulus of Elasticity E (Kg/mm ²)	7036


Executive Engineer
Construction Division
A.P. Transport and Highways

CROSSING DETAILS

Name of the line	220 KV SMDC line from 400KV SS at Hindupur to the proposed 220 KV SS at Gorantla in Satya Sai(Dist)
Crossing	NH-44 near VadigePalli (Village),Gorantla (Mandal) Crossing Location will be Location No. 28/0 to Location No. 29/0 between 445/300, 445/400 KM stones
Crossing towers	Location No. 28/0, TSP C+6 Location No. 29/0, TSP C+9
Crossing span	184 mts
Distance from road side	Loc no. 28/0 - 83 Mtrs (from NH center) Loc no. 29/0- 101 Mtrs (from NH center)
Line crossing at Max sag	16.25 mtrs
No of Phases and conductors	3 Phases, 1 conductor/Phase
Systems of supply (i.e. Voltage, Frequency, No of Phases, whether neutral is earthed or	220 KV AC, 50 Hz, Three phase, Neutral earthed at station end.


Executive Engineer
Construction Division
AP Transco Limited

TRANSMISSION CORPORATION OF ANDHRA PRADESH LTD



Proposed National High way 44 crossing of 220 KV SMDC line from 400KV SS Hindupur to the proposed 220KV SS Penukonda.

Methodology of carrying out the stringing

1. The aim of this exercise is to carry out the stringing of 220 KV power line across the National High way between the towers AP 28/0 and AP29/0 with a span of 188 meters. The height of tower AP 28/0 at bottom most conductor is 25.085 meters and of AP 29/0 is 28.085 meters. After the stringing a clearance of 16.50 meters would be maintained from the road surface to the bottom most conductor of the line.
2. Wooden scaffolding of 16 mts height and 3 mts width would be installed on either side of the National High way 44. A distance of 10 mts would be kept from the edge of the high way to the edge of the scaffolding to provide safe distance in case of collapse of scaffolding. This scaffolding would be carrying only Earth Wire.
3. Steel pilot wire would be strung first as shown in the figure. To pass Steel pilot wire over the road, a polypropylene rope (Pilot rope) would be extended from scaffolding of one side and connected to the edge of the Steel pilot wire which would be on the scaffolding on other side. Once the connection is made, the pilot rope is pulled with tractor on the other side taking the Steel pilot wire on the wooden scaffolding. While pulling the Steel pilot wire due to self weight the Steel pilot wire will take a catenary shape and hence traffic needs to be stopped for about 15 minutes.
4. Once the Steel pilot wire is pulled completely, it would be connected to the ends of the peak as shown in figure.
5. Later the Six conductors will be dragged in the same manner as said above in case of Steel pilot wire by making up them on one side and every time there needs to be stoppage of traffic for about 15 minutes with time gap between one conductor and another. Likewise, all the conductors will be lifted and final stringing will be completed one by one.
6. During the above process every effort will be kept to maintain clearance from road and 15 to 20 minutes blockage of traffic would be necessary intermittently.
7. All safety measures would be followed as insisted by NHAI at the time of execution of work.

V. R.

Executive Engineer
Construction Division