



सत्यमेव जयते

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन एवं राजमार्ग मंत्रालय)

National Highways Authority of India

(Ministry of Road Transport & Highways)

दूरभाष/Phone : 07162-292880

फैक्स/Fax : 07162-292880

ई-मेल/E-MAIL chhindwara@nhai.org

वेबसाइट/Website : www.nhai.org



परियोजना क्रियान्वयन इकाई छिन्दवाड़ा / Project Implementation Unit Chhindwara

एच.नं. 84, पॉलीथिन फैक्ट्री के बाजू में, स्वर्ण जयन्ती नगर, खजरी रोड, फ्रेंड्स कॉलोनी, छिन्दवाड़ा म.प्र. 480001

H.No. 84, Beside Polythene Factory, Swarna Jayanti Nagar, Khajri Road, Near Friends Colony, Chhindwara (M.P.) 480001

CHW/MPPTL/Salaiya Bulaki/Ch. 163.70/NH-547/2022 / 5993

Date: 09.03.2023

INVITATION OF PUBLIC COMMENTS

Sub:- Application for the Submission of Crossing Proposal of NH-547 between Km. 163 & 164 Near Village-Salaiya Bulaki for 132 Kilovolt Double-Circuit, Single Stringing, Deonagar-Harral-Amarwara Transmission line, District-Chhindwara In the State of Madhya Pradesh-reg.

Ref:- 1. M/s Madhya Pradesh Power Transmission Lt. No. MP/NH/XING/146 Dated 27.12.2022
2. Regional office Lt. No. NHA/RO-MP/Permission/2022/204 dated 28.09.2022

With reference to subject matter, M/s Madhya Pradesh Power Transmission Ltd., Jabalpur has submitted proposal with checklist vide letter dated 27.12.2022 for the seeking permission of Crossing proposal of NH-547 between Km. 163 to 164 near Village-Salaiya Bulaki, District-Chhindwara for 132 KV DCSS Deonagar-Harral-Amarwara Transmission line according to Ministry's Circular no. RW-NH-33034/29/2015/S&R(R) dated 22.11.2016 at the location mentioned in the subject above.

As per para-4 of MoRTH Circular No. RW/NH-33044/29/2015/S&R (R) dated 22.11.2016, the Highway Administrative shall put out in the Public Domain for 30 days for seeking claims and objection (on ground of public inconvenience, safety, and general public interest).

In view of the above, the comments/objection of the affected public is hereby invited with reference to Ministry's Circular dated 22.11.2016 for the above-mentioned proposal.

The comments/objection may be addressed to the below-mentioned address, which should reach to this office, within 30 days from the date of publication; beyond which no comments shall be entertained.

PROJECT DIRECTOR,
NATIONAL HIGHWAYS AUTHORITY OF INDIA,
PROJECT IMPLEMENTATION UNIT-CHHINDWARA,
HOUSE NO. 84, BESIDE POLYTHENE FACTORY,
SWARNA JAYANTI NAGAR, KHAJARI ROAD, NEAR FRIENDS COLONY,
CHHINDWARA-480001, MADHYA PRADESH
E-MAIL:-chhindwara@nhai.org & chhindwarapd@gmail.com

(Sanjeev Sharma)

Project Director

PIU-Chhindwara, (M.P.)

Copy to:

1. **Web Admin**, NHAHQ, New Delhi-for Uploading on NHAHQ Website please.
2. **Sr. Technical Director**, NIC, Transport Bhawan, New Delhi-for uploading on Ministry's Website please.
3. **Regional Officer**, NHAHQ-RO-MP, (East) Jabalpur for information please.
4. **Dy. General Manager**, M/s MPPTL, House No.-5/1006, Near Ghadi Chowk, Vijay Nagar, Jabalpur for information please.
5. Office Master File.



O&M0520/LION/CHI-AMR-NAR/Pkg-II/2023/608

Date: - 25.02.2023

To,
The Project Director,
National Highways Authority of India,
Project Implementation Unit,
H. No. 84, Beside Polythene Factory,
Swarna Jayanti Nagar, Near Friends Colony,
Khajri Road, Chhindwara (M.P.) – 480001.

Subject:- "Supervision Consultancy Services for Supervision of Routine Maintenance/Incident Management /Toll Operation/Special/Repairs/Periodical Renewals/Civil Work of Chhindwara-Amarwara-Narsingpur from Km.87.100 to Km.210.000 (Total length=121.00 Km) in the state of Madhya Pradesh. (Package No. SP/MP/02/2019) – **Application of the submission of crossing proposal of NH-547 between Km 163 to 164 Near Salaiya Bulaki for 132 KV Double-Circuit single straining Deonagar-Harrai-Amarwara Transmission line-reg.**

Ref:-

1. MoRTH Circular No. RW-NH-33034/29/2015/S&R(R) on dated 22.11.2016
2. NHAI letter no CHW/MPPTL/Salaiya Bulaki /Ch.163.70/NH-547/2022/5905 on dated 10.02.2023.
3. MPPTL letter no.MPPTP-II/NH/XING/205 on dated 03.02.2023.
4. This office letter no O&M0520/LION/CHI-AMR-NAR/Pkg-II/2022/583 on dated 21.01.2023.
5. NHAI letter no. CHW/MPPTL/Salaiya Bulaki /Ch.163.70/NH-547/2022/5807 on dated 12.01.2023.
6. MPPTL letter no.MPPTP-II/NH/XING/146 on dated 27.12.2022.

Dear Sir,

This is in reference to above mentioned subject, we have received Letter No. 5905 Dated 10.02.2023 regarding application of the submission of crossing proposal of NH-547 between Km 163 to 164 Near Salaiya Bulaki for 132 KV Double-Circuit single straining Deonagar-Harrai-Amarwara Transmission line, as per Ministry Circular RW/NH-33044/29/2015/S&R dated 22.11.2016.

- (1) We have Visited the site along with Contractor Representative (M/s MPPTL, Jabalpur) and Supervision Consultants Representative and verified checklist at site and found it satisfactory.
- (2) As per para-6 of Ministry Circular, for utility services such as tower etc (rate in Rs per Sqm) of performance Bank Guarantee @Rs. 100 per meter is required to be submitted by the applicant with a validity of one year initially. In the case, you have applied for Transmission line crossing 01 number of 10.08 m of span, NH land in a length of 24 meter according the amount of BG work out to be **Rs. 24192/- (10.08*24*100)**
- (3) As per para-5 of Ministry Circular, the applicant is required to pay a license fee for use of NH land. The license fees as calculating using with the Chhindwara collector guideline 2021-22 for village-Salaiya Bulaki (Km. 163+330) and plot rates there on works out to be **Rs. 23950/- [(10.08*24*600*5*10/12)33%]** for permission period of Five (05) years.



So, we are recommending this for further process and it is also suggested to please instruct to MPPTL when they will be start straining transmission line conductors, firstly inform us before a week and to arrange all necessary safety measures.

For & on Behalf of M/s Lion Engineering Consultants Pvt. Ltd.
In Association with M/s. Sugam Technocrats Pvt. Ltd. &
M/s. Synergy Engineers Group Pvt. Ltd.



Rahul Sisodia
Highway Maintenance cum
Resident Engineer

Encl: Annexure 1

Copy for information:

1. The Sr. CGM (Tech), Lion Engineering Consultants, Bhopal (M.P.) for information Email:
sushil.nimbark@liongroup.in, design@liongroup.in

ANNEXURE - I

**163.330 KM Near Village - Salaiya Bulaki for 132 KV DCSS Deonagar-Harrai Amarwara
IN SAGAR-NAGPUR BYPASS (NH 547) SECTION
TOWER NO. - AP-2C (YB+6) & TOWER NO. - AP-2D(YDH+3)**

Bank Guarantee for Utilized NH land

Outer Conductor of tower (m)	NH-547 ROW (m)	Total Utilized NH land (sqm)	Unit Rate / SQ Mtr. For tower	Total Amount for utilized NH land
A	B	C = AxB	D	E = CxD
5.7+4.380 =10.08	24	241.92	100	24192

License fees for utilized NH land

Outer Conductor of tower (m)	NH-547 ROW at Ch. 10+200 km(m)	Total Utilized NH land (sqm)	Prevailing circle Rate of land per unit area	License fees	License Fees for Utilities 33 %	License Fess for 5 Years
A	B	C = AxB	D	E = CxD/10x12	F=E x 33 %	G=F x 60
5.7+4.380 =10.08	24	241.92	600	1209.6	399.168	23950.08


E.E. Lec

File No. 10412/09

MP POWER TRANSMISSION PACKAGE-II LIMITED.

PROPOSAL FOR NH-547 CROSSING

OF

**132 KV DCSS DEONAGAR - HARRAI-AMARWARA TRANSMISSION
LINE**

163.330 KM FROM NAGPUR TOWARDS SAGAR

IN NAGPUR-SAGAR (NH-547) SECTION

TOWER NO.- AP-2C(YB+6) & TOWER NO. AP-2D(YDH+3)



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परियोजना क्रियान्वयन इकाई छिन्दवाड़ा / Project Implementation Unit Chhindwara

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दूरभाष/Phone : 07162-292880

फैक्स/Fax : 07162-292880

ई-मेल/E-MAIL: chhindwara@nhai.org

वेबसाइट/Website : www.nhai.org



CHW/MPPTL/Salaiya Bulaki/Ch.-163.70/NH-547/2022/5905

Date: 10.02.2023

To,

Resident Engineer (Pkg-II),

M/s Lion Engineering Pvt. Ltd.,

H. No. A-24/25 Arcon City,

Near Khajri Road, Chhindwara- (M.P.) 480001

Sub.: Application for the Submission of Crossing Proposal of NH-547 between Km. 163 & 164 Near Village- Salaiya Bulaki for 132 Kilovolt Double-Circuit, Single Stringing, Deonagar-Harrai-Amarwara Transmission line-reg.

Ref.: 1. Your Office Lt. No. O&M0520/LION/CHI-AMR-NAR/PKG-II/2022/583 Dt. 21.01.2023

2. This office Lt. No. CHW/MPPTL/Salaiya Bulaki/Ch.-163.70/NH-547/2022/5807 Dt. 12.01.2023

3. M/s Madhya Pradesh Power Transmission Lt. No. MP/NH/XING/146 Dated 27.12.2022

Please refer to the letter dated 27.12.2022 from M/s Madhya Pradesh Power Transmission Ltd., Jabalpur in which he is seeking permission of Crossing proposal of NH-547 between Km. 163 to 164 Ch. 163.70 near Village- Salaiya Bulaki for 132 KV DCSS Deonagar-Harrai-Amarwara Transmission line according to Ministry's Circular no. RW-NH-33034/29/2015/S&R(R) dated 22.11.2016 at the location mentioned in the subject above.

The proposal is forwarded to your good office for scrutiny/examine as per MoRTH Circular dated 22.11.2016 vide letter dated 12.01.2023.

After scrutiny/examine as per MoRTH Circular dated 22.11.2016 you have reported to this office with the following observations vide letter dated 21.01.2023 are as below:-

Sl. No.	Observations	Compliance
1.	Location of Proposed Transmission line crossing not matching with site location.	Chainage number has been changed from 163.70 to 163.330.
2.	Check list crossing chainage not matching.	

M/s Madhya Pradesh Power Transmission Ltd. has again submitted the all Compliance vide letter dated 03.02.2023 observed by your office vide letter dated 21.01.2023.

In this regard, you are again requested to re-visit the site to ensure conformance to the details re-submitted by M/s MPPTL and check as per MoRTH Circular dated 22.11.2016 and subsequently, submit the report to this office for necessary action please.

Encl: 4 Sets Files.

Yours faithfully,

(Sanjeev Sharma)

Project Director

Copy to: The Dy. General Manager, M/s MPPTCL, House No.-5/1006, Near Ghadi Chowk, Vijay

Nagar Jabalpur for information please. Mail ID- mpptp02@gmail.com

MP POWER TRANSMISSION PACKAGE-II LIMITED

House No.-5/1006, Near Ghadi Chowk, Vijay Nagar, Jabalpur - 482002, Madhya Pradesh

CIN: U40100DL2020GOI368275

Mail ID: mpptp02@gmail.com

Ref. No: MPPTP-II/NH/XING/205

Date: 03-02-2023

To,
The Project Director,,
National Highway Authority of India (NHAI)
H.no. 84 , Swarna Jayanti Nagar ,
Chhindwara , Madhya Pradesh

Subject: Submission of Crossing Proposal of NH-547 between KM Stone 163 & 164 for 132 KV Deonagar - Harrai - Amarwara Line.

Ref: -

1. M/s NHAI Lt.No. CHW/MPPTL/Salaiya Bulaki/CH.163.70/NH-547/2022/5875 Dt.02-02-2023
2. M/s LECPL Lt.No. 08/M0520/LION/CHI-AMR-NAR/PKG-II/2022/583 Dt. 21-01-2023
3. M/s NHAI Lt.No. CHW/MPPTL/Salaiya Bulaki/CH.163.70/NH-547/2022/5807 Dt.12-01-2023
4. This office Lt.No. MP/NH/XING/146 Dt. 27-12-2022

Dear Sir,

With reference to your Letter No. CHW/MPPTL/ Salaiya Bulaki /CH. 163.70 /NH -547/2022/5875 Dtd - 02-02-2023 , we are hereby submitting the following Compliances as raised against our Letter No. MP/NH/XING/146.

Below are the details of the Observation and Compliance done :

Sr. No	Name of NH Crossing	Observation	Compliance
1	NH-547	Actual location of proposed Transmission line crossing not match with site location.	Chainage number has been changed from 163.70 to 163.330.
2	NH-547	Check list crossing chainage not matching.	Chainge number has been changed on checklist to 163.330.

Requesting you to Kindly accord the submitted proposal and provide us working permission at the respective chainage.

We solicit your quick action in this regard.

Yours Faithfully,

For MP Power Transmission Package-II Limited



MP POWER TANSMISSION PACKAGE-II LIMITED

1st floor, ACH, Shantigram, Near Vaishnav Devi Circle, S. G. Highway, Khodiyar, Ahmedabad 382 421 Gujarat, India

Registered Office: C-105, Anand Niketan, New Delhi - 110 021.

Check List

For Overhead NH-547 road crossing by 132 KV DCSS Deonagar-Harrai-Amarwara Transmission line.

S.No.	Description	As per site	Remarks
1	National Highway no.	NH-547	
2	Crossing Name	Nagpur-Sagar	
3	Crossing Chainage	163.330 km	
4	System of supply(i.e. Voltage) Frequency, no. of phases, whether	132 KV DCSS Line, 50Hz, 3 Phase, Single Circuit ,1 earth wire OR 1 OPGW	
5	Position of tower	Between AP 2C (YB+6) and AP 2D (YDH+3)	
6	Normal span at Twin ACSR PANTHER conductor	335 M	
7	Maximum sag at normal span	8.001 M	
8	Crossing span	220.0 M	ok
9	Preceding span with loc.	307.0 M.	
10	Succeeding span with loc.	295.0 M.	
11	Height of structure above ground and below ground separately	AP 2C(YB+6)=32.88 M AP 2D(YDH+3)=28.70 M Depth below Ground level=3.5 M Both	
12	Sag of ACSR PANTHER conductor size 30/3.0mmAL+7/3.0mm STEEL	220X220X8.001/335X335=3.451 M, 3.451+0.150 (Sag error) = 3.601 M	
13	Clearance over road	13.80 M	ok
14	Height of lower conductor over ground level at loc.	AP 2C(YB+6)=20.27 M AP 2D(YDH+3)=17.27 M	
15	Height/Difference of lower conductor from level of NH at loc.	AP 2C(YB+6)=19.97 M AP 2D(YDH+0)=15.97 M	
16	Angle of road crossing	87°00'00"	ok
17	Distance from NH boundary from centre of tower	AP 2C(YB+6)=102.0 M AP 2D(YDH+3)=108.0 M	
18	Perpendicular distance from centre of tower to centre of road	AP 2C(YB+6)=107.0 M AP 2D(YDH+3)=113.0 M	
19	Protection of assembly line	Danger Board	ok
20	Foundation type	AP 2C(YB+6)=WET AP 2D(YDH+3)=WET	
21	No. of stay required	None	
22	Min factor of safety	2	
23	Size of power conductor	30/3.00mmAL+7/3.00mm STEEL Dia.-21.00mm, Weight=0.974 kg/m	
24	Size of earth wire	Earth Wire- 9.45 mm, Weight= 0.428 kg/m. OPGW- 12.20 mm dia, Weight- 0.451 kg/m	
25	Size of OPGW	12.20 mm.dia	
26	Two legs of tower earthed	As per Specification.	
27	Plain paper diagram	Profile Enclosed	
28	Earthing	Pipe Type	





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परियोजना क्रियान्वयन इकाई छिन्दवाड़ा / Project Implementation Unit Chhindwara

एच.नं. 84, पॉलीथिन फैक्ट्री के बाजू में, स्वर्ण जयन्ती नगर, खजरी रोड, फ्रेंड्स कॉलोनी, छिन्दवाड़ा म.प्र. 480001

H.No. 84, Beside Polythene Factory, Swarna Jayanti Nagar, Khajri Road, Near Friends Colony, Chhindwara (M.P.) 480001

CHW/MPPTL/Salaiya Bulaki/Ch.-163.70/NH-547/2022/5875

Date: 02.02.2023

To,

The Dy. General Manager,
M/s MPPTCL, House No.-5/1006,
Near Ghadi Chowk, Vijay, Nagar Jabalpur

Sub.: Application for the Submission of Crossing Proposal of NH-547 between Km. 163 & 164 Near Village- Salaiya Bulaki for 132 Kilovolt Double-Circuit, Single Stringing, Deonagar-Harrai-Amarwara Transmission line-reg.

Ref.: 1. M/s LECPL Lt. No. O&M0520/LION/CHI-AMR-NAR/PKG-II/2022/583 Dt. 21.01.2023

2. This office Lt. No. CHW/MPPTL/Salaiya Bulaki/Ch.-163.70/NH-547/2022/5807 Dt. 12.01.2023

3. M/s Madhya Pradesh Power Transmission Lt. No. MP/NH/XING/146 Dated 27.12.2022

Please refer to your letter dated 27.12.2022 from "you are seeking permission of Crossing proposal of NH-547 between Km. 163 to 164 Ch. 163.70 near Village- Salaiya Bulaki for 132 KV DCSS Deonagar-Harrai-Amarwara Transmission line according to Ministry's Circular no. RW-NH-33034/29/2015/S&R(R) dated 22.11.2016 at the location mentioned in the subject above".

The proposal is forwarded to the Supervision Consultant M/s Lion Engineering Consultant for scrutiny/examine as per MoRTH Circular dated 22.11.2016 vide letter dated 12.01.2023.

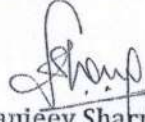
Supervision Consultant has reported to this office with the following observations vide letter dated 21.01.2023 are as below:-

1. Actual location of proposed Transmission line crossing not match with site location.
2. Check list crossing chainage not matching.

In view of above, you are directed to comply brought out the above observations vide letter dated 21.01.2023 and submit the report at the earliest to this office for further necessary action please.

Encl: As above.

Yours faithfully,


(Sanjeev Sharma)
Project Director

Copy to:

1. Resident Engineer, (Pkg-01) M/s LECPL, Chhindwara for information please.



LION ENGINEERING CONSULTANTS PRIVATE LIMITED

"Contributing in Building the Infrastructure of the Nation"

CIN No. U74999MP2020PTC0507

O&M0520/LION/CHI-AMR-NAR/PKG-II/2022/583

Date 21/01/2023

To,
The Project Director
National Highways Authority of India
Project Implementation Unit
H.No. 84, Beside Polythene Factory,
Swarna Jayanti Nagar, Near Friends Colony,
Khajri Road, Chhindwara (M.P.) - 480001

Sub: - "Supervision Consultancy Services for Supervision of Routine Maintenance/Incident Management /Toll Operation/Special Repairs/Periodical Renewals/Civil Works of Chhindwara-Amarwara-Narsinghpur from Km.87.100 to Km 210.000 (Total length=121.00Km) in the state of Madhya Pradesh (Package No. SP/MP/02/2019) -**Application of Submission of Crossing Proposal of NH-547 between Km. 156 & 157 near Village- Basuriya Khurd for 132 KV DCSS DEONAGAR-HARRAI-AMARWARA Transmission line-reg.**

Ref: -

1. CHW/MPPTL/Salaiya Bulakki/Ch.-163.70/NH-547/2022/5807 dated 12.01.2023
2. MPPTL letter no MP/NH/XING/146 dated 27.12.2022

Dear Sir,

With reference to above subject matter letter received from your office dated 12.01.2023 in which you have requested to scrutiny / examine the proposal received from M/s MPPTL, Jabalpur. We have jointly visited on dated 21.01.2023 on above mentioned location Km. 163 & 164 near village Salaiya Bulaki for 132KV DCSS DEONAGAR-HARRAI-AMARWARA transmission line along with MPPTL representative and also examine proposal, as per specifications.

- (i) Location of proposed Transmission line crossing not matching with site location.
- (ii) Check list crossing Chainage not matching.

So, we are returning this proposal for correction and suggest to give instruction to owning department to correction and resubmit the proposal

This is for your kind information and positive response.

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

For & On Behalf of M/s Lion Engineering Consultants Pvt. Ltd.
In Association with M/s. Sugam Technocrats Pvt. Ltd. &


Rahul Sisodia

Highway Maintenance cum
Resident Engineer

Encl: 4 No files.

Copy for information:

1. The Sr. CGM (Tech), Lion Engineering Consultants, Bhopal (M.P.) for information Email: sushil.nimbark@liongroup.in ; design@liongroup.in



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CHW/MPPTL/Salaiya Bulaki/Ch.-163.70/NH-547/2022/ 5807
To,

Date: 12.01.2023

Resident Engineer (Pkg-II),
M/s Lion Engineering Pvt. Ltd.,
H. No. A-24/25 Arcon City,
Near Khajri Road, Chhindwara- (M.P.) 480001

Sub.: Application for the Submission of Crossing Proposal of NH-547 between Km. 163 & 164 Near Village- Salaiya Bulaki for 132 Kilovolt Double-Circuit, Single Stringing, Deonagar-Harrai-Amarwara Transmission line-reg.

Ref.: M/s Madhya Pradesh Power Transmission Lt. No. MP/NH/XING/146 Dated 27.12.2022

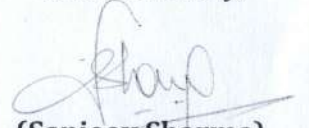
Please refer to the letter dated 27.12.2022 from M/s Madhya Pradesh Power Transmission Ltd. , Jabalpur in which he is seeking permission of Crossing proposal of NH-547 between Km. 163 to 164 Ch. 163.70 near Village- Salaiya Bulaki for 132 KV DCSS Deonagar-Harrai-Amarwara Transmission line according to Ministry's Circular no. RW-NH-33034/29/2015/S&R(R) dated 22.11.2016 at the location mentioned in the subject above.

The proposal is herewith forwarding for scrutiny /examination as per MoRTH Circular dated 22.11.2016 and subsequent comments may be submitted along with clear cut recommendation thereof to this office at the earliest with following essential documents:-

- (i) Checklist duly verified on each page.
- (ii) Tower Schedule.
- (iii) Profile Drawing.
- (iv) Madhya Pradesh Government Permission.
- (v) All Undertakings.

Encl: 4 Sets Files.

Yours faithfully,


(Sanjeev Sharma)
Project Director

Copy to:(1) **The Regional Officer, NHAI-RO-MP-(East) Jabalpur** for information please.

(2) **The Dy. General Manager, M/s MPPTCL, House No.-5/1006, Near Ghadi Chowk, Vijay Nagar Jabalpur** for information please. Mail ID- **mpptp02@gmail.com**

MP POWER TRANSMISSION PACKAGE-II LIMITED

House No.-5/1006, Near Ghadi Chowk, Vijay Nagar, Jabalpur - 482002, Madhya Pradesh

CIN: U40100DL2020GOI368275

Mail ID: mpptp02@gmail.com

Ref. No: MP/NH/XING/146

Date: 27/12/2022

To,
The Project Director,
National Highways Authority of India
H.No. 84 , Swarna Jayanti Nagar,
Chhindwara , Madhya Pradesh

Subject: Submission of Crossing Proposal of NH-547 between KM Stone 163 & 164 for 132 kV Deonagar – Harrai- Amarwara Line

Dear Sir,

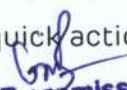
We would like to state that MP Power Transmission Package-II Limited (MPPTP-2L) is to install a Transmission scheme i.e., "Development of Intra-State Transmission Work in MP through Tariff Based Competitive Bidding: Package-2" for which prior approval of Govt. Of MP under section 68 of Electricity Act' 2003 had been issued vide Letter no. F-3-02/2020/13 dated 26th August'2021.

We have got approval from Govt. of MP, Ministry of power under section 68 of Indian Electricity Act'2002 for construction of the below line . Our 132 kV DCSS Deonagar-Harrai- Amarwara Line is crossing the NH-547 between chainage KM Stone 163 -164 near village Salaiya Bulaki . Please find enclosed herewith the Crossing proposal of NH-547. Requesting you to kindly accept our Proposal and issue us the NOC for crossing the above referred National Highway .

Accordingly, we are enclosing the 03 sets of Crossing Details, crossing profile, SLD, preceding, succeeding span tower schedule, Tower spotting data & section 68 for examination at your end.

Kindly accord your approval to our submitted proposal.

We solicit your quick action in this regard.


-MP Power Transmission Package-II Ltd.

Yours Faithfully

For MP Power Transmission Package-II Limited



MP POWER TRANSMISSION PACKAGE-II LIMITED

1st floor, ACH, Shantigram, Near Vaishnav Devi Circle, S. G. Highway, Khodiyar, Ahmedabad 382 421 Gujarat, India

Registered Office: C-105, Anand Niketan, New Delhi - 110 021.

MP POWER TRANSMISSION PACKAGE-II LIMITED.

SAGAR-NAGPUR National Highway-547 crossing chainage is 163.70 km from Nagpur to Sagar for construction of 132 KV DCSS Deonagar-Harrai-Amarwara Transmission Line between Angle Tower No. - AP-2C (YB+6) & AP-2D (YDH+3),

Name of Transmission Line: 132 KV DCSS Deonagar-Harrai-Amarwara Transmission Line With ACSR PANTHER Conductor

1.	Situation of the EHV transmission line crossing on National Highway.	On Nagpur-Sagar National Highway (NH-547) near Salaiya Bulaki 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	87° 00' 00"
4.	The length of the span at the crossing and also those on either side of the crossing	A) Crossing span 220.0 Mtr. B) Preceding span 307.0 Mtr. C) Succeeding span 295.0 Mtr.
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, deviation 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-2C-YB+6 < 12° 42' 08" RT AP-2D-YDH+3 < 58° 21' 53" 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 PANTHER Conductor dia 21.00 mm, No. of Conductor - 3 x 1 Nos. Unit Weight 0.974 Kg/m, ultimate strength - 9144 kg. Aluminum - 30/3.00 mm, Steel - 7/3.00 mm B) Earthwire - 7/3.15 mm (Steel), no. of Earthwire -1 Nos. OR OPGW-12.20 mm dia, weight 451kg/km. nos. of OPGW-1 nos.
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.


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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.	132 KV, 50 Hz, 3 Phase Single Circuit with 1 OPGW.
10.	Height of structure above ground and below ground separately.	A) Angle tower location no.AP-2C, YB+6 heights above GL 33.67m. Depth below GL = 3.5 m. B) Angle Tower Location no.AP-2D, YDH+3 heights above GL 32.88m. Depth Below GL = 3.5 m.
11.	Height above ground level of (1) Lowest conductor on insulator and (2) guard wire on bracket above ground level.	Angle Tower Location No = AP-2C, YB+6 (1) 20.27 m, (2) 33.67m. Angle Tower Location No.AP-2D, YDH+3 (1) 17.27 m. (2) 32.88m.
12.	Height of road level above ground level measured at the foot of the structure.	Angle Tower Location No. AP-2C YB+6 = -0.30 M. Angle Tower Location No. AP-2D YDH+3 = -1.30 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).	At Null Point = 14 M. At Road = 13.80 M
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-2C YB+6 =102.0 M. Angle Tower Location No. AP-2D YDH+3 = 108.0 M.
16.	Are the proposed structure is in NH boundary.	No, Both structures are Outside of NH boundary.
17.	Are approved anti climbing devices and warning notices provided on the structures erected	Anti climbing 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 steel in general building construction (IS 800 1965).	Tested steel quality Lattice steel structure made of mild steel and high tensile steel in conformity with clause 4.0 of I.S. 226- 1975 and with a tensile strength of 15704 Lbs/Sq Inch.
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 = 90 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 13.5 M is done.
b)	To reduce the hazard to life and property.	Danger Plates and Anti climbing devices provided.
c)	Supporting structure including guys, from the danger of being struck by moving road vehicle.	Safe tower falling distance from Road, and ground clearance maintained as per I.E Rules.
25.	Drawing showing details of crossing disturbance of road, ground or attachment that may be necessary	Enclosed.

Check List

For Overhead NH-547 road crossing by 132 KV DCSS Deonagar-Harrai-Amarwara Transmission line.

S.No.	Description	As per site	Remarks
1	National Highway no.	NH-547	
2	Crossing Name	Nagpur-Sagar	
3	Crossing Chainage	163.70 km	
4	System of supply(i.e. Voltage) Frequency, no. of phases, whether	132 KV DCSS Line, 50Hz, 3 Phase, Single Circuit ,1 earth wire OR 1 OPGW	
5	Position of tower	Between AP 2C (YB+6) and AP 2D (YDH+3)	
6	Normal span at Twin ACSR PANTHER conductor	335 M	
7	Maximum sag at normal span	8.001 M	
8	Crossing span	220.0 M	ok
9	Preceding span with loc.	307.0 M.	
10	Succeeding span with loc.	295.0 M.	
11	Height of structure above ground and below ground separately	AP 2C(YB+6)=32.88 M AP 2D(YDH+3)=28.70 M Depth below Ground level=3.5 M Both	
12	Sag of ACSR PANTHER conductor size 30/3.0mmAL+7/3.0mm STEEL	220X220X8.001/335X335=3.451 M, 3.451+0.150 (Sag error) = 3.601 M	
13	Clearance over road	13.80 M	ok
14	Height of lower conductor over ground level at loc.	AP 2C(YB+6)=20.27 M AP 2D(YDH+3)=17.27 M	
15	Height/Difference of lower conductor from level of NH at loc.	AP 2C(YB+6)=19.97 M AP 2D(YDH+0)=15.97 M	
16	Angle of road crossing	87°00'00"	ok
17	Distance from NH boundary from centre of tower	AP 2C(YB+6)=102.0 M AP 2D(YDH+3)=108.0 M	
18	Perpendicular distance from centre of tower to centre of road	AP 2C(YB+6)=107.0 M AP 2D(YDH+3)=113.0 M	
19	Protection of assembly line	Danger Board	ok
20	Foundation type	AP 2C(YB+6)=WET AP 2D(YDH+3)=WET	
21	No. of stay required	None	
22	Min factor of safety	2	
23	Size of power conductor	30/3.00mmAL+7/3.00mm STEEL Dia.-21.00mm, Weight=0.974 kg/m	
24	Size of earth wire	Earth Wire- 9.45 mm, Weight= 0.428 kg/m. OPGW- 12.20 mm dia, Weight- 0.451 kg/m	
25	Size of OPGW	12.20 mm.dia	
26	Two legs of tower earthed	As per Specification.	
27	Plain paper diagram	Profile Enclosed	
28	Earthing	Pipe Type	



bmg
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**DETAIL OF 132 kV DCSS DEONAGAR-HARRAI-AMARWARA LINE FOR OVERHEAD
NH-547 ROAD CROSSING**

Name of NH to be crossed by 132 kV D/C Harrai-Amarwara Transmission line	NH-547 SAGAR-NAGPUR
Crossing between Mile Stone No.	163 & 164
crossing angle	87°00'00"
Vertical clearance between 132 kV bottom conductor to top surface of NH-547	13.80 M.
Distance of 132 kV crossing tower no. AP-2C & AP-2D from crossing point	107.0 m & 113.0 m respectively
Height of Tower No. AP-2C (YB+6) & AP-2D (YDH+3)	33.67 m & 32.88 m Respectively
Preceeding span	307.0 m
Succeeding span	295.0 m
Crossing Span	220.0 m



CERTIFICATE

I, Priankush Dass, Deputy Manager, T/L Construction, MP Power Transmission Package-II Ltd., Jabalpur. Do hereby undertake in respect of our proposed Erection of overhead 132 kV DCSS Deonagar-Harrai-Amarwara Transmission Line for crossing on NH-547 chainage 163.330 KM stone 163-164 near village-Salaiya Bulaki, District- Chhindwara , Madhya Pradesh as per enclosed Map/Drawing and further:

1.0 Certificate that no other structure will be erected, nor any other service rendered within the ROW of NH-547.



-MP Power Transmission Package-II Ltd.

Priankush Dass
Deputy Manager
MP PKG-II Limited, Chhindwara

DRAFT

LICENCE DEED FOR LAYING OF OVERHEAD EHT LINE OVER THE NATIONAL HIGHWAY LAND

(For laying of overhead 132 KV DCSS Deonagar-Harrai-Amarwara Transmission line by MP Power Transmission Package-II Ltd., Sagar (M.P.) by crossing of National Highway No. -547 between KM 163-164 at near village – Salaiya Bulaki.)

Agreement to lay overhead 132 KV DCSS Deonagar-Harrai-Amarwara line by MP Power Transmission Package-II Ltd., Sagar (M.P.) by crossing of National Highway No. -547 between KM 163-164 at near village – Salaiya Bulaki in the state of Madhya Pradesh.

AN AGREEMENT made this.....Day of.....(Month) of.....(Year) between the National Highway Authority of India (herein after referred to as NHAI) which expression shall, unless excluded by or repugnant to the context, include his successors in office and assignees of the one part and MP POWER TRANSMISSION PACKAGE – II LTD., having its office at Sagar (hereinafter called the Licensee), which expression shall, unless excluded by or repugnant to the context, include his successor / administrator assignees on the second part.

Whereas the licensee has/licensees have applied to the government for permission to lay of overhead 132 KV DCSS Deonagar-Harrai-Amarwara line by MP Transmission line at KM 163-164 on Nation Highway No. 547 at near village- Salaiya Bulaki in the state of Madhya Pradesh and whereas the government have agreed to grant such permission terms and conditions hereinafter mentioned.

Now this agreement witness that in consideration of conditions hereinafter contained and on the part of the License/Licensees to be observed and performed the Government hereby grants to the License/Licensees permission to lay of 132 KV DCSS Deonagar-Harrai-Amarwara line by MP line Overhead High Tension Transmission line as per the approved drawing attached here to subject to the following conditions namely-

- (i) That the License/Licensees shall within three months from the dated hereof, but without interfering with the road traffic complete the laying of overhead 132 KV DCSS Deonagar-Harrai-Amarwara transmission line to the satisfaction of Divisional engineer in-charge of the National Highways (hereinafter referred to as the Divisional / Executive Engineer) in accordance with the drawing and specifications approved by the Divisional / Executive Engineer.
- (ii) The License/Licensees shall be responsible for restoring the road and at / their own cost to its original condition after laying of overhead 132 KV DCSS Harrai-Amarwara Transmission line, if any damage caused due to inadequate maintenance / operation of the above transmission line.
- (iii) That in case of breakdown of above high-tension transmission line the License/Licensees shall bear the entire cost of restoration of damage caused to the road.


-MP Power Transmission Package-II Ltd.

- (iv) That the License/Licensees shall not without the prior permission in writing of the Divisional / Executive Engineer undertake any work of shifting repairs or alteration to the said transmission line.
- (v) That the License/Licensees shall at all time permit any duly authorized officer or servant of the Government to inspect the said transmission line.
- (vi) That the License/Licensees shall be liable for any loss or damage caused to the Government by any obstructions or any other like cause due to the said transmission line.
- (vii) That if licensee fails / licensees fail to execute any work which he has / they have agreed to execute under this agreement to the entire satisfaction of Divisional / Executive Engineer, the work shall be executed by the divisional / Engineer at cost of the licensee / licensees and the amount shall be recoverable from the licensee / licensees as arrears of land revenue without prejudice to any other remedies which may be open to the NHAI in this behalf.
- (viii) That the licensee / licensees shall not sale, transfer or otherwise dispose of the premises without obtaining the previous consent of the Government in writing.
- (ix) That no fee will be charged for the licensee.
- (x) The licensee shall have to make all necessary arrangements for safety of highway users and workman and also to ensure that no impedance is caused to highway traffic by providing a barricading, Danger lighting and other necessary caution boards while executing the work.
- (xi) That the permission granted by this license shall not in any way to be deemed to convey to the licensee / licensees any right to or over or any interest in Government land other than what is herein expressly granted.
- (xii) That during the subsistence of this license the high tension transmission line located on the road shall be deemed to have been constructed and continued only by the consent and permission of the Government so that the right of the licensee / licensees to the use thereof shall not become absolute and indefeasible by lapse of time.
- (xiii) That the licensee / licensees shall bear the stamp duty charges on this agreement.

Notwithstanding anything contained herein, the license may be cancelled at any time by the NHAI for a breach of any condition of the license and the licensee / licensees shall not be entitled to any loss to it by such cancellation nor shall it be absolved from any liability already incurred under this agreement.

IN WITNESS WHEREOF Shri.....the Chairman, NHAI or on behalf of the President of India and the licensee has / licensees have signed and subscribed their respective hands herein to the day, month and year first above written.

Signed by.....

MP Power Transmission Package-II Ltd.
For MP-PKG-II LIMITED

Signed by.....

For NHAI

In the Presence of

1. Name in Full/Designation/Signature

1. Name in Full/Designation/Signature

2. Name in Full/Designation/Signature

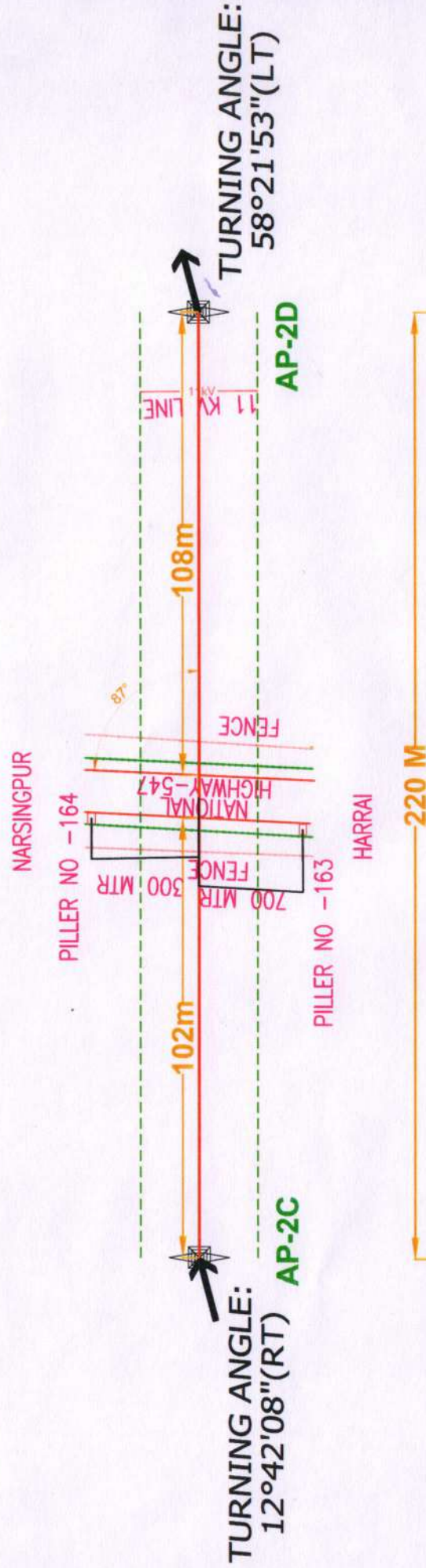
1. Name in Full/Designation/Signature



MP POWER TRANSMISSION PACKAGE-II LIMITED

SITE MAP OF PROPOSED DEONAGAR HARRAI - AMARWARA 132 KV DCSS TRANSMISSION LINE
ROAD CROSSING NH-547 AT VILL-SALAIYA BULAKI IN BETWEEN KM STONE NO. 163-164

DRG. TITLE : SLD OF NH-547 CROSSING



MP Power Transmission Package-II Ltd.

NH 547 CROSSING

Write a description for your map.

Legend

- STRUCTURES
- ROUTE



Google Earth

Image © 2022 Maxar Technologies



1 -MP Power Transmission Package-II Ltd.

TOWER SPOTTING DATA

DESIGNER : **ENERGY ENGINEERING GROUP**

PROJECT : **Development of Intra-State Transmission Work in M.P. through Tariff Based Competitive Bidding: PACKAGE-I & PACKAGE-II**

LINE : **132 KV DOUBLE CIRCUIT TRANSMISSION LINE
(132 kV Single ACSR Panther WZ-4, RL-1, TC-2, FOS- 1.1)**

DOCUMENT : **TOWER SPOTTING DATA
FOR TOWER TYPES ...**
YDAL marked as "YAL" WITH BODY EXTNS UP TO +6M
YDAH marked as "YAH" WITH BODY EXTNS UP TO +6M
YDB marked as "YB" WITH BODY EXTNS UP TO +6M
YDC marked as "YC" WITH BODY EXTNS UP TO +6M
YDD45 marked as "YDL" WITH BODY EXTNS UP TO +6M
YDD60 marked as "YDH" WITH BODY EXTNS UP TO +6M
[+9M, +12M]; [+15M, +18M]; & +30M EXTN.
YTD marked as "YTD" WITH BODY EXTNS +9+18+27m Extn.
YDE marked as "YDE" WITH BODY EXTNS UP TO +12M,
& [+15M TO +30M EXTN.]
YDU marked as "YDU" WITH BODY EXTNS UPTO +6M

Reliability level- 1; Terrain category- 2 ;Wind zone- 4 (47 m/s); Maximum Temperature - 85°C

SHEET	DOCUMENT DESCRIPTION	
1-4 5-8 9-13	TOWER SPOTTING DATA INCLUDING GENERAL NOTES SAG-TENSION VALUES FOR CONDUCTORS & OPGW OUTLINE DIAGRAMS OF ALL TOWER TYPES & THEIR EXTENSIONS AVAILABLE	
REV. NO.	REVISION DESCRIPTION	DATE
R0	FIRST ISSUE	3-Sep-21
R1	TSD FOR HIGHER EXTN, YDE & UNDER CROSSING TOWER IS ADDED	25-Nov-21
R2	TSD FOR YTD LARGE SPAN CROSSING TOWER IS ADDED	11-Jan-22
DOC NO	A25-A26-TSD-132-DC-ACSR	MP-1 DOC NO 3730-E-ETL-TSD-BC-C-I-001
DESIGN BY	SANKET BARAPATRE Digitally signed by Sanket Barapatre DN: cn=Sanket Barapatre, email=sanket.barapatre@mpptl.com, o=MPPTL, ou=MPPTL	MP-2 DOC NO 3740-E-ETL-TSD-BC-C-I-001
CHECKED BY	SUJAL SHAH Digitally signed by Sujal Shah DN: cn=Sujal Shah, email=sujal.shah@mpptl.com, o=MPPTL, ou=MPPTL	SHEETS : 13
APPROVED BY	I K DUBEY Digitally signed by I K Dubey DN: cn=I K Dubey, email=i.k.dubey@mpptl.com, o=MPPTL, ou=MPPTL	DATE : 11-Jan-22 REVISION: R2

-MP Power Transmission Package-II Ltd.

Doc No : 3745-E-ETL-132-BC-C-1401
3745-E-ETL-132-BC-C-1401

•• 132 kV Double-Circuit • WZ-4 with FOS 1.1 • RL-1 • TC-2 • Single ACSR Panther Conductor • 85°C Max. Conductor Temperature ••

TOWER SPOTTING DATA

Tower marked as	YAL	YAH	YB	YC	YDL	YDH						YTD (220kV)	YDE				YDU																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Sr. No.	Tower & Extension (m)	YDAL	YDAH	YDB	YDC	YDD45	YDD60 upto +6m Extn.	YDD60 +9m & +12m Extn.	YDD60 +15m & +18m Extn.	YDD60 +30m Extn.	YTD+9+18+27m Extn.	YDE upto +12m Extn	YDE +15m to +30m Extn	YDU																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
1	Vertical Load limitation on weight span (For both GW / OPGW & conductor)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
a)	On both spans(m) GW/OPGW/Conductor	450	200	502.5	200	502.5	0	502.5	0	502.5	0	502.5	0	873.0	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0	502.5	0

3. Power Transmission Package H114

TOWER SPOTTING DATA

GENERAL DETAILS:

A) ELECTRICAL CLEARANCE FOR RAILWAY CROSSING

- Prior approval of Railway Authority is to be obtained.
- Minimum Clearance between lowest point of line Conductor and Rail level shall be as per **Column-2 of Table-1** below under maximum sag condition.. However approval of railway crossing from railway authority has to be obtained in each case.
- Minimum Clearance to be maintained between highest traction conductor and lowest transmission line crossing Conductor should be...
 - As per **Column-3 of Table-1** At structure as per clause 61 CEA, if nearest OHE structure /fixed structure is within 6000 mm from overhead conductor under maximum sag condition, else it should be as per **column-4 of table-1**.
 - As per **Column-4**, At Mid Span as per clause 69 CEA.

Table-1

Voltage Level	Minimum Clearance between lowest point of line Conductor and Rail level	Minimum clearance to be maintained between lowest transmission line crossing conductor and railway structure as per clause 61 CEA (At structure)	Minimum clearance to be maintained between highest traction conductor and lowest transmission line crossing conductor as per clause 69 CEA (At Mid Span)
(1)	(2)	(3)	(4)
66 KV	16960	4000	2440
132 KV	17560	4600	3050
220 KV	18460	5500	4580
400 KV	20260	7300	5490
500 KV HVDC	21160	8200	7940
765 KV	23860	10900	7940
800 KV HVDC	23860	10900	7940

- The crossing span shall be limited to 300 M.
- The crossing shall normally be at right angle to the railway track.
- Crossing should be done with "D" type tower.
- The minimum distance of crossing tower shall be at least equal to the height of tower plus 6.0 m away measured from center of the nearest railway track.

B) MINIMUM CLEARANCE FOR POWER LINE CROSSING EACH OTHER

Table-2

Voltage Level	66 KV (mm)	132 KV (mm)	220 KV (mm)	400 KV (mm)	765 KV (mm)	500 KV HVDC (mm)
66 KV	2440	3050	4580	5490	7940	6790
132 KV	3050	3050	4580	5490	7940	6790
220 KV	4580	4580	4580	5490	7940	6790
400 KV	5490	5490	5490	5490	7940	6790
500 KV HVDC	6790	6790	6790	6790	7940	6790
765 KV	7940	7940	7940	7940	7940	7940
800 KV HVDC	9040	9040	9040	9040	9040	9040
1200 KV	10440	10440	10440	10440	10440	10440

For crossing of existing power line of 132kV, 220kV, 400kV & above voltage level, only YDH , YDE & YDU towers shall be used on either side of power line crossing.

TOWER SPOTTING DATA

GENERAL DETAILS:

C) TELE-COMMUNICATION LINE CROSSING

- Minimum clearance between Power conductor & telecommunication lines with respect to Voltage Level shall be as per Table-3 with maximum conductor sag.

Table-3

Voltage Level	66 KV	132 KV	220 KV	400 KV	765 KV
Minimum clearance between Power conductor crossing (mm)	2440	2750	3050	4480	7900

- The angle of tele-communication line crossing shall be as near to 90° as possible. However, deviation to the extent of 60° may be permitted under exceptionally difficult situations.
- When, the angle of crossing has to be below 60°; the matter will be referred to the authority in charge of the telecommunication system. On a request from the contractor the permission of the telecommunication authority may be obtained by the Owner.
- In the crossing span, power line support will be as near the telecommunication line as possible, to obtain increased vertical clearance between the wires.

- D) The number of consecutive spans between the section points shall not exceed 15 or 5 km. In plain terrain and 10 spans or 3 km. in hilly terrain.

- E) A section point shall comprise of tension point with "B" type or "C" type or "D" type towers as applicable.

- F) Minimum ground clearance required for respective voltage level shall be as per Table-4.

Table-4

Voltage Level	66 KV	132 KV	220 KV	400 KV	765 KV	500 KV HVDC	800 KV HVDC
Minimum Ground Clearance (mm)	6100	6100	7015	8840	15000	12500	18000

- G) Sag Error : 150 mm. Add Sag Error to Ground Clearance.

- H) At all important road crossings, tension tower to be used.

For all national highway crossing, tension tower is to be used and the crossing span is not to exceed 250 meters.

- I) Maximum span of adjacent spans for various angles of deviation are subject to the condition that minimum specified live Metal Clearance & minimum Ground Clearance are available.

- J) Maximum deviation of line for dead end tower (D / E / U Type) shall be as mentioned in **sheet 1** depending of tower type.

TOWER SPOTTING DATA

GENERAL DETAILS:

- K) The clearances from building, trees, Power line crossings should be made in accordance with latest version of Indian Electricity Rules and IS:5613.
- L) Vertical load of individual spans are acting downwards for suspension towers.
- M) Corridor requirement and Way leave clearance either side from the C.L. of the Transmission Line shall be as per the **Table-5**.

Table-5

Voltage Level	Corridor requirement (m)	Way leave clearance on either side of C.L. of the TL (m)
66 KV	18	9
132 KV	27	13.5
220 KV	35	17.5
400 KV Single Circuit (Horizontal Configuration)	52	26
400 KV Double Circuit / Single Circuit (Vertical Configuration)	46	23
765 KV Single Circuit (Horizontal Configuration)	85	42.5
765 KV Single Circuit (Delta Vertical Configuration)	64	32
765 KV Double Circuit	67	33.5
1200 KV	89	44.5
500 KV HVDC	52	26
800 KV HVDC	69	34.5

- N) Minimum clearance for power conductor of respective Voltage level over the highest flood level (HFL) in case of non navigable rivers and navigable rivers is as per **Table-6**.

Table-6

Voltage Level	Minimum clearance above HFL (mm)	
	Navigable Rivers (mm)	Non-navigable Rivers (mm)
66 KV	19000	3650
132 KV	19220	4300
220 KV	20100	5100
400 KV	21900	6400
765 KV	25550	9400
1200 KV	29900	11000
500 KV HVDC	24030	6750
800 KV HVDC	27700	11000

Design: MP1 & MP2					
Line: 132kV DC LINE					
SAG TENSION CALCULATION					
• 132 D/C • WZ-4 • SINGLE ACSR PANTHER • 85° Max. Temp • Up to +6m Extn					
Normal Span		m 335			
Wire		TOP CONDUCTOR	MIDDLE CONDUCTOR	BOTTOM CONDUCTOR	EARTHWIRE
Name		ACSR Panther	ACSR Panther	ACSR Panther	GSS
Make/Model No./ Stranding/etc.		30/3.00 Al + 7/3.00 St	30/3.00 Al + 7/3.00 St	30/3.00 Al + 7/3.00 St	7/3.15
Overall Diameter	D	cm	2.1	2.1	0.945
Area	A	cm ²	2.615	2.615	0.5455
Unit weight	Wt	kg/m	0.974	0.974	0.428
Ultimate strength	T	kg	9144	9144	5710
Young's modulus	E	kg/cm ²	816000	816000	1936100
Coefficient of expansion	α	/°C	0.0000178	0.0000178	0.0000115
					0.0000138
TOP CONDUCTOR		ACSR Panther 30/3.00 Al + 7/3.00 St			
Case Description		32° • Nil (0) Wind	32° • Full (148) Wind	32° • 0.75 wind	0° • Nil wind
Wire Tension	kg	2286.0	4894.0	4158.0	2853.0
	N	22419	47995	40777	27979
% Use		25.00 %	53.52 %	45.47 %	31.20 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %
Sag PARABOLA	m	5.977		4.789	8.001
MIDDLE CONDUCTOR		ACSR Panther 30/3.00 Al + 7/3.00 St			
Case Description		32° • Nil (0) Wind	32° • Full (144.7) Wind	32° • 0.75003 wind	0° • Nil wind
Wire Tension	kg	2286.0	4829.9	4107.6	2853.0
	N	22419	47367	40283	27979
% Use		25.00 %	52.82 %	44.92 %	31.20 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %
Sag PARABOLA	m	5.977		4.789	8.001
BOTTOM CONDUCTOR		ACSR Panther 30/3.00 Al + 7/3.00 St			
Case Description		32° • Nil (0) Wind	32° • Full (138.7) Wind	32° • 0.75004 wind	0° • Nil wind
Wire Tension	kg	2286.0	4712.6	4015.3	2853.0
	N	22419	46216	39378	27979
% Use		25.00 %	51.54 %	43.91 %	31.20 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %
Sag PARABOLA	m	5.977		4.789	8.001
EARTHWIRE		GSS 7/3.15			
Case Description		32° • Nil (0) Wind	32° • Full (186) Wind	32° • 0.75 wind	0° • Nil wind
Wire Tension	kg	1125.6	2673.2	2263.4	1319.7
	N	11039	26216	22197	12942
% Use		19.71 %	46.81 %	39.64 %	23.11 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %
Sag PARABOLA	m	5.334		4.550	5.873
OPGW		OPGW 48F OBRA-C (TENTATIVE)			
Case Description		32° • Nil (0) Wind	32° • Full (186) Wind	32° • 0.75 wind	0° • Nil wind
Wire Tension	kg	1191.3	2914.4	2475.0	1390.6
	N	11683	28582	24273	13637
% Use		13.2%	32.3%	27.4%	15.4%
Maximum % Use Allowed		25 %	40 %	40 %	40 %
Sag PARABOLA	m	5.311		4.550	5.853

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Design: A25-MADHYA PRADESH					
Line: 132kV DC LINE (WIND ZONE-4)					
SAG TENSION CALCULATION					
MADHYAPRADESH • 132 D/C • WZ-4 • SINGLE ACSR PANTHER • 85° Max. Temp					
• For +9m Ext & +12m Extn					
Normal Span	m	300			
Wire		TOP CONDUCTOR	MIDDLE CONDUCTOR	BOTTOM CONDUCTOR	EARTHWIRE
Name		ACSR Panther	ACSR Panther	ACSR Panther	GSS
Make/Model No./ Stranding/etc.		30/3.00 Al + 7/3.00 St	30/3.00 Al + 7/3.00 St	30/3.00 Al + 7/3.00 St	7/3.15
Overall Diameter	D cm	2.1	2.1	2.1	0.945
Area	A cm ²	2.615	2.615	2.615	0.5455
Unit weight	Wt kg/m	0.974	0.974	0.974	0.428
Ultimate strength	T kg	9144	9144	9144	5710
Young's modulus	E kg/cm ²	816000	816000	816000	1936100
Coefficient of expansion	α /°C	0.0000178	0.0000178	0.0000178	0.0000115
					OPGW
					48F OBRA-C (TENTATIVE)
					1.22
					0.584
					0.451
					9035
					1296059.31
					0.0000138
TOP CONDUCTOR					
-ACSR Panther 30/3.00 Al + 7/3.00 St					
Case Description		32° • Nil (0) Wind	32° • Full (156) Wind	32° • 0.75 wind	0° • Nil wind 85° • Nil wind
Wire Tension	kg	2286.0	4833.7	4122.5	2931.9
	N	22419	47404	40429	28753
% Use		25.00 %	52.86 %	45.08 %	32.06 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %
Sag PARABOLA	m	4.793		3.737	6.679
MIDDLE CONDUCTOR					
- ACSR Panther 30/3.00 Al + 7/3.00 St					
Case Description		32° • Nil (0) Wind	32° • Full (152.5) Wind	32° • 0.75003 wind	0° • Nil wind 85° • Nil wind
Wire Tension	kg	2286.0	4771.5	4073.3	2931.9
	N	22419	46794	39947	28753
% Use		25.00 %	52.18 %	44.55 %	32.06 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %
Sag PARABOLA	m	4.793		3.737	6.679
BOTTOM CONDUCTOR					
- ACSR Panther 30/3.00 Al + 7/3.00 St					
Case Description		32° • Nil (0) Wind	32° • Full (149) Wind	32° • 0.75 wind	0° • Nil wind 85° • Nil wind
Wire Tension	kg	2286.0	4708.9	4023.9	2931.9
	N	22419	46180	39462	28753
% Use		25.00 %	51.50 %	44.01 %	32.06 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %
Sag PARABOLA	m	4.793		3.737	6.679
EARTHWIRE					
GSS 7/3.15					
Case Description		32° • Nil (0) Wind	32° • Full (194.2) Wind	32° • 0.75 wind	0° • Nil wind 53° • Nil wind
Wire Tension	kg	1135.6	2620.7	2229.1	1356.2
	N	11137	25702	21861	13300
% Use		19.89 %	45.89 %	39.04 %	23.75 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %
Sag PARABOLA	m	4.240		3.550	4.730
OPGW					
OPGW 48F OBRA-C (TENTATIVE)					
Case Description		32° • Nil (0) Wind	32° • Full (194.2) Wind	32° • 0.75 wind	0° • Nil wind 53° • Nil wind
Wire Tension	kg	1207.8	2847.8	2429.0	1429.0
	N	11845	27929	23821	14015
% Use		13.4%	31.5%	26.9%	15.8%
Maximum % Use Allowed		25 %	40 %	40 %	40 %
Sag PARABOLA	m	4.201		3.550	4.680

24-11-21 3

Design: **A25-MADHYA PRADESH**Line: **132kV DC LINE (WIND ZONE-4)**

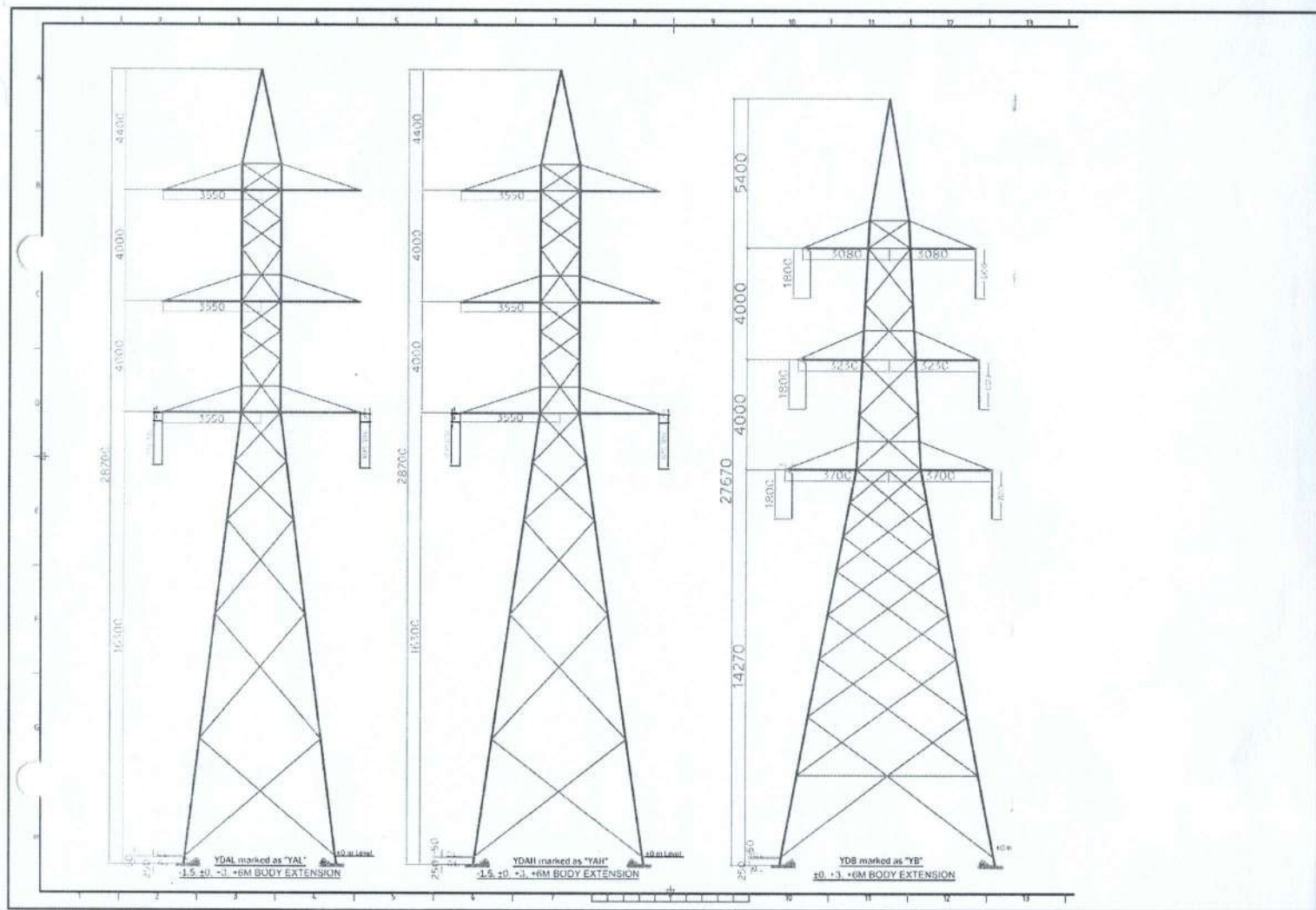

MD Power Transmission Package.0114

SAG TENSION CALCULATION						
MADHYAPRADESH • 132 D/C • WZ-4 • SINGLE ACSR PANTHER • 85° Max.						
Temp • For +15m Extn & +18m Extn						
Normal Span	m	280				
Wire		TOP CONDUCTOR	MIDDLE CONDUCTOR	BOTTOM CONDUCTOR	EARTHWIRE	OPGW
Name		ACSR Panther	ACSR Panther	ACSR Panther	GSS	OPGW
Make/Model No./ Stranding/etc.		30/3.00 Al + 7/3.00 St	30/3.00 Al + 7/3.00 St	30/3.00 Al + 7/3.00 St	7/3.15	48F OBRA-C (TENTATIVE)
Overall Diameter	D cm	2.1	2.1	2.1	0.945	1.22
Area	A cm ²	2.615	2.615	2.615	0.5455	0.584
Unit weight	Wt kg/m	0.974	0.974	0.974	0.428	0.451
Ultimate strength	T kg	9144	9144	9144	5710	9035
Young's modulus	E kg/cm ²	816000	816000	816000	1936100	1296059.31
Coefficient of expansion α	/°C	0.0000178	0.0000178	0.0000178	0.0000115	0.0000138
TOP CONDUCTOR		-ACSR Panther 30/3.00 Al + 7/3.00 St				
Case Description		32° • Nil (0) Wind	32° • Full (162.2) Wind	32° • 0.75 wind	0° • Nil wind	85° • Nil wind
Wire Tension	kg	2286.0	4806.9	4108.0	2980.4	1597.8
	N	22419	47141	40288	29229	15670
% Use		25.00 %	52.57 %	44.93 %	32.59 %	17.47 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %	70 %
Sag PARABOLA	m	4.176			3.203	5.974
MIDDLE CONDUCTOR		-ACSR Panther 30/3.00 Al + 7/3.00 St				
Case Description		32° • Nil (0) Wind	32° • Full (158.8) Wind	32° • 0.75 wind	0° • Nil wind	85° • Nil wind
Wire Tension	kg	2286.0	4749.8	4062.8	2980.4	1597.8
	N	22419	46581	39844	29229	15670
% Use		25.00 %	51.94 %	44.43 %	32.59 %	17.47 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %	70 %
Sag PARABOLA	m	4.176			3.203	5.974
BOTTOM CONDUCTOR		-ACSR Panther 30/3.00 Al + 7/3.00 St				
Case Description		32° • Nil (0) Wind	32° • Full (155.3) Wind	32° • 0.75003 wind	0° • Nil wind	85° • Nil wind
Wire Tension	kg	2286.0	4690.7	4016.2	2980.4	1597.8
	N	22419	46002	39387	29229	15670
% Use		25.00 %	51.30 %	43.92 %	32.59 %	17.47 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %	70 %
Sag PARABOLA	m	4.176			3.203	5.974
EARTHWIRE		GSS 7/3.15				
Case Description		32° • Nil (0) Wind	32° • Full (200.8) Wind	32° • 0.75 wind	0° • Nil wind	53° • Nil wind
Wire Tension	kg	1142.0	2595.4	2213.1	1378.6	1015.4
	N	11200	25453	21704	13520	9958
% Use		20.00 %	45.45 %	38.76 %	24.14 %	17.78 %
Maximum % Use Allowed		25 %	70 %	70 %	70 %	70 %
Sag PARABOLA	m	3.673			3.042	4.131
OPGW		OPGW 48F OBRA-C (TENTATIVE)				
Case Description		32° • Nil (0) Wind	32° • Full (200.8) Wind	32° • 0.75 wind	0° • Nil wind	53° • Nil wind
Wire Tension	kg	1218.7	2815.5	2407.3	1452.7	1086.7
	N	11952	27611	23608	14247	10657
% Use		13.5%	31.2%	26.6%	16.1%	12.0%
Maximum % Use Allowed		25 %	40 %	40 %	40 %	40 %
Sag PARABOLA	m	3.627			3.042	4.067

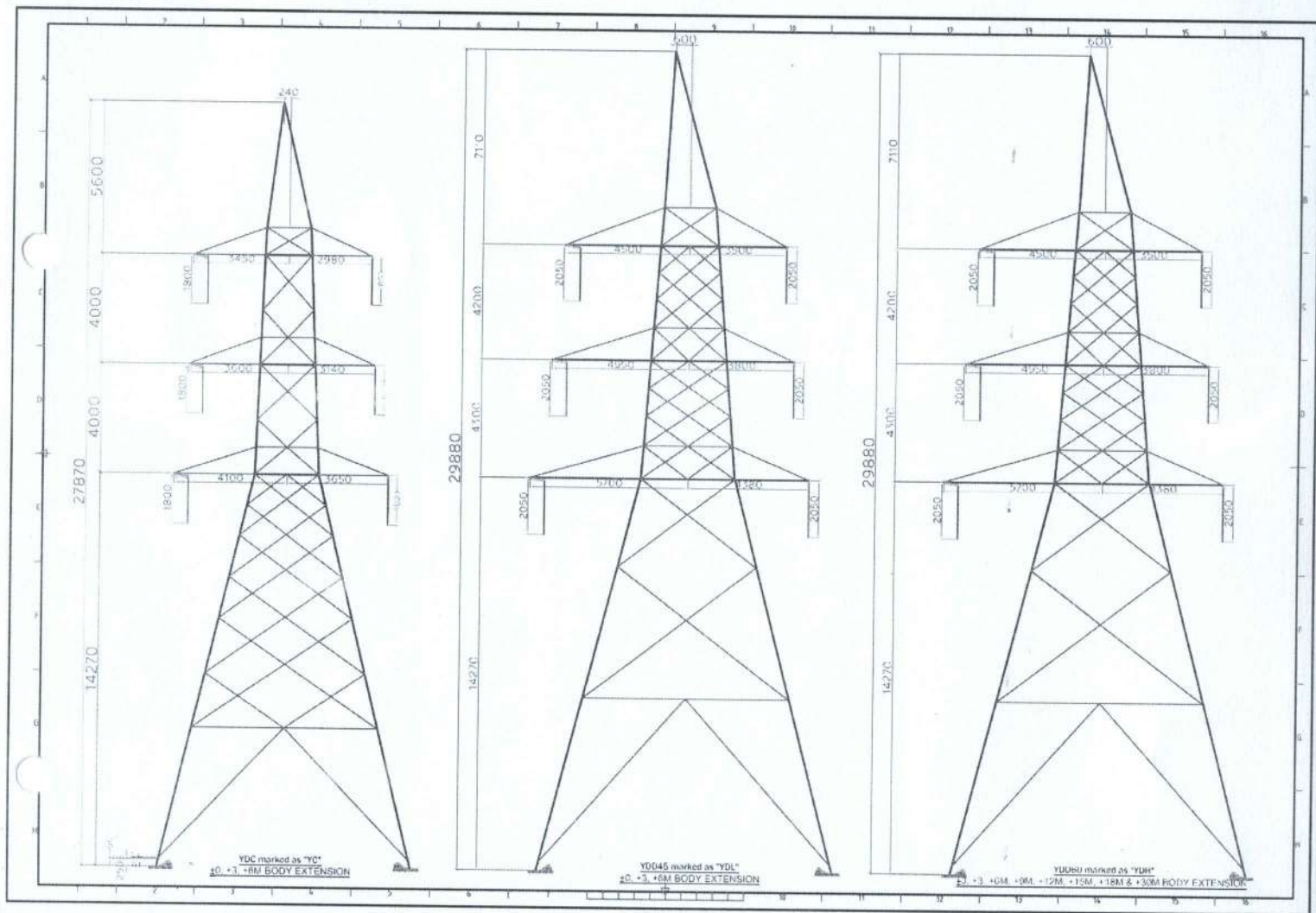
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 -MP Power Transmission Package-II Ltd.

Design: A25-MADHYA PRADESH					
Line: 132kV DC LINE (WIND ZONE-4)					
SAG TENSION CALCULATION					
MADHYAPRADESH • 132 D/C • WZ-4 • SINGLE ACSR PANTHER • 85° Max.					
Temp • Higher than +18m Extn up to +30m Extn					
Normal Span	m	250			
Wire		TOP CONDUCTOR	MIDDLE CONDUCTOR	BOTTOM CONDUCTOR	EARTHWIRE : OPGW
Name		ACSR Panther	ACSR Panther	ACSR Panther	GSS : OPGW
Make/Model No./ Stranding/etc.		30/3.00 Al + 7/3.00 St	30/3.00 Al + 7/3.00 St	30/3.00 Al + 7/3.00 St	7/3.15 : 48F OBRA-C (TENTATIVE)
Overall Diameter	D cm	2.1	2.1	2.1	0.945 : 1.22
Area	A cm ²	2.615	2.615	2.615	0.5455 : 0.584
Unit weight	Wt kg/m	0.974	0.974	0.974	0.428 : 0.451
Ultimate strength	T kg	9144	9144	9144	5710 : 9035
Young's modulus	E kg/cm ²	816000	816000	816000	1936100 : 1296059.31
Coefficient of expansion	α /°C	0.0000178	0.0000178	0.0000178	0.0000115 : 0.0000138
TOP CONDUCTOR		-ACSR Panther 30/3.00 Al + 7/3.00 St			
Case Description		32° • Nil (0) Wind	32° • Full (172.8) Wind	32° • 0.75 wind	0° • Nil wind : 85° • Nil wind
Wire Tension	kg	2286.0	4751.6	4074.3	3056.8 : 1526.5
	N	22419	46599	39957	29978 : 14970
% Use		25.00 %	51.96 %	44.56 %	33.43 % : 16.69 %
Maximum % Use Allowed		25 %	70 %	70 %	70 % : 70 %
Sag PARABOLA	m	3.329		2.489	4.985
MIDDLE CONDUCTOR		- ACSR Panther 30/3.00 Al + 7/3.00 St			
Case Description		32° • Nil (0) Wind	32° • Full (169.8) Wind	32° • 0.75 wind	0° • Nil wind : 85° • Nil wind
Wire Tension	kg	2286.0	4705.8	4038.0	3056.8 : 1526.5
	N	22419	46150	39601	29978 : 14970
% Use		25.00 %	51.46 %	44.16 %	33.43 % : 16.69 %
Maximum % Use Allowed		25 %	70 %	70 %	70 % : 70 %
Sag PARABOLA	m	3.329		2.489	4.985
BOTTOM CONDUCTOR		-ACSR Panther 30/3.00 Al + 7/3.00 St			
Case Description		32° • Nil (0) Wind	32° • Full (166.8) Wind	32° • 0.75 wind	0° • Nil wind : 85° • Nil wind
Wire Tension	kg	2286.0	4659.9	4001.6	3056.8 : 1526.5
	N	22419	45699	39243	29978 : 14970
% Use		25.00 %	50.96 %	43.76 %	33.43 % : 16.69 %
Maximum % Use Allowed		25 %	70 %	70 %	70 % : 70 %
Sag PARABOLA	m	3.329		2.489	4.985
EARTHWIRE		GSS 7/3.15			
Case Description		32° • Nil (0) Wind	32° • Full (213.4) Wind	32° • 0.75 wind	0° • Nil wind : 53° • Nil wind
Wire Tension	kg	1152.6	2558.7	2190.1	1413.9 : 1011.1
	N	11303	25093	21478	13867 : 9916
% Use		20.18 %	44.81 %	38.35 %	24.76 % : 17.71 %
Maximum % Use Allowed		25 %	70 %	70 %	70 % : 70 %
Sag PARABOLA	m	2.901		2.365	3.307
OPGW		OPGW 48F OBRA-C (TENTATIVE)			
Case Description		32° • Nil (0) Wind	32° • Full (213.4) Wind	32° • 0.75 wind	0° • Nil wind : 53° • Nil wind
Wire Tension	kg	1237.1	2769.4	2376.6	1489.9 : 1092.0
	N	12132	27159	23307	14612 : 10709
% Use		13.7%	30.7%	26.3%	16.5% : 12.1%
Maximum % Use Allowed		25 %	40 %	40 %	40 % : 40 %
Sag PARABOLA	m	2.848		2.365	3.227

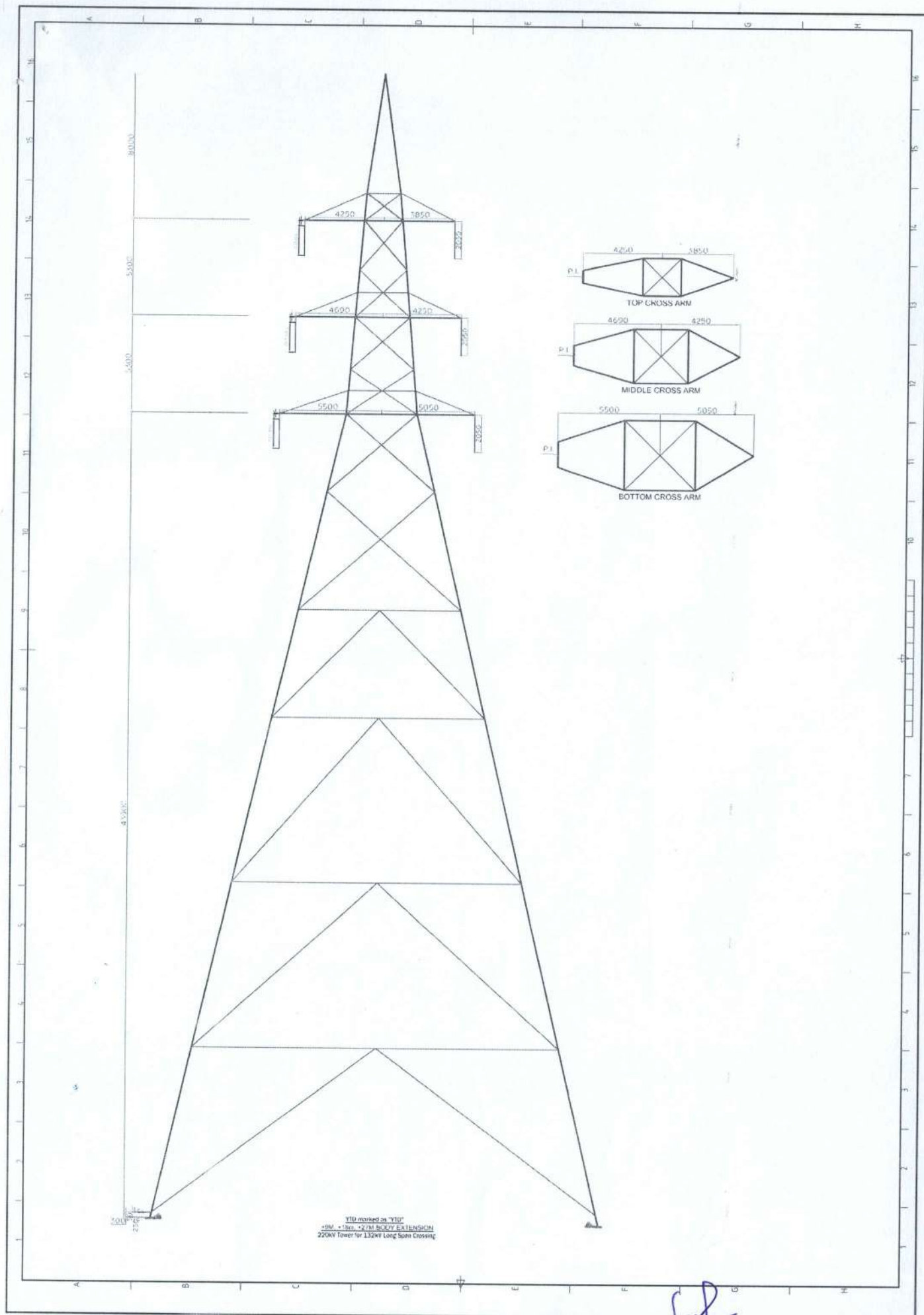


Gmb
 -MP Power Transmission Package-II Ltd.



MP Power Transmission Package-II I & II







मध्यप्रदेश शासन
ऊर्जा विभाग
मंत्रालय
आदेश

भोपाल, दिनांक '26 AUG 2021

क्रमांक : एफ-3-02/2020/तेरह : यह कि, मेसर्स एमपी पावर ट्रांसमिशन पैकेज-II लिमिटेड, मुख्य कार्यालय CORE-4, स्कोप काम्प्लेक्स, लोधी रोड, नई दिल्ली-110003, टैरिफ आधारित प्रतिस्पर्धात्मक बोली प्रक्रिया (TBCB) के माध्यम से मध्यप्रदेश के विभिन्न क्षेत्रों में ट्रांसमिशन प्रणाली के विकास हेतु 220 / 132 केव्ही लाइनों के निर्माण कार्य संलग्न परिशिष्ट अनुसार करने का इरादा रखता है।

और यह कि आवेदक मेसर्स एमपी पावर ट्रांसमिशन पैकेज-II लिमिटेड, नई दिल्ली द्वारा मध्यप्रदेश में 220 / 132 केव्ही लाइनों के निर्माण कार्य हेतु विद्युत अधिनियम, 2003 की धारा 68 के तहत अनुमति प्रदान करने बावत आवेदन प्रस्तुत किया है। उक्त पैकेज-II अंतर्गत प्रस्तावित पारेषण लाइनें मध्यप्रदेश के 24 जिलों यथा पन्ना / छतरपुर / सागर / रायसेन / होशंगाबाद / सिंगरौली / विदिशा / शिवपुरी / भिण्ड / श्योपुर / ग्वालियर / छिंदवाड़ा / दमोह / सिवनी / रीवा / कटनी / जबलपुर / उमरिया / शहडोल / नरसिंहपुर / टीकमगढ़ / निवाडी / मंडला / बालाघाट में है एवं क्षेत्र के मुख्य ग्राम लाइनों के मार्ग में सम्मिलित रहेंगे।

अतएव, प्राप्त आवेदन पर विचारोपरांत राज्य सरकार, विद्युत अधिनियम, 2003 की धारा 68 के अधीन मेसर्स एमपी पावर ट्रांसमिशन पैकेज-II लिमिटेड, नई दिल्ली को मध्यप्रदेश के विभिन्न क्षेत्रों में संलग्न परिशिष्ट के अनुसार 220 / 132 केव्ही लाइनों का निर्माण कार्य किए जाने हेतु निम्नानुसार शर्तों के साथ अनुमति प्रदान करता है :-

- (i) विद्युत अधिनियम, 2003 की धारा 68 के अंतर्गत प्रदत्त अनुमति को संलग्न परिशिष्ट में उल्लेखित शिरोपरि पारेषण लाइनों के निर्माण के उद्देश्य मात्र के लिए सीमित रखा जाएगा।
- (ii) आवेदक कंपनी अपने स्वयं के व्यय पर जिलाधिकारी, अन्य संबंधित विभागों और भूमि मालिकों से "राइट ऑफ वे" (आर.ओ.डब्ल्यू.) की अनुमति प्राप्त करने के लिए उत्तरदायी होगा।

14

- (iii) आवेदक कंपनी उपरोक्त पारेषण लाइनों को म.प्र. पावर ट्रांसमिशन कंपनी (एमपीपीटीसीएल) द्वारा अनुमोदित ले-आउट प्लान और लाइन ओरिएंटेशन के अनुसार म.प्र. पावर ट्रांसमिशन कंपनी के उपकेन्द्रों में संबद्ध करेगी।
- (iv) आवेदक कंपनी द्वारा पारेषण लाइनों का निर्माण कार्य टोपो शीट पर चिह्नित प्रस्तावित मार्ग के अनुरूप किया जाएगा।
- (v) आवेदक कंपनी द्वारा प्रस्तावित लाइनों का निर्माण विद्युत अधिनियम, 2003 (यथा संशोधित) एवं उसके अंतर्गत बनाये गये नियमों/विनियमों के प्रासंगिक प्रावधानों एवं केन्द्रीय विद्युत प्राधिकरण (सुरक्षा तथा विद्युत आपूर्ति से संबंधित उपाय) विनियम, 2010 (यथा संशोधित), केन्द्रीय विद्युत प्राधिकरण (विद्युत संयंत्रों और विद्युत लाइनों के निर्माण के लिए तकनीकी मानक) विनियम, 2010 (यथा संशोधित) और केन्द्रीय विद्युत प्राधिकरण (विद्युत संयंत्रों और विद्युत लाइनों का निर्माण, प्रचालन एवं अनुरक्षण के लिए सुरक्षा आवश्यकताएं) विनियम, 2011 (यथा संशोधित) के प्रावधानों के अधीन किया जाएगा।
- (vi) आवेदक कंपनी को गांवों/शहरों के उन भूमि मालिकों से "अनापत्ति प्रमाण पत्र" प्राप्त करना होगा, जिनकी भूमि पर लाइन के टावरों को खड़ा किया जाना है।
- (vii) पारेषण लाइनों के टावर बेस और आर.ओ.डब्लू. कॉरिडोर से संबंधित नुकसान के लिए सक्षम राजस्व प्राधिकारी द्वारा तय किए गए अनुसार भूमि मुआवजा आवेदक कंपनी द्वारा भूमि मालिकों को देय होगा।
- (viii) यदि लाइनों के निर्माण के लिए पेड़ों की कटाई की आवश्यकता होती है, तो आवेदक कंपनी सक्षम प्राधिकारी से पूर्व अनुमति प्राप्त करेगी।
- (ix) प्रस्तावित शिरोपरि लाइनों के विद्यमान पारेषण लाइनों, राष्ट्रीय / राज्य राजमार्ग, नदी, रेलवे ट्रैक आदि के साथ क्रासिंग के मामले में आवेदक कंपनी, सक्षम प्राधिकरण की मंजूरी प्राप्त कर कार्य करेगी।
- (x) यदि वन भूमि के ऊपर से लाइनें पास करने का प्रस्ताव है, तो आवेदक कंपनी वन क्षेत्र में काम शुरू करने के पूर्व वन विभाग से स्वीकृति प्राप्त करेगी। हालांकि लाइन बिछाने में वन क्षेत्र की संलिप्तता न होने की स्थिति में सक्षम वन प्राधिकारी से "अनापत्ति प्रमाण पत्र" प्राप्त करने की आवश्यकता होगी।
- (xi) यदि प्रस्तावित लाइनें दूरसंचार लाइनों या अनुज्ञप्तिधारियों की लाइनों के पास से गुजरती हैं, तो आवेदक कंपनी को सक्षम प्राधिकारियों से अनुमति लेनी होगी।
- (xii) आवेदक कंपनी को विद्युत अधिनियम 2003 की धारा 160 के प्रावधानों का अनुपालन करना होगा और केन्द्रीय पीटीसीसी द्वारा निर्धारित मानदंडों के

अनुसार प्रस्तावित लाइनों को ऊर्जीकृत करने के पूर्व पीटीसीसी रूट अनुमोदन प्राप्त करना होगा।

- (xiii) प्रस्तावित लाइनों के निर्माण कार्य पूर्ण होने के पश्चात लाइनों को ऊर्जीकृत करने के पूर्व आवेदक कंपनी को अपने व्यय पर विद्युत निरीक्षक से अनुमति प्राप्त करनी होगी।
- (xiv) प्रस्तावित लाइनों के निर्माण से, यदि व्यक्तिगत / सार्वजनिक संपत्ति को कोई नुकसान होता है, तो सक्षम प्राधिकारी द्वारा नियत क्षतिपूर्ति का भुगतान आवेदक कंपनी को करना होगा।
- (xv) यदि आवेदक कंपनी की लाइनों पर किसी वैधानिक प्रावधान के अनुसार कोई शुल्क लगाया जाता है, तो यह आवेदक कंपनी द्वारा देय होगा।
- (xvi) आवेदक कंपनी राज्य / केन्द्र सरकार की सभी प्रचलित एवं समय-समय पर संशोधित सांविधिक आवश्यकताओं का परिपालन सुनिश्चित करेगी।
- (xvii) आवेदक कंपनी कार्य के दौरान दुर्घटना या अन्य किसी कारण से उसके तथा अन्य पक्ष के बीच के मामलों में विवादों/निपटान के आपराधिक और नागरिक दायित्व से राज्य सरकार को प्रतिरक्षित रखेगी।
- (xviii) लाइनों के निर्माण के लिए उपरोक्त अनुमति राज्य शासन द्वारा आदेश जारी करने की दिनांक से 4 वर्ष की अवधि के लिए प्रभावी है। आवेदक कंपनी द्वारा इस अवधि के भीतर निर्माण पूरा कर राज्य शासन और म.प्र. पावर ट्रांसमिशन कंपनी लिमिटेड को सूचित करना होगा।
- (xix) सरकार उपरोक्तानुसार निर्धारित अवधि समाप्त होने पर किसी भी समय अनुमोदन को वापस या रद्द कर सकती है।
- (xx) उपरोक्त नियमों एवं शर्तों में से किसी के उल्लंघन पर, यह अनुमति स्वतः रद्द हो जाएगी।

मध्यप्रदेश के राज्यपाल के नाम से

तथा आदेशानुसार


(मीरज अग्रवाल) 26/8/24

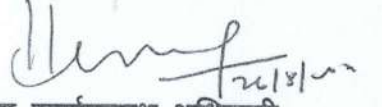
विशेष कर्तव्यस्थ अधिकारी

म.प्र. शासन, ऊर्जा विभाग

पृष्ठा. क्रमांक : एफ-3-02/2020/तेरह
प्रतिलिपि -

भोपाल, दिनांक 26 AUG 2021

1. प्रबंध संचालक, एमपी पावर मैनेजमेंट कंपनी लिमिटेड, जबलपुर।
2. प्रबंध संचालक, म.प्र. पूर्व / मध्य / पश्चिम क्षेत्र विद्युत वितरण कंपनी लिमिटेड, जबलपुर / भोपाल / इंदौर।
3. प्रबंध संचालक, म.प्र. पावर ट्रांसमिशन कंपनी लिमिटेड, जबलपुर।
4. मेसर्स एमपी पावर ट्रांसमिशन पैकेज-II लिमिटेड, मुख्य कार्यालय CORE-4, स्कोप कॉम्प्लेक्स, लोधी रोड, नई दिल्ली-110003.
5. कलेक्टर, जिला पन्ना / छतरपुर / सागर / रायसेन / होशंगाबाद / सिंगरौली / विदिशा / शिवपुरी / भिण्ड / श्योपुर / ग्वालियर / छिंदवाडा / दमोह / सिवनी / रीवा / कटनी / जबलपुर / उमरिया / शहडोल / नरसिंहपुर / टीकमगढ़ / निवाडी / मंडला / बालाघाट (म.प्र.)।
6. आयोग सचिव, म.प्र. विद्युत नियामक आयोग, भोपाल।
7. मुख्य अभियंता (विद्युत सुरक्षा) एवं मुख्य विद्युत निरीक्षक, म.प्र. शासन, सतपुडा भवन, भोपाल।
8. मुख्य अभियंता (योजना एवं रूपांकन)/(प्रोक्योरमेंट), म.प्र. पावर ट्रांसमिशन कंपनी लिमिटेड, जबलपुर।
9. निदेशक (पी.एस.पी एवं ए-1), केन्द्रीय विद्युत प्राधिकरण, सेवा भवन, आर.के. पुरम-1, नई दिल्ली - 110066.


विशेष कर्तव्यस्थ अधिकारी
म.प्र. शासन, ऊर्जा विभाग

क्रमांक	पारेषण कार्य
1.	220/132/33 के.व्ही. उपकेन्द्र अजयगढ़ (जिला पन्ना)
i	अजयगढ़ 220 के.व्ही. उपकेन्द्र के लिये सतना - छतरपुर 220 के.व्ही. लाइन के दोनों सर्किट का लीलो कार्य।
ii	अजयगढ़ - पन्ना 132 के.व्ही. डीसीएसएस लाइन।
iii	अजयगढ़ - लवकुश नगर (लौंडी) 132 के.व्ही. डीसीएसएस लाइन।
2.	220/132/33 के.व्ही. उपकेन्द्र बेगमगंज (जिला रायसेन)
i	सागर - बेगमगंज 220 के.व्ही. डीसीएसएस लाइन।
ii	बेगमगंज - राहतगढ़ 132 के.व्ही. डीसीएसएस लाइन।
iii	बेगमगंज - सिलवानी 132 के.व्ही. डीसीएसएस लाइन।
iv	बेगमगंज - ग्यारसपुर 132 के.व्ही. डीसीएसएस लाइन।
v	बेगमगंज - गैरतगंज 132 के.व्ही. डीसीएसएस लाइन।
3.	220/132/33 के.व्ही. उपकेन्द्र बरगवां (जिला सिंगरौली)
i	बरगवां 220 के.व्ही. उपकेन्द्र के लिये सीधी - हिंडालकों 220 के.व्ही. लाइन के दोनों सर्किट का लीलो कार्य।
ii	बरगवां 220 के.व्ही. उपकेन्द्र के लिये रजमिलान - मोरवा 132 के.व्ही. लाइन का लीलो कार्य।
iii	बरगवां 220 के.व्ही. उपकेन्द्र के लिये बैढन - मोरवा 132 के.व्ही. लाइन का लीलो कार्य।
4.	132/33 के.व्ही. उपकेन्द्र मेहलुआ चौराहा (जिला विदिशा)
i	मेहलुआ चौराहा 132 के.व्ही. उपकेन्द्र के लिये बीना - गंजबासौदा 132 के.व्ही. लाइन का लीलो कार्य।
5.	132/33 के.व्ही. उपकेन्द्र नरवर (जिला शिवपुरी)
i	नरवर 132 के.व्ही. उपकेन्द्र के लिये मढीखेड़ा - करेरा 132 के.व्ही. लाइन का लीलो कार्य।
6.	132/33 के.व्ही. उपकेन्द्र कनाथर (जिला भिंड)
i	कनाथर 132 के.व्ही. उपकेन्द्र के लिये मेहगांव 220 - सेंवडा 132 के.व्ही. लाइन का लीलो कार्य।
ii	हस्तिनापुर - कनाथर 132 के.व्ही. डीसीएसएस लाइन।
7.	132/33 के.व्ही. उपकेन्द्र बीरपुर (जिला श्योपुर)
i	बीरपुर 132 के.व्ही. उपकेन्द्र के लिये सबलगढ़ - श्योपुर 132 के.व्ही. लाइन का लीलो कार्य।

16

क्रमांक	पारेषण कार्य
8.	132/33 के.व्ही. उपकेन्द्र एमईएस ग्वालियर (जिला ग्वालियर)
i	मालनपुर 220 - एमईएस ग्वालियर 132 के.व्ही. डीसीडीएस लाइन।
9.	132/33 के.व्ही. उपकेन्द्र खानियाधाना (जिला शिवपुरी)
i	खानियाधाना 132 के.व्ही. उपकेन्द्र के लिये पिछौर - राजघाट 132 के.व्ही. लाइन का लीलो कार्य।
10.	132/33 के.व्ही. उपकेन्द्र चाँद (जिला छिंदवाड़ा)
i	छिंदवाड़ा 220 - चाँद 132 के.व्ही. डीसीएसएस लाइन।
ii	चाँद - बिछुआ 132 के.व्ही. डीसीएसएस लाइन।
11.	132/33 के.व्ही. उपकेन्द्र केवलारी (जिला सिवनी)
i	केवलारी 132 के.व्ही. उपकेन्द्र के लिये सिवनी 220 - नैनपुर 132 के.व्ही. लाइन का लीलो कार्य।
12.	132/33 के.व्ही. उपकेन्द्र देवेन्द्र नगर (जिला पन्ना)
i	देवेन्द्र नगर 132 के.व्ही. उपकेन्द्र के लिये सतना - पन्ना 132 के.व्ही. लाइन का लीलो कार्य।
13.	132/33 के.व्ही. उपकेन्द्र सिमरिया (जिला पन्ना)
i	पटेरा - सिमरिया 132 के.व्ही. डीसीएसएस लाइन।
ii	सिमरिया - हट्टा 132 के.व्ही. डीसीएसएस लाइन।
14.	132/33 के.व्ही. उपकेन्द्र खैरा(मनिकवार) (जिला रीवा)
i	मऊगंज - खैरा (मनिकवार) 132 के.व्ही. डीसीएसएस लाइन।
ii	खैरा (मनिकवार) - मनगवा 132 के.व्ही. डीसीएसएस लाइन।
15.	132/33 के.व्ही. उपकेन्द्र बहोरीबंद(जिला कटनी)
ii	स्लीमनाबाद - बहोरीबंद 132 के.व्ही. डीसीएसएस लाइन।
i	बहोरीबंद - कटंगी 132 के.व्ही. डीसीएसएस लाइन।
16.	220/33 के.व्ही. उपकेन्द्र मानपुर(बिजौरी) (जिला उमरिया)
i	मानपुर (बिजौरी) 220/33 के.व्ही. उपकेन्द्र के लिये बिरसिंगपुर - सतना 220 के.व्ही. लाइन का लीलो कार्य।
17.	132/33 के.व्ही. उपकेन्द्र गोपालगंज(कुरई) (जिला सिवनी)
i	गोपालगंज (कुरई) 132 के.व्ही. उपकेन्द्र के लिये पेंच - सिवनी 132 के.व्ही. लाइन का लीलो कार्य।
18.	132/33 के.व्ही. उपकेन्द्र हरई (जिला छिंदवाड़ा)
i	देवनगर - हरई 132 के.व्ही. डीसीएसएस लाइन।
ii	हरई - अमरवाड़ा 132 के.व्ही. डीसीएसएस लाइन।
19.	प्रणाली सुदृढीकरण कार्य
i	दिगौड़ा - पृथ्वीपुर 132 के.व्ही. डीसीएसएस लाइन।
ii	बैहर 132 के.व्ही. उपकेन्द्र के लिये नैनपुर - मंडला लाइन का लीलो कार्य।

16

OWNER:

MP Power Transmission Package-II Limited

CONTRACTOR:

Jyoti Structures Ltd.

SURVEYOR:

M/s. Sani Survey & Civil Works

PROJECT:

DEVELOPMENT OF INTRA-STATE TRANSMISSION WORK IN M.P. THROUGH TARIFF BASED COMPETITIVE BIDDING, PACKAGE-II,

LINE:

HARRAI - AMARWARA 132KV DCSS LINE, 2.18.2.2 (SINGLE ACSR PANTHER)

TITLE:

TOWER SCHEDULE FOR GANTRY (HARRAI) TO GANTRY (AMARWARA)

Owner Doc. No.

3740-E-TRL-L31-DC-T-V-0001

Contractor/
Vendor Doc. No.:

SSCW/ATL/MP-2/TS/2.18.2.2/011

DATE

19/12/2022

REV

3

Prepared :

Bhaumik Bhavsar

Checked :

B.B.Shah

Sr. No	Loc. No.	Type of Tower	RAISED CHIMNEY/ BENCHING	WGS-84 (UTM ZONE-44)		Ground Level M.S.L (m)	Deviation Angle	Span (m)	Section Length (m)	Sum of Adjacent Span (m)	Wind Span (m)	Weight Span in Mtr (Cold)			Weight Span in Mtr (Hot)			Remarks & Crossings.
				Easting (X)	Northing (Y)							Left	Right	Total	Left	Right	Total	
1	AP-2B	YDH+0		318874.17	2499270.43	618.85	53°54'49"(LT)		1142	602	301	233	187	420	205	166	370	
								280										Road,11kV line,Nala
2	2B/1	YAH+6		318641.65	2499114.43	608.58				556	278	94	221	315	115	183	298	
								275										11kV line
3	2B/2	YAH+0		318413.29	2498961.22	607.05				556	278	54	171	225	92	157	249	
								280										Nala
4	2B/3	YAH+0		318180.77	2498805.23	604.21			220	586	293	109	114	224	123	132	256	
								307										-
5	AP-2C	YB+6		317926.102	2498634.37	602.151	12°42'08"(RT)			526	263	193	168	361	175	137	312	
								220										National Highway-547, 11kV line
6	AP-2D	YDH+3		317721	2498555	601.172	58°21'53"(LT)		601	514	257	51	236	288	83	197	280	
								295										11kV line
7	2D/1	YAH+0		317667.34	2498264.92	595.49				600	300	59	167	226	98	161	259	
								306										Nala
8	AP-3	YC+0		317611.74	2497964.33	594.02	25°08'24"(LT)		295	600	300	138	89	228	145	113	258	
								295										Pond,11kV line,Hut

adani

Transmission


 -MP Power Transmission Package-II Ltd.

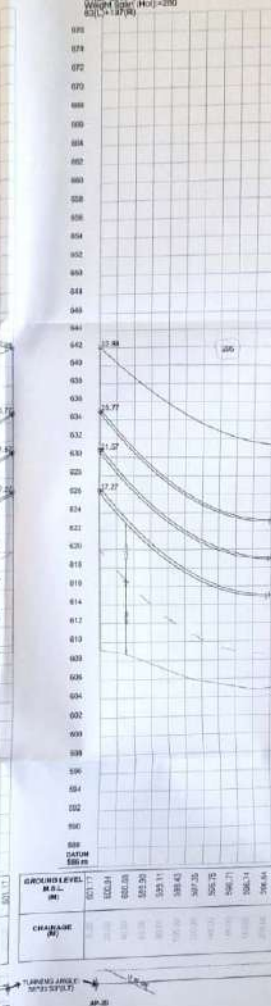
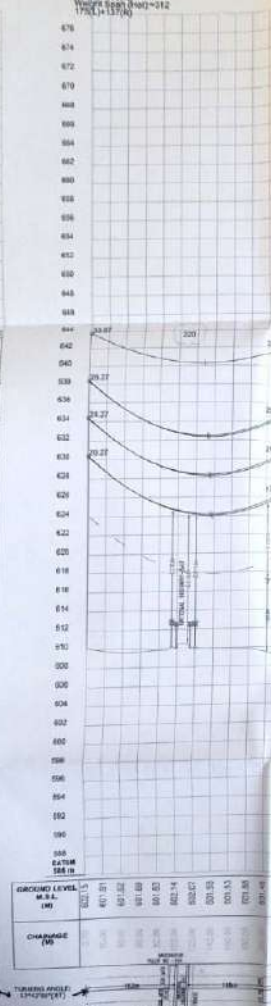
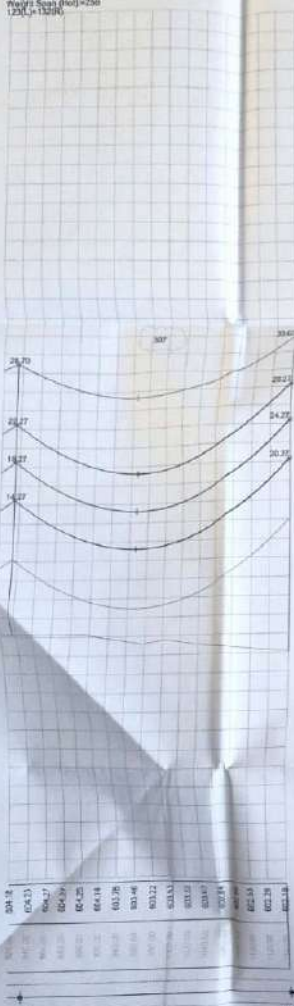
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 Tower No. 20/1
 V=240000.00
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LOC. No. AP-20
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1. CONDUCTOR
 2. GUY WIRE
 3. GUY ANCHOR
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1. CONDUCTOR
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