



# North Bihar Power Distribution Company Limited

Regd. Office-Vidyut Bhawan, Bailey Road, Patna.

CIN No:U40109BR2012SGC018920

(Department of Project II)

Letter No- 615 /

NB/P-II/Kishan/RDSS/ Vaishno Associates/ 22/2023

dated 25/9/23 /

Contact No – 09264437179

Email – cerdssnbpdc12@gmail.com

From,

Pranav Kumar  
Chief Engineer (Project-II)

To,

M/s Vaishno Associates Vidyut Projects LLP,  
H.O-14-15, 3<sup>rd</sup> Floor, Gajraj Tower,  
Motilal Atal Road, Jaipur-302001,

Email – vaishno-elect@rediffmail.com, rohitkr.elect@gmail.com, vaishno.rdsskishanganj@gmail.com

Sub: - Regarding Amendment of GTP & Drawing of 11 KV HTAB cables of Dynamic Cables Limited, Jaipur under RDSS Project in Kishanganj Circle.

- Ref :-
- 1) NIT No.-35/PR/NBPDCL/2022
  - 2) NOA No.-23 & 24 dated 06.03.2023
  - 3) Your Lt. No.- 71 dated 21.07.2023, 48 dated 21.06.2023
  - 4) This office Letter No. 307 dated 27.07.2023 & 227 dated 30.06.2023
  - 5) Your office letter no. 64 dated 25.09.2023.

Sir

With reference to the subject noted above, please find enclosed herewith **Amended** approved GTP & drawing of 11 KV HTAB cables for Development of Distribution Infrastructure under Revamped Reforms-Based And Results-Linked, Distribution Sector scheme. Details as follows :-

Sl. No.	Name of Firm and address	Name of Material/Equipment
1.	M/s Dynamic Cables Limited, Unit No.-1, F-260, Road No. 13, VKI Area, Jaipur-302013.	a) 11 KV 3Cx95+1Cx95 Sqmm HT AB Cable b) 11 KV 3Cx185+1Cx150 Sqmm HT AB Cable

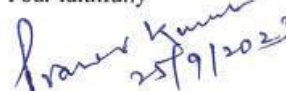
The Correction wherever required in GTP/Drawing submitted by the manufacturer has been made. However, these drawing shall be subject to correctness as per technical specifications of the tender document and the entire responsibility of the correctness of the drawing as per the specification as well as supply of material according to the technical specification of the contract agreement shall be responsibility of the contractor.

In case of any conflict or contradiction between GTP/ Drawings & Technical Specification, the decision of C.E. (Project-II) shall be final and binding on both the parties. Contractor shall have to replace the material to the entire satisfaction of the owner in case the material is found unsuitable for use in the project, at any stage.

Please carry out the works immediately under conditions stated above.

**Encl:- As above.**

Your faithfully

  
25/9/2023

(Pranav Kumar)

Chief Engineer (Project-II)

Memo no 615-----/

dated 25/9/23-----/

Copy forwarded M/s Vindhya Telelinks Limited, Club 125, 6<sup>th</sup> Floor, Tower A, Plot No- 3, 4 & 5, Sector 125, Noida, UP 201301/ M/s Ashoka Bulldeon Ltd., S.No.-861, Ashoka House, Ashoka Marg, Vadala, Nashik-422011/M/s Polycab India Ltd., Polycab House, 771, Pandit Satwalekar Marg, Mumbai / M/s NCC Ltd., NCC House, Survey no. 64, Madhapur, Hyderabad, 500081 / M/s JSP Projects Pvt. Ltd., Flat No.-5, IInd Floor, IIIrd B-2, Nehru Nagar, Ghaziabad (UP)-201001 /M/s CABCON India Ltd., 1<sup>st</sup> Floor, The Terminus Building, BG-12, Action Area- 1 B, New Town, Kolkata-700156 / M/s Techno Power Enterprises Pvt., INFINITY "THINK TANK" Tower II, 10<sup>th</sup> Floor Plot No. A3, Block-GP, Sector V, Salt Lake City, Kolkata-700091 (WB) for information and necessary action.

*Pranav Kumar*  
25/9/2023

**(Pranav Kumar)**

Chief Engineer (Project-II)

Memo no 615-----/

dated 25/9/23-----/

Copy forwarded to Chief Engineer, Project-I (Urban), NBPDCCL for information and further needful action.

*Pranav Kumar*  
25/9/2023

**(Pranav Kumar)**

Chief Engineer (Project-II)

Memo no 615-----/

dated 25/9/23-----/

Copy forwarded to M/s Rodic Consultant, Hq team for information and further needful.

*Pranav Kumar*  
25/9/2023

**(Pranav Kumar)**

Chief Engineer (Project-II)

Memo no 615-----/

dated 25/9/23-----/

Copy forwarded to OSD to MD/ Director (Project), NBPDCCL for kind information.

*Pranav Kumar*  
25/9/2023

**(Pranav Kumar)**

Chief Engineer (Project-II)

M/S Dynamic Cables Ltd.	
F-260, Road No.-13, V.K.L. Area, Jaipur-302 013 (Rajasthan)	
SCHEDULE OF GUARANTEED TECHNICAL PARTICULARS FOR SUPPLY OF 11 KV HT XLPE AERIAL BUNDLED CABLE	
NAME OF THE MANUFACTURER	Dynamic Cables, Ltd.
PLACE OF MANUFACTURE	H-581A To H-582A, Road No.6, VII Area Jaipur [raj] GR-A-125, A 129A, A130, SKS Industrial Area, Raengust, Distt., Sikar-332404, Rajasthan, India
CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDC)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" at Kothanganj
Contractor	Vaidano Associates Vidvut Projects LLP ( EPC Division), Jaipur.
ISO CERTIFICATION	ISO 9001:2015 CERTIFIED & VALID UPTO 03/09/2023
STANDARDS APPLICABLE	generally conforming to IS: 7000 Pt-II/2011 with latest Amendment.
CABLE DETAILS:-	
TYPE OF CABLE	11 KV AIR BUNDLED CABLE
VOLTAGE GRADE	6.35/11 KV
1. General	
1.1 Brand Name as per TS-11.1	DC X 95 + 95 50,MM Dynamic Cables Ltd
1.2 Name & Address of Manufacturer	Dynamic Cables Ltd, H-581(A)-H-582(A), Road No.6 VII Area Jaipur-302 013 or A-118, A 129A, A 130, SKS Industrial Area, Raengust, Distt., Sikar-332404, Rajasthan, India
1.3 Rated Voltage	6.35/11 KV
2.0 Phase Conductor	
2.1 Material	Aluminium
2.2 Class/Grade	Class 2, H2 J14 to IS:8130/1994
2.3 Shape of conductor	Standard Compacted Circular
2.4 Nominal cross section area (mm <sup>2</sup> )	95
2.5 Approx. Weight (kg/km)	11.6
2.6 Minimum CL resistance at 20°C OHM/KM	0.320
3 Conductor Screening	
3.1 Material	Extruded Semi Conducting Compd. Linked Polyethylene
3.2 Approx. Thickness (mm)	0.5
4 Insulation	
4.1 Material	Extruded Cross Linked Polyethylene XLPE
4.2 Nominal thickness (mm)	2.6
4.3 Tolerance on thickness (Min)	(0.1-0.15) where 0.1 = Thickness of insulation
5 Insulation Screening	
5.1 Material	
(a) Non-Metallic	Extruded Semi Conducting Compound
(b) Metallic	Copper Tape
5.2 Approx. Thickness (mm)	
(c) Non-Metallic	0.6
(d) Metallic	0.04 0.05
6 Polyethylene Sheath Over Coat	
6.1 Material	Extruded Black Polyethylene
6.2 Nominal thickness (mm)	2.00 2.2
7 Bare Messenger Wire	
7.1 Material & its applicable Standard	Aluminium Alloy as per IS:298 (Part 01/1994)
7.2 Shape of Conductor	Standard Compacted Circular
7.3 Nominal Cross section area (mm <sup>2</sup> )	55
7.4 No of Strands and dia of strand (mm)	7/4.16 (Before stranding & Compacting)
7.6 Approximate Cond Diameter (mm)	12.4
7.7 DC Resistance at 20°C (Ohm/km)	0.357
7.8 Approximate Breaking load (kN)	295 27.97
8 Cables	
8.1 Continuous Current Carrying Capacity in air at Ambient Temp 40°C	245 Amps
8.2 Maximum Short Circuit Current for 1 Sec. (KA)	8.02
8.3 Interlocked Power Core	3 Phase Cores twisted around the Bare Messenger Wire
8.4 Twisting of Power Core and with AAAC Messenger Wire	
8.5 Approximate Total Weight of Cable kg/km	3520
8.6 Standard Length of Cable in each drum in meter, Tolerance on drum lengths	5000 mtr (+/-) 5%
8.7 Maximum Conductor Temp. During Short Circuit	250°C
8.8 Bending Radius of the cable	15 X D.D (For installation purpose)
8.9 Manufacturer Identification Mark	Dynamic Cable, Voltage Grade, Size of Cable, Year of Manufacture

**APPROVED**  
 Subject to the condition that  
 you are not absolved of the  
 responsibility of  
 Correctness of materials

*Power House*  
 25/9/2023  
**Chief Engineer (Project-II)**  
**NBPDC**



Date: 06.04.2023  
 Place: Jaipur

Prepared By

For Dynamic Cables Ltd.  
 Rajesh Chaturvedi  
 Sr. Manager Technical  
 Checked By

- Max<sup>m</sup> operating Voltage - 12KV
- Max<sup>m</sup> Continuous Conductor temperature - 90°C
- Max<sup>m</sup> Short Time Conductor Temperature - 250°C

Note- Materials must comply Technical Specification of REC & Relevant 15.  
 - Manufacturer must have valid Type Test Report as mentioned in TS of REC at the time of inspection.

**CHECKED**

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M/S Dynamic Cables Ltd.  
F-260, Road No.-13, V.K.I. Area, Jaipur-302 013 (Rajasthan)

SCHEDULE OF GUARANTEED TECHNICAL PARTICULAR FOR SUPPLY OF HT AERIAL BUNCHED CABLE

NAME OF THE MANUFACTURE		Dynamic Cables Ltd.
PLACE OF MANUFACTURE		H-581A To H-592A, Road No.6, VKI Area Jaipur (raj) OR A-129, A 129A, A130, SKS Industrial Area, Reengus, Dist., Sikar-332404, Rajasthan, India
CLIENT		NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDC)
PROJECT		"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" at Kishanganj
Contractor		Vaishno Associates Vidyut Projects LLP (IPC Division), Jaipur.
ISO CERTIFICATION		ISO 9001:2015 CERTIFIED & VALID UPTO 03/09/2023
STANDARDS APPLICABLE		Generally conforming to IS 7098 (Part-2) :2011
CABLE DETAILS:-		
TYPE OF CABLE		HT Aerial Bunched Cable
VOLTAGE GRADE		6.35/11 KV
1	General	
1.1	Brand Name or Trade Mark	3C X 185 + 150 5G,MM
1.2	Name & Address of Manufacturer	Dynamic Cables Ltd
1.3	Rated Voltage	Dynamic Cables Ltd, H-581(A)-H-592(A), Road No.6 Vki Area Jaipur-302 013 or A-129, A 129A, A130, SKS Industrial Area, Reengus, Dist., Sikar-332404, Rajasthan, India
2.0	Phase Conductor	6.35/11 kv
2.1	Material	Aluminum
2.2	Class/Grade	Class 2, H2 /H4 to IS-8130/1984
2.3	Shape of conductor	Standard Compact Circular
2.4	Nominal cross section area (mm <sup>2</sup> )	185
2.5	Approximate Dia. of Conductor (mm)	15.3
2.6	Maximum DC Resistance at 20°C OHM/KM	0.164
3	Conductor Screening	As per relevant IS
3.1	Material	
3.2	Approx. Thickness (mm)	Extruded Semi Conducting Compound
4	Insulation	0.5
4.1	Material	Extruded Cross Linked Polyethylene XLPE
4.2	Nominal thickness (mm)	3.6
4.3	Tolerance on thickness (Min)	(0.1+0.3x)t where t = Thickness of insulation
5	Insulation Screening	Extruded Semi Conducting Compound
5.1	Material	Plain Copper Tape
5.2	Approx. Thickness (mm)	0.6
5.3	(a) Non-Metallic	0.03
5.4	(b) Metallic	0.05
6	Polyethylene Sheath Over Core	Extruded Black Polyethylene
6.1	Material	20 2.2
6.2	Nominal thickness (mm)	
7	Bare Messenger Wire	Aluminum Alloy as per IS-308 (Part-II) 1994
7.1	Material & its applicable Standard	Standard Compact Circular
7.2	Shape of Conductor	150
7.3	Nominal Cross section area (mm <sup>2</sup> )	19/3.18 (Before stranding & Compacting)
7.4	No of Strands and dia of strand (mm)	15.9
7.5	Approximate Cond. Diameter (mm)	0.226
7.6	DC Resistance at 20°C (Ohm/Km)	114.08
7.7	DC Resistance at 20°C (Ohm/Km)	
7.8	Approximate Breaking Load (KN)	
8	Cables	
8.1	Continuous Current Carrying Capacity in air at ambient Temp 40°C	370 Amps
8.2	Maximum Short Circuit Current for 1 Sec. (KA)	17.39
8.3	Identification of Power Core	Ridge I, II, III on Phase Cores
8.4	Laying Up of Power Core and with AAAC Messenger Wire	3 Phase Cores twisted around the Bare Messenger Wire
9	Approximate Total Weight of Cable kg/km	2650
9.1	Maximum Conductor Temp. During Short Circuit	250°C
9.2	Bending Radius of the cable	25 X O.D (For installation purposes)
9.3	Standard Drum Length with Tolerance	1500/1000 ± 5%
9.4	Overall length tolerance	± 2%
9.5	Non standard drum length	As per requirement of DISCOM
9.6	Manufacturer Identification Mark	10% of Ordered Quantity, No length less than 250 Mtrs.
9.7	Sequential length marking	Dynamic Cable, Voltage Grade, Size of Cable, Year of Manufacture

**APPROVED**  
Subject to the condition that you are not absolved of the responsibility of Correctness of materials

*Ramesh Kumar*  
25/9/2023  
Chief Engineer (Project-II)  
NBPDC

Note: The above given parameters are only indicative and approximate and can be subjected to actual manufacturing tolerance wherever applicable as per relevant IS.

Date: 08.04.2023  
Place: Jaipur

For Dynamic Cables Ltd.  
*Rajesh Chaturvedi*  
Sr. Manager Technical  
Checked By



Prepared By  
 → Max<sup>m</sup> operating voltage - 12KV  
 → Max<sup>m</sup> continuous conductor Temperature - 90°C  
 → Max<sup>m</sup> short Time Conductor Temperature - 250°C

Note → The material must comply Technical Specification of REC & Relevant IS.  
 - Manufacturer must have valid Type Test Report as mentioned in TS of REC at the time of inspection.

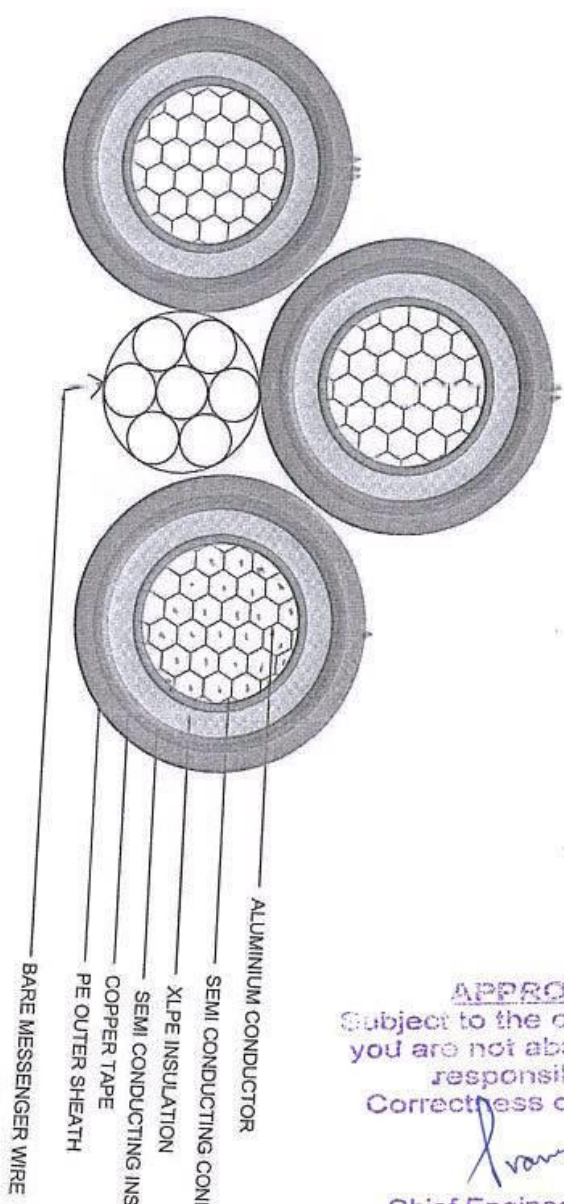
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CONSTRUCTIONAL DRAWING OF 11 KV 3CX95+95 & 3CX50+50 SQMM XLPE INSULATED AERIAL  
BUNCHED CABLE



APPROVED  
Subject to the condition that  
you are not absolved of the  
responsibility of  
Correctness of materials

*[Signature]*  
Chief Engineer (Project-II)  
NBPD

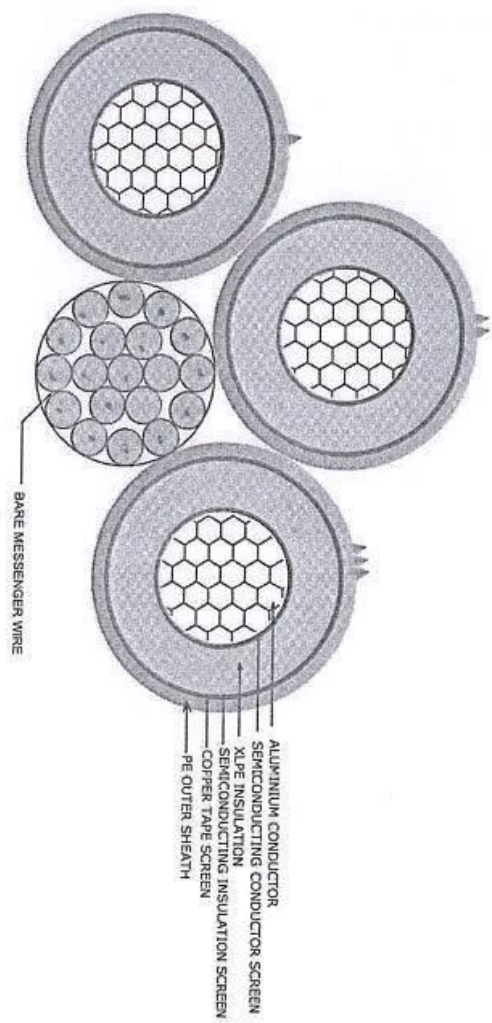
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*[Signature]*  
AEE(P-II) EEE(P-II) ESE(P-II)



CUSTOMER NAME : NBPDCL	
DESIGN BY	SUBHASH SAINI
APPROVED BY	RAJESH CHATURVEDI
DRAWING NO.	DCL/23-34/004
DATE	08.04.2023
SCALE	N.T.S.
CONSTRUCTIONAL DRAWING OF 11 KV 3CX95+95 & 3CX50+50 SQMM AB CABLE	DYNAMIC CABLES LTD. JAIPUR

640

# CONSTRUCTIONAL DRAWING OF 11 KV 3CX185+150 SQMM XLPE INSULATED AERIAL BUNCHED CABLE



CUSTOMER NAME : NBPDCI	
DESIGN BY	SUBHASH SAINI
APPROVED BY	RAJESH CHATURVEDI
DRAWING NO.	DCL/23-24/005
DATE	08.04.2023
SCALE	N.T.S



CONSTRUCTIONAL  
DRAWING OF 11 KV  
3CX185+150 SQMM  
AB CABLE  
DYNAMIC CABLES  
LTD. JAIPUR

**CHECKED**

*(Signatures)*  
AEC(P-II) EEE(P-II) ESE(P-II)

**APPROVED**  
Subject to the condition that  
you are not absolved of the  
responsibility of  
Correctness of materials

*(Signature)*  
Chief Engineer (Project-I)  
NBPDCI