

**JAIPUR VIDYUT VITARAN NIGAM LIMITED**  
**OFFICE OF THE SUPERINTENDING ENGINEER (PROC)**  
**OLD POWER HOUSE PREMISES, NEAR RAM MANDIR, BANIPARK, JAIPUR-6**

**FAX:0141- 2208098, TELE:0141- 2208098**

**SPECIFICATION FOR SUPPLY OF HEAT SHRINKABLE TYPE LT INDOOR/  
OUTDOOR CABLE END TERMINATIONS AND STRAIGHT THROUGH JOINTS  
FOR LT ARMoured PVC/ XLPE, ALUMINIUM CABLES AGAINST BID NOTICE  
NO. JPD/SE(Proc)/SPO.III/TN-4662  
SINGLE PART BID**

<b>Last Date of receipt of bids</b>	<b>27.12.17 upto 01:30 PM</b>
<b>Date of opening of bids</b>	<b>28.12.17 upto 3.00 PM</b>
<b>Cost of Specification</b>	<b>Rs. 2950.00 (Rs. Two Thousand Nine Hundred Fifty only)</b>
<b>Validity</b>	<b>120 days from the next date of opening of Techno commercial bid.</b>
<b>Bid Security to be deposited</b>	<b>i)General Bidder : Rs.16460/- ii)Sick Unit : Rs. 8230/- iii)SSI Unit of Rajasthan : Rs. 4115/-</b>

"In case **SSI units of Rajasthan** quotes less than the tendered quantity then they are required to furnish Bid Security @ 0.5% of the estimated value of quantity offered on the basis of estimated unit FOR destination price mentioned hereunder:

S.No.	Jointing Kits For LT Cables	Estimated Price in Rs.
1	300 Sqmm O/D	730.00
2	185 Sqmm O/D	415.00
3	120 Sqmm O/D	415.00
4	95 Sqmm O/D	300.00
5	400 Sqmm STJ	1290.00
6	300 Sqmm STJ	1006.00
7	185 Sqmm STJ	755.00
8	120 Sqmm STJ	755.00
9	95 Sqmm STJ	460.00

Further, while furnishing / depositing the BG in lieu of bid security /bid security amount in the office of Sr. Accounts Officer (MM) /Accounts Officer (MM), JVVNL, Jaipur, the bidders shall also furnish a certificate of SSI unit of Rajasthan / sick unit and also to submit a letter mentioning the quantity offered by them."

The Micro, Small & Medium Scale Industries of Rajasthan and sick industries, other than Small Scale Industries, whose cases are pending before the Board of Industrial and Financial Reconstruction (BIFR) shall furnish self-attested documentary evidence duly attested by Notary to claim the above.

The bid security may be given in the form of banker's cheque or demand draft in favour of Accounts Officer (MM), JVVNL, Jaipur of a scheduled bank payable at Jaipur. Bid security can be furnished in form of bank guarantee( in specified format as mentioned in bid document), in favour of Sr. Accounts Officer (MM), JVVNL, Jaipur, of a scheduled bank in favour of Chief Engineer (MM), JVVNL, Jaipur up to stipulated date & time, and obtain a receipt/acknowledgement thereof. No other mode of deposit shall be accepted.

**NOTE:-**

- 1.** Wherever EMD and Security Bank Guarantee (SBG), are appearing in the ITB, GCC & other Bidding Documents, same is hereby replaced by BID SECURITY as above.
  - 2. VENDOR REGISTRATION:** The relaxation/exemption given to the registered vendors of the Nigam in respect of EMD/SBG, wherever appearing in the ITB, GCC & other Bidding documents, are hereby WITHDRAWN
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**Note:- The bidder, in their own interest, are requested to read very carefully Section-I (Instruction to bidders), Section-II (General Condition of Contract) & Section-III (Technical Specification) before filling the bid. The Bid documents be downloaded from JVVNL website [www.jaipurdiscom.com](http://www.jaipurdiscom.com) . No hard copy of the bidding documents will be provided to the bidders through this office. In case of any discrepancy found in bidding documents downloaded from the website and appended with the bid (as a bid document) and original copy of such document available in the office of Superintending Engineer (Proc.), Jaipur Discom, Jaipur then the copy available with Superintending Engineer (Proc.), Jaipur Discom, Jaipur will be considered as final document for all purpose. The cost of Bid document as published in NIT shall be furnished along with downloaded bid document in the manner prescribed in bid document.**

**SECTION-III****TECHNICAL SPECIFICATION FOR HEAT SHRINKABLE TYPE CABLE JOINTING AND TERMINATION KITS FOR LT ARMoured PVC/ XLPE ALUMINIUM CABLES AGAINST BID SPECIFICATION TN- 4662.****3.01. SCOPE:**

This specification covers the design, manufacturing, testing and supply of Heat-Shrinkable type cable straight-through joints and cable end termination kits **as per IS:13573(Pt.1)/2011** suitable for use with and installation on LT armoured PVC/ XLPE aluminium/ conductor cables .

**3.01.1** The cable accessories specified in this specification i.e., cable end terminations, either indoor or outdoor, and straight-through, shall be complete in all respects. Such complete set of accessories shall be termed as kit hereinafter in this specification.

**3.01.2** Termination and jointing kits shall be heat-shrinkable type of proven make and of a design and type which have already been extensively used and fully type tested. The offered kits shall be easy in handling and simple to install without much skill, with minimum tools at site.

**3.02 TYPE**

**3.02.1** Termination Kits & Joints shall be heat shrinkable type for LT armoured PVC/ XLPE aluminium/ conductor suitable for Outdoor and Indoor Cable End Terminations and Straight Through Joints

**3.02.2** It is not the intent to specify completely herein all the details of the design, manufacture & assembly of cable accessories; however, cable accessories shall confirm in all respects to a high standard of design & workmanship and be capable of performing in continuous commercial operation upto bidders guarantee in a manner acceptable to the purchaser, who will interpret the meanings of the drawings and specifications and shall have the power to reject any works or material which in his judgment are not in accordance therewith. The cable accessories offered shall be complete with all components necessary for the effective and trouble-free operations. Such components shall be deemed to be within the scope of supplier's supply irrespective of whether they are specifically brought out in this specification and/ or in the commercial order or not.

**3.03 SYSTEM PARAMETERS**

1.	Nominal operating voltage	440 V rms
2.	Maximum system voltage :	1.1 kV rms
3	Frequency (Hz.):	50 +/- 1.5
4.	Number of Phases	3
5.	Type of Earthing	Solid
6.	Environmental conditions	Humid Tropical Climate with polluted atmosphere ,and/or , direct burial in water- logged ground.

### 3.04 SERVICE CONDITIONS

(A) The cable accessories to be supplied against this specifications shall be suitable for continuous & satisfactory operation under climatic conditions listed below:

S.No.	Particulars	
i)	Peak ambient air temperature in shade (°C)	50°C
ii)	Minimum ambient air temperature (°C)	0°C
iii)	Maximum avg. ambient temp. over 24 Hrs. in shade ((°C)	40°C
iv)	Maximum temperature attainable by an object	60°C
V0	Maximum relative humidity (%)	100 %
vi)	Maximum altitude above mean sea level	1000 mtrs
vii)	Maximum wind pressure (Kg./Sq.Mtr.)	100
viii)	Number of months of tropical monsoon conditions	4 months
ix)	Average No. of rainy days per annum	100
x)	Average Annual Rainfall in cms.	10 to 100

(B) The kits shall be provided with protection against rodent and termite attacks.

### 3.05 APPLICATION

The cable accessories shall be use on armoured, PVC/XLPE, LT, Aluminium cables installed in sub-stations for power distribution system and LT consumers.

### 3.06 APPLICABLE STANDARDS

**1554 (Part 1)/1988** PVC insulated (heavy duty) electric cables: Part 1 For working voltages up to and including 1100 V

**2071 (Part 1) /1993:** High voltage test techniques:Part 1 General definitions and test IEC 60-1 1989 requirements

**7098 (Part 1)/1988** : Specification for cross linked polyethylene insulated PVC sheathed cable: Part 1 For working voltages up to and including 1100 V

**8130 : 1984** Conductors for insulated electric cables and flexible cords

**8308 : 1993** Compression type tubular in-line connectors for aluminium conductors of insulated cables

**IS-13573 (Part –I):2011** – for working voltage upto 1.1kV (E) - Test methods and requirements.

**8309 : 1993** Compression type tubular terminal ends for aluminium conductors of insulated cables

**8337 : 1976** Performance requirements of compression joints of aluminium conductors in insulated cables

**14255 : 1995** Aerial bunched cables for working voltages up to and including 1100 volts — Specification

IEC: 60502-04/ 2005 VDE 0278 – Standard for cable accessories.

IEEE48 –for terminations of cable.

ESI-09-13 standards – for components used in the Kit

The specification given in this documents supersedes the relevant clauses of IS-13573:2011 (Part-I) wherever applicable.

### **3.07 DESIGN FEATURES.**

The following considerations shall be taken into account in the design of the product, material properties and the components of the jointing and termination kits.

i) Electrical stresses at the screen cut back in case of LT XLPE cables shall be controlled to a safe value. The stress control may be either through stress control tubing / stress control cone or other suitable means. The bidder shall furnish details of the technique employed by them for stress control in cable- end terminations / straight-through joints. The application of stress control system shall be safe, foolproof and independent of cable jointers' skills. The stress control method used should withstand expansion and contraction of the cable during load cycling.

ii) The cable end termination and jointing kits shall be so designed so as to prevent discharge/ leakage at the cut back and nicks / scratches on XLPE insulations. Full details of the method of discharge prevention shall be indicated by the bidder in their offer.

iii) The cable end termination and jointing kits shall be so designed so as to give track - resistant erosion and weather resistant protection to the cable insulation. The outdoor end terminations and straight through joints shall be totally sealed against ingress of moisture of environment.

iv) All Outdoor End Termination kits as well as LT Indoor End Termination kits shall be provided with rain (weather) sheds or creepage-extending petticoats. These shall be non-tracking, weather resistant, hydrophobic and have smooth surface to deflect any water/ dirt etc. The design of these rain (weather) sheds or creepage-extending petticoats shall avoid any shed to shed conducting path under heavy rain conditions.

v) The cable end terminations & jointing kits shall be class 1 as defined in IEEE standard 48/1996 with latest amendments. Documentary proof shall be required to prove compliance in this regard without which the bid may be ignored.

vi) The lugs and ferrules provided should be suitable for compacted conductors and should withstand thermal short circuit of 250 deg. centigrade.

### **3.08 GENERAL TECHNICAL REQUIREMENT**

Material used for construction of a joint/termination shall perfectly match with the di-electric, chemical and physical characteristics of the associated cable. The material and design concepts shall incorporate a high degree of operating compatibility between the cable and joints.

The Straight through joint kit or termination shall be complete with all accessories, jointing material, insulating stress control and sealing material, lugs, nuts, bolts etc. as well as an instruction booklet explaining the method of using the kit. In case of heat shrinkable type kit, the joint shall include a heat shrinkable dual wall tubing which shall be insulating from inside and semi conductive from outside.

Detailed sectional views of the assemblies shall be submitted along with the offer. The straight through joints should be absolutely impervious to the entry of water. The manufacturer shall use the proven technologies and design to ensure a construction which will prevent entry of water or any other liquid inside the straight through joint and cable.

The cable termination kit shall be suitable for terminating the cable on indoor or outdoor installation as per requirement. The type of cable will be armoured PVC / XLPE insulated L.T Cable.

The Straight - through joints shall be suitable for Buried / Over Head application. The heat shrinkable component shall be light in weight and shall be made of specially formulated cross linked polymeric material with excellent tracking & erosion resistance characteristic.

Environmentally sealed system for splicing dielectric shielded power cables.

The design of joint and termination shall be such that on completion of work, the cable can be charged immediately. The joint/termination shall have range taking feature. The Connector/ferrule used shall be range taking, Moisture entry into conductor shall be protected by providing special mastic. The termination kit offered shall provide for total environmental sealing of the cable crutch and at the lug end. The details of the same shall be submitted along with the offer.

**Indoor Termination:** jointing kit should be designed to withstand high humidity and surface contamination under electrical stress caused due to condensation and dust in indoor conditions.

**Outdoor Terminations:** The LT Terminations should be designed to withstand exposure to extreme climatic variations & surface contamination, UV rays from sunlight and electrical stress caused due to heavy pollution & dust in external conditions.

The sizes generally used in JVVNL network.

300 Sqmm O/D
185 Sqmm O/D
120 Sqmm O/D
95 Sqmm O/D
400 Sqmm STJ
300 Sqmm STJ
185 Sqmm STJ
120 Sqmm STJ
95 Sqmm STJ

### **3.09 GENERAL REQUIREMENT FOR CABLE END TERMINATIONS / STRAIGHT-THROUGH JOINTS.**

i) The term heat shrinkable refers to extruded or moulded polymeric materials which are cross linked to develop elastic memory by irradiation method and supplied in expanded or otherwise deformed sizes/ shapes, subsequently heating in a strained state to a temperature above the shrink temperature resulting in the material recovering or shrinking to its original shape.

ii) (a) The stress control tubes used in heat shrinkable cable accessories shall have volume resistivity as per Standard with latest amendments for both terminations & straight through joints. The relative permittivity shall be as per Standard with latest amendments. Bidder shall furnish documentary evidence confirming adherence to these along with the offer. Further, impedance of stress control tubes shall not change over a range of temperature from 0 °C to 125 °C. The stress control tubes must have a thermal endurance equivalent to 35 years life. The impedance should also remain constant in spite of the difference in stress which will exist within the sleeve due to heating effect within the conductor and the temperature of the environment.

b) Bidder must submit graph showing effect on the impedance value of stress control tube due to effects of stress, temperature variations and thermal ageing of as per Standard with latest amendments with the offer.

c) Copies of test reports on the critical components used in the joints & terminations be furnished as per **as per IS:13573(Pt.1)/2011**, be furnished along with the offer.

iii) The heat shrinkable polymeric material to be used for external leakage insulation between the high voltage conductors and grounds should be non-tracking, weather and erosion resistant and hydro-phobic in nature. A heat-shrinkable flexible polymeric tubing, preferably coloured black, and possessing non-tracking erosion and weather resistant properties shall work as an external covering for the cable covers.

Rain - Sheds (skirts) provided should be of same material as the non-tracking tube specified in the paragraph above. Copies of test reports, confirming the non-tracking tubes and rain-sheds (skirts) meeting the above requirements shall be furnished along with the offer.

iv) Since the sealants or adhesives to be used between the heat shrinkable materials and XLPE cable shall be exposed to high electrical stresses, they must be track resistant. Documentary evidence shall be furnished in this regard along with the offer.

v) All cuts/ nicks inadvertently occurred to XLPE insulation must be rendered discharge free by using suitable discharge suppression compound.

vi) The heat shrinkable tubes may be either extruded or moulded type.

vii) The higher wall-thickness of heat shrinkable tubes / sleeves shall be preferred to counter the effect of erosion due to pollution.



### 3.10 OTHER REQUIREMENTS

- i) The kit shall be suitable for storage without deterioration at a temperature upto 50 Deg. C and shall have **unlimited shelf life**. Conducting paints having limited shelf life are not acceptable.
- ii) Proper stress control, stress grading and non tracking arrangement in the termination shall be offered by means of proven methods, details of which shall be elaborated in the offer. Detailed sectional view of assemblies shall be submitted along with the offer.
- iii) The straight through joints shall be suitable for underground buried installation with incorporated back-fill and chances of flooding by water. The straight through joints should be absolutely impervious to the entry of water. The manufacturer shall use proven technology and design to prevent entry of water or any other liquid inside the straight through joints and cables.
- iv) The end termination kits shall provide for total environmental sealing of the cable crutch and at the lugs end. The details of the environmental sealing provided shall be submitted along with the offer.
- v) Provisions for effective screening over each core shall be made and the bidder shall categorically confirm this aspect in the offer.
- vi) The materials and components not specifically stated in the specification but which are essential for satisfactory operation of the cable shall be deemed to be included in the kit without any extra cost.
- vii) The terminations / joints shall be of better tracking resistant properties and fully reliable earthing system to maintain continuous contacts with screening/ armouring as the case may be.
- viii) The armour / earthing arrangement shall form part of the terminations/ joints and shall be protected from erosion either by suitable tape or tube.
- ix) The terminations/ jointing kits shall have provision for shield connection and earthing whichever required.
- x) The fault level as well as duration withstand capacity of termination / jointing kits should be strictly matching with the parameters of cables for which the kits are intended to be used.
- xi) The trade / brand name of the manufacturer, shall be embossed / engraved or suitably marked with indelible ink / paint for the purpose of identification on the tubings and components which are visible from the outside. The words "JVNL" along with the trade / brand name of the manufacturer, TN No. , month / year of manufacture, size etc. shall be suitably printed / marked on the kit packing/Cartoon
- xii) Suitable creepage extension/ rain protection sheds for outdoor cable end terminations shall be provided.

xiii) Adequate provisions for eliminating the chances of entrapment of air at steps formed by semicon screen shall be made.

xiv) The terminations/ joints shall be supplied in kit form. All insulation and sealing materials, consumable items, conductor fittings, earthing arrangements and lugs etc. should be provided .

xv) The bidder shall furnish the constructional features of material offered.

xvi) An instruction manual in English and , optionally in Hindi script, indicating the complete method/ proceedings adopted for installation of kits, preferably with more diagrams/ pictorial presentation shall be supplied with each kit. Various items, quantity thereof included in each kit must be indicated in the instruction manual / packing slip provided in the kit packing.

**This specification covers design and manufacturing of cable joints suitable for 1.1 kV Armored PVC/XLPE Al Conductor Cables.**

1. The accessories shall be supplied in kit form. Each component of the kit shall carry the manufacturer's mark of origin.
2. The supplied joint shall have a range taking feature.
3. The kits must have unlimited shelf life.
4. The insulating tubing over the connector should be Dual Wall design sleeve With entrapped lubricant.
5. Type tests should have been carried out to prove the general qualities and design of a given type of jointing system. The sleeve shall be tested for ANSI C1191.1-1986 or equivalent standard. Type Test Report for the same shall be submitted along with offer.
6. The installation of joint shall be done without use of special tools like crimping tool.
7. Conductor connection shall be achieved by use of connectors with pre-defined shear off bolt head design. The connector should be range taking which can be used for both copper & Aluminium cables.
8. Armour Connectivity shall be maintained by using Tinned copper braid.
9. Armour Wrap to be provided for mechanical protection of joint body.
10. The design of joint shall be such that on completion of joint the cable can be charged immediately.

**3.11 CABLE SIZE AND ITS REQUIREMENT**

If the design of the cable jointing kits is such that same kit is suitable for more than one of the cable sizes mentioned at clause 3.08 , then the bidder shall furnish the details of kit number and corresponding cable sizes for which the kit is suitable.

### **3.12 CIRCULAR SHAPED CONDUCTOR:-**

The terminations/ jointing kits offered shall be suitable to be used on circular compacted XLPE cable conductor.

### **3.13 LUGS/ FERRULES**

Requisite number and size of lugs/ ferrules depending upon the type of the cable shall be provided in the kit. Lugs and Ferrules shall be of crimping type, shall conform to the relevant standards in case of XLPE cables.

### **3.14 EARTH/SCREEN CONTINUITY**

i) Screen continuity by using tinned copper mesh and earth continuity by tinned copper braids of appropriate size shall be provided for transfer of screen/ earth in straight through joints.

ii) Tinned copper braids of appropriate size along with copper lugs of proper size shall be provided for the continuity of screen/ armour along with adequate clamping arrangement.

### **3.15 EARTHING**

Earthing shall be as per relevant standards and the details of the earthing arrangement offered for the cable accessories shall be submitted along with the offer.

### **3.16 FIRE RESISTANCE**

The cable end terminations and straight-through joints shall be fire resistant. The components of kits shall have flame retardant property.

### **3.17 INTERCHANGEABILITY**

The components of different size of the kits shall be interchangeable between more than one cable sizes in case the need so arises. Bidders should indicate the range / limits of such interchangeability.

### **3.18 EASY INSTALLATION**

The bidder shall offer complete material and components for each kit so as to make one termination/ joint complete in all respects. The bidder shall indicate the list of the material/ components with the supplied quantities of each for each type of cable end termination and straight-through joint.

i) The detailed bill of material and installation instructions shall be provided with each kit for verification by the purchaser's inspecting officer and at Nigam's stores / site.

ii) All components shall be sealed separately and marked clearly for the purpose of identification of each component. All components shall be supplied in a single package as a complete kit for one termination/ joint and shall bear the

manufacturer's name and the cable size or range of cable sizes for which the kit can be used.

### 3.19 Marking and Labelling

As per the IS 13573 (Part-I):2011 all kits shall be marked and labeled suitably for identification.

- a. Manufacturer's name or logo and the name of components wherever feasible;
- b. Type of jointing materials, the application;
- c. Batch number(s), where relevant;
- d. Product reference;
- e. Defined storage conditions and expiry date, if any;
- f. If relevant, the manufacturing date;
- g. Health and safety marking and handling instructions, where relevant; and
- h. Reference to compliance with this standard

### 3.20 GUARANTEED & OTHER TECHNICAL PARTICULARS

(A) The bidder shall furnish the guaranteed and other technical particulars of the kits offered by him in schedule-V attached with the bid specifications. The particulars which are subject to guarantee shall be clearly indicated. The bidder shall furnish the length of the tube used in the kits in the GTP attached. The complete drawings indicating such length of tubing must be also enclosed along with the type test reports duly authenticated by the testing agency. Without schedule of GTP completely filled in, the bid offer may be ignored.

(B) The bidder shall highlight the various technical aspects and salient features of the kits offered by them.

### 3.21 GUARANTEE

The cable end terminations and straight through joints shall bear guarantee for **five and half years from dt. of last consignment or five years from dt. of installation**. Any defect noticed in the kit, same shall be replaced ( only for LT ) free of cost, if required otherwise the same will be arranged at the supplier's risk and cost. The successful bidder shall furnish manufacturer's warranty on Rajasthan Non-judicial stamp paper worth Rs.100/- in a manner as detailed at clause No. 1.41 of GCC

### 3.22 TESTS

#### 1) TYPE TESTS

a) The bidder shall furnish valid and authenticated type test certificate **as per IS:13573(Pt.1)/2011** from a Govt. approved/ a Govt. recognized/ NABL accredited laboratory/ ILAC i.e. International Laboratory Accredited laboratory / ILAC i.e International Laboratory Accrediation Cooperation ( In case of foreign laboratory)

b) The bidder should furnish documentary evidence in support of the laboratory whose type test have been furnished, that the said laboratory is a Govt/ a Govt.

approved/ a Govt. recognized/ NABL accredited laboratory/ ILAC accredited ( in case of foreign laboratory)

**c) Such type test certificates should not be older than Seven years as on the date of bid opening.**

**d) Bids not accompanied with requisite type test(s) certificate not older than Seven years as on the date of bid opening, shall be treated as non- responsive.**

The test sequence shall be in the order given in Tables 3 to 5, of IS 13573 (Part 1) : 2011 as appropriate for the accessory being tested

## **2) ACCEPTANCE TESTS**

All acceptance and routine tests as stipulated in the relevant standards, latest amended shall be carried out by the supplier in presence of purchaser's representative , and the sampling plan shall be 1% subject to minimum of one No. of assorted size/type for each voltage rating i.e. LT separately.

Further tests mentioned below shall be conducted as acceptance tests at supplier's works or any approved test laboratory preferably at place where supplies work is situated; which will be arranged by the supplier at his own cost:

- a) Visual Inspection. The offered kits should be free from any visible defects
- b) Physical verification of contents - all the contents shall be checked as per kit contents list enclosed by the supplier
- c) Electric Strength test for insulation tubing
- d) Elongation tests for all types of tubing
- e) Wall thickness ratio in expanded condition
- f) Longitudinal change after full recovery
- g) Tensile strength

## **3) ROUTINE TESTS**

The bidder must specify the details of the routine tests being conducted at their Works along with the standards applicable in their offer.

### **3.23 INSPECTION**

The supplier shall provide the facilities to carry out the prescribed acceptance tests on selected samples from the lot offered at one or more testing laboratories. The samples from the lot shall be selected by the inspecting officer or the person authorized by purchaser.

All the tests shall be arranged and carried out as per the procedures laid down in respective specifications as per latest amendment in the presence of purchaser's nominee.

The suppliers should satisfy themselves that the material offered are in accordance with the term of contract and fully confirms to the required specifications

by carrying out a thorough pre-inspection of each lot before offering the same for inspection to the purchaser. Such pre-inspection on the part of the supplier shall minimize the chances of rejection during inspection.

### 3.24 Inspection & Testing

Inspection of material shall be done as per clause (6). Relevant documents including certificate of compliance regarding import / inflow of materials / tubing, test reports under type approval and quality assurance shall be made available to the inspection team for its checking and verification.

### 3.25 TRAINING

If required by the Purchaser, the bidder shall arrange for demonstration / training on the use / proper installation of the kits ordered by the Purchaser, free of cost at Circle Headquarters of Jaipur Discom for getting acquainted with the joining method. The kits used in the training shall be provided by Jaipur Discom

### 3.26 LIST OF KIT CONTENTS

The bidder shall furnish the lists of kit contents and shall also confirm unlimited shelf-life of the kits.

### 3.27 PREFERENCE

The offer of standard make & directly from the manufacturers quoting shorter delivery period shall be preferred.

### 3.28 DEPARTURE FROM THE SPECIFICATION

Should the bidder wish to depart from the specification in any respect, he should clearly state such departures indicating the reasons thereof. Unless this is done, the departmental specification will hold good and shall be binding on the supplier unless the departures have been approved in writing by the purchaser.

### 3.29 BIDS:

a) Bidders shall furnish complete particulars of the material offered by them in regard to the specification and submit the same with their bid. Failure to do so or any incomplete entry therein may prevent a bid from being considered.

b) The bids received without complete details required as per enclosed forms / schedules are liable to be rejected.

### 3.30 DELIVERY SCHEDULE

The bidder is required to quote monthly delivery. The delivery of quoted quantity should be completed in **Seven months period including commencement period of maximum 30 days** in equal monthly installment of assorted size from the date of receipt of purchase order. In case ordered quantity is different than quoted quantity, then monthly delivery shall be adjusted proportionately. **Bids in which monthly**

**delivery schedule is not indicated shall be ignored.**The bidders are required to indicate the delivery schedule in the schedule attached with the Specification.

**3.31 Prices:** Prices offered against the specification shall be **FIRM**.

**3.32. ADDITIONAL ORDER:** Repeat orders for additional quantity, upto 50% of original ordered quantity may be placed by Nigam on the same rates, terms and conditions given in the contract, if required by the Nigam.

**SCHEDULE-I**

**SCHEDULE OF REQUIREMENT**

The approximate quantities to be purchased are as under :-

<b>S.No</b>	<b>Rating &amp; Size in Sq. mm</b>	<b>Quantity in Nos.</b>
1	300 Sqmm O/D	200
2	185 Sqmm O/D	200
3	120 Sqmm O/D	200
4	95 Sqmm O/D	190
5	400 Sqmm STJ	25
6	300 Sqmm STJ	100
7	185 Sqmm STJ	270
8	120 Sqmm STJ	100
9	95 Sqmm STJ	90

The above quantity is tentative and can be increased / decreased as per requirement.

The bidder shall furnish the length of tube used in the kits in the GTP attached. The complete drawing indicating such length of tubing must also be enclosed along with the type test reports duly authenticated by the testing agency.



**Schedule – III**



**JAIPUR VIDYUT VITRAN NIGAM LIMITED**

**A Govt. of Rajasthan Undertaking  
Prescribed technical specification for supply of**

**(Name of Material/Equipment/Machinery/T&P etc.)**

S.No.	Technical specification to which material/equipment/ Machinery/T&P shall conform	Name of IS/other standard specification to which material should	Other if any.
1.	Indian Standard Specification for cross-link polyethylene insulated PVC sheathed cable (for LT)	BIS: 7098	
2.	IEC Specification for plastic cables from 1 KV to 30 KV.	IEC: 502	
3.	Standard for power cable accessories with rated voltage upto 30 KV	VDE: 0278 (PARTS I,II,IV,V)	
4.	IEEE Standard Test Procedures & Requirement for Alternating Current Cable Terminations 2.5 KV Through 765 KV	IEEE 48-1996	
5.	Performance Specification for High Voltage Heat Shrinkable components for use with high voltage solid type cable for LT armoured PVC/ XLPE aluminium conductor cables	ESI: 09-13 (with latest amended)	
6.	Indian Electricity Rules,2005	IE RULES	
7.	Specification for Compression type tubular terminal ends for aluminium conductors of insulated cable	BIS : 8308-1993 (with latest amendments)	
8.	Joints & Terminations of polymeric cable for working voltage upto 1.1 KV & including performance requirement & Type test	<b><u>IS:13573(Pt.1)/2011</u></b>	

Certified that we agree to all the aforesaid technical specification except at S.No..... for which our technical specification shall be as under:-

S.No.	Technical specification to which material/equipment/ Machinery/T&P shall conform	Name of IS/other standard specification to which material should	Other if any.

**(Signature)**  
Name & Designation  
with seal of the bidder.

## SCHEDULE-III -A

### **PRE QUALIFICATION REQUIREMENT**

The bidder should fulfill following qualifying requirements for successful participation in the tender along with relevant documentary evidence supporting each qualifying requirement without which the offer shall be considered non-responsive & rejected.

#### **1.0 STATUS OF BIDDER:-**

a) The bidder should be a Manufacturer of offered items. The offers from sole selling agent/ authorized dealers shall not be entertained.

b) Old/ New suppliers:- Any bidder located within or outside the state of Rajasthan has participated for the first time in a particular Discom & meeting minimum qualification requirement and has supplied the tendered material/or of higher rating in other utility shall be treated as an old supplier. Rajasthan's firms although supplied in past but not meeting minimum quantity supplied criterion including altogether new units which have not supplied any quantity but having adequate & required manufacturing and testing facility and technical know-how of the tendered material shall be considered as new firms and would be eligible for trial order only. In case of supply made to the licensed power utility outside India, the C.A. certificate furnished by firm shall be considered.

#### **2.0 PAST SUPPLY & PERFORMANCE CRITERIA :-**

The bidder shall meet both past supply and performance criteria as detailed below for opening of tenders:-

##### **2.01 PAST SUPPLY:-**

2.01.1 The bidder is required to quote for minimum **10%** of tendered quantity failing which their offer may be considered Non-Responsive.

2.01.2 The bidder should have designed, manufactured / fabricated, tested and supplied to utility / Discoms / Govt. Departments at least 2 X QQ (QQ being the quoted quantity) of similar item / higher rating of tendered material / equipment in last 3 financial years from the date of opening of technical-commercial bid.

**Note:** Requirement of quantity manufactured, minimum quantity to be offered and amount of Bank Guarantee to be furnished in absence of test certificate shall be reduced to 25% for Rajasthan based units.

2.01.3 In support of fulfillment of the past supply criteria, the bidder shall furnish documentary evidence in the form of certificate from Chartered Accountant in the enclosed prescribed proforma only. This prescribed proforma should be furnished either in original or copy duly attested by Notary. The bidder shall also sign and affix seal on the C.A. Certificate. The certificate should have membership number with the name & address of the chartered accountant. Certificate should clearly indicate the quantity supplied, period of supply, voltage Class, Rating of the Transformer etc. in the format prescribed, any deviation to format or information diverted format, will not be considered and rejected.

Note:-The material supplied and accepted for same/higher rating for Turnkey projects to a licensed power utility/Govt. shall be considered for the purpose of evaluating criteria. The certificate given by C.A. shall indicate above quantity separately.

## **2.02 PERFORMANCE CRITERIA:-**

2.02.1 i) If a bidder has supplied up to 50% of ordered quantity in previous tender up to date of opening of subsequent tender and scheduled delivery period expired, the bid of such bidder will not be opened in the Discom for that item.

ii) However, if the supplies have been completed for a quantity more than 50% but not completed up to date of opening of subsequent tender and scheduled delivery period expired, the quantity equal to the quantity pending in previous tender for that item shall be reduced from the subsequent tender quantity to be allocated to the bidder.

iii) If a bidder doesn't fulfill G.P. failed contractual obligations in previous bid(s), then quantity equal to the G.P. failed quantity pending for repair/ replacement shall be reduced from the subsequent new bid quantity for fresh item to be allocated to the bidder. This action will be in addition to the penal provisions applicable in respective bids where supply is incomplete.

iv) The heat shrink system of the identical type brand as offered in the bid shall have proven performance of at least Three Years for 33 KV Kits & five years for 11 KV Kits in Indian conditions. Performance of same make /brand but of type other than heat shrinkable shall not be acceptable. The bidder shall furnish documentary proof for performance period.

## **3.0 TYPE TEST CRITERIA:-**

a) The bidder shall furnish valid and authenticated type test certificate from a Govt. approved/ a Govt. recognized/ NABL accredited laboratory/ ILAC i.e. International Laboratory Accredited laboratory / ILAC i.e International Laboratory Accrediation Cooperation ( In case of foreign laboratory)

b) The bidder should furnish documentary evidence in support of the laboratory whose type test have been furnished, that the said laboratory is a Govt/ a Govt. approved/ a Govt. recognized/ NABL accredited laboratory/ ILAC accredited ( in case of foreign laboratory)

**c) Such type test certificates should not be older than Seven years as on the date of bid opening.**

**d) Bids not accompanied with requisite type test(s) certificate not older than Seven years as on the date of bid opening, shall be treated as non- responsive.**

## **4.0 POOR RECORD OF PERFORMANCE AND DELIVERY:**

The bidder who has been black listed in any of the state Discom or with whom business relations have been severed in Jaipur Discom shall not be considered. Severment of business relations will be done in case of following circumstances for the period and with the recovery mentioned against each:

i) When vendor does not accept order awarded on its accepted price and terms and conditions or does not comply with contractual formalities.	Forfeiture of EMD/cancellation of vendor registration to recover amount of EMD along with severment of business relations for three years from the date of issue of order.
ii) When vendor complies with contractual formalities but does not commence supplies.	Levy of maximum recovery on account of delay in delivery along with severment of relations for a period of 2 years from the date of issue of order or in next two bids whichever is later along with forfeiture of EMD / cancellation of vendor registration.

### 5.0 (A) Black listing of a firm:

After having given Show Cause Notice of 30 days, and having established & cogent reasons for blacklisting of the firm as given below, the firm should immediately be blacklisted for a period of 5 years indicating reasons of doing so, in the letter itself, and a copy of such blacklisting should be given to the firm, with the approval of CLPC:-

(i) There are sufficient and strong reasons to believe that the supplier or his employee has been guilty of malpractices such as manhandling/misbehavior with Government official by supplier or his partner/employee, bribery, corruption or abatement of such a offence in a position where he could corrupt Nigam's official, fraud, vitiating fair tender process including substitution of or interpolation in tender, mis-representation, pilfer-aging or unauthorized use or disposal of Nigam's material issued for specific work etc.

(ii) Where a supplier or his partner or his representative has been convicted by a court of Law for offences involving moral turpitude in relation to the business dealing or where security considerations including suspected disloyalty to the Nigam/state so warrant the blacklisting.

(iii) If the State Bureau of Investigation or any other authorized investigating agency recommends for blacklisting after completing the investigation.

Note: - 1 If a supplier after having tendered for a supply or after negotiations gives application voluntarily vitiating the fair tendering process, it shall also tantamount to malpractice.

Note:-2 A register containing the reasons for blacklisting the supplier as also the names of all the partner of the suppliers and the allied concerns coming within the effective influence of the blacklisted supplier will be maintained.

Note: - 3 A register of black listed supplier will be maintained which will not only include suppliers enlisted with the Enlisting Authority but also black listed suppliers in Nigam.

Note :-4 A Black listed supplier

(i) shall not be entitled for registration in any of the Discom (ii) shall not be awarded any supply order in future in any Discom during the notified period.(iii) his registration if any shall stand cancelled immediately and his registration security /EMD/S.D. shall stand forfeited. (iv) In case of blacklisting of the firm by any one of Discom for the cogent prescribed reason(s) as stipulated above, the same shall be applicable to all the three Discoms and as a

consequence of blacklisting, all the pending orders to that firm, will be cancelled in all three (3) Discoms with immediate effect. However in respect of completed/executed contract G.P. obligations as well as other liabilities shall be fulfilled by the supplier.

**(B) Severment of Business relation:**

(a) After having given Show Cause Notice of 30 days, and having established & cogent reasons for Severment of business relation as given below, the firm should immediately be severed the business relations for a period of 2 to 3 years indicating reasons of doing so, in the letter itself, and a copy of such severment should be given to the firm, with the approval of CLPC:-

(i) The supplier continuously refuses to pay Nigam dues without showing adequate reasons and where the purchasing authority is satisfied that no reasonable dispute attracting reference to Settlement Committee or Court of Law exists for the supplier's action of non-supply.

(ii) When vendor does not accept LOI/detailed purchase order awarded on its accepted prices and terms & conditions or does not comply with the contractual formalities.

(iii) When vendor/supplier who otherwise completed contractual formalities but does not commence supplies on the date of opening of technical bid of the fresh tender/completion of schedule delivery period whichever is later.

**Note-1-**In case supplier does not deposit outstanding dues towards Nigam, even after completion of severment period, the period of severment will continue.

2. Severment done purely/ mainly on account of non-deposition of dues against the supplier/vendor/contractor could be lifted by CLPC, if the dues are deposited prior to the expiry of such severment period.

3. Severment done by one Discom for non-supply of material and /or corresponding non-recovery of dues will not be effective in other Discoms except in respect of common purchase cases of three Discom.

4. On severment of business, the EMD/SD/vendor registration security will be forfeited.

5. The orders in execution satisfactorily will not be cancelled other than the order on which severment have been done.

**(C) DEBARMENT**

Reasons on which Debarment can be made:-

(i) The competent authority may debar the supplier on account of his performance or other disabilities, if it is no longer considered fit to remain under vendor registration as per his obligation under vendor registration.

(ii) If at any subsequent stage of inspection of firms after award of contract, it is found that firm does not have sufficient tech. staff or required/necessary technical equipments, the purchasing authority can debar the firm for one year or next tenders whichever is later. The

debarment will be lifted only on re-inspection of firm's works; the defects noticed earlier are fully rectified to the satisfaction of Nigam.

(iii) When contract agreement executed and supplies commenced but could supply only up to 50% of ordered quantity and scheduled delivery period expired, then the firm can be debarred for one year or next tender whichever is later in that Discom only for that particular item/rating/ capacity/size etc.

(iv) The suppliers who have been awarded contract for supply of material is not adhering to the periodic delivery schedule, the contract awarding authority reserve the right to terminate the contract and may debar the firm in participating in tender for a period of 2 to 3 years.

Note:-1. On debarment, the EMD/ SD/Vendor Registration security shall be forfeited.

Note:-. 2. If the firm is debarred in one Discom for any reasons then the same should not be applicable in other Discom subject to exception that in case of common Discoms purchases such debarment of a firm would be applicable to all three Discoms for that particular item and rating/capacity/size etc.

## **6.0 APPEALS AND APPLICATIONS:-**

Appeal against the order of blacklisting, severment and debarment can be filed before BOD within a period of 3 months from the date of intimation. The letter of appeal will be addressed to the order placing authority. Who will process the case for placing the matter in B.O.D. with in a period 60 days. The BOD may reduce or waive the penalty, if sufficient reasons/supporting documents are furnished by the supplier.

### **GENERAL CONDITIONS : - (ALL CONDITIONS BE DULY SIGNED & SEALED)**

I) The bidder shall clearly indicate the deviations such as 'Technical Deviation & Commercial Deviations' in the prescribed proforma only. The deviations indicated elsewhere in the bid shall not be accepted.

II) The bidder must clearly fill up each and every particular of guaranteed technical particulars annexed with Technical Specifications otherwise he will be responsible for Technical Non-responsiveness.

III) All documents required in the prescribed format are to be furnished along with the bid itself only except an attested copy of BIS license (wherever it is required), failing which the bid will be summarily rejected.

IV) However, a copy of BIS License may be submitted by the bidder up to the official working hours of one working day prior to the schedule / notified date of opening of price bid.

**Schedule – IV**

**JAIPUR VIDYUT VITRAN NIGAM LIMITED  
A Govt. of Rajasthan Undertaking  
SCHEDULE OF PRICES**

(Must be filled by the bidder and returned with the bid)

The Superintending Engineer (Proc.)

Jaipur Vidyut Vitran Nigam Limited

with reference to your invitation to bid against specification No....., we agree to supply at prices (firm) given as follows

S No.	Particulars of Material	Ex-works Price (in Rs.)	Freight (Per Unit)	Insurance (Per Unit) (In Rs.)	GST (Per Unit)		Total Price In Rs. (Per Unit)	Entry Tax @ ___ %	All adjusted unit FOR. Destination Price including Entry Tax	Total Contract Value (In Rs.)
					Rate	Amt.				

**Notes:-**

- i) The bidder is required to quote the prices in the above format only. Bids having prices quoted in other format/manner are liable to be ignored.
- ii) The bidder must fill each and every column of the above format . Mentioning “extra/ Inclusive” in any of the column may lead for rejection of the price bid.
- iii) No cutting/ overwriting in the prices is permissible.
- iv) The unit Ex-work price to be indicated in should be exclusive of taxes & duties which are to be indicated in separate columns meant for the purpose. .
- v) In case of price bid break-up is given component wise and also given sum total by the bidder but there is a difference between aggregate of component wise and sum total , then lesser of the two will be taken into account.

**Signature of bidder with rubber stamp**

**Schedule-IV `A`**

**Must be filled in by the bidder and attached with Technical Bid (Part-I)**

To,  
The Superintending Engineer (Proc),  
Jaipur Vidyut Vitran Nigam Limited, Jaipur.

Dear Sir,

With reference to your invitation to bid against specification No.JPD/SE/Proc/TN-4662, we agree to supply the following quantity :

S. No.	Name of the item	Bid Quantity	Qty. Offered	Justification of quantity offered as per Pre Qualifying Requirement	Status of Type Test Certificates.
1	300 Sqmm O/D	200			
2	185 Sqmm O/D	200			
3	120 Sqmm O/D	200			
4	95 Sqmm O/D	190			
5	400 Sqmm STJ	25			
6	300 Sqmm STJ	100			
7	185 Sqmm STJ	270			
8	120 Sqmm STJ	100			
9	95 Sqmm STJ	90			

1. The offer is valid for a period of 120 days from the next date of opening of this bid.
2. The prices are **FIRM**.
3. It is noted that the quantity as mentioned in the specification are approximate and we agree to supply any quantity as per your requirement.
4. The delivery shall strictly be in accordance with our delivery schedule as given in Schedule-VIII of this specification. In case we fail to deliver the materials as indicated in the clause No.1.23 of GCC, we are liable to pay recovery for delay in delivery as per clause No.1.24 of this Section-II of this specification. The material shall conform to your specification No.JPD/SE/Proc/ TN-4662 and as per relevant ISS in all respect.
5. We conform that we agree to all the terms & conditions as well as the technical stipulation of your specification No.JPD/SE/Proc/TN-4662 and there are no deviations other than as specified in the Schedule-VI (A & B).

**Yours faithfully,**

**Signature of bidder with stamp  
Dated.**





**Schedule – V**

**JAIPUR VIDYUT VITRAN NIGAM LIMITED**

**A Govt. of Rajasthan Undertaking**

Statement of guaranteed technical particulars and other performance data for supply of ..... (Name of material) against specification no.....

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S.No.	Particulars of technical & other performance data guaranteed.
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Certified that we agree to all the aforesaid technical particulars and other performance data except following :-

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S.No.	Particulars of technical & other Performance data	Reasons for deviations/departure.
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**(Signature)**  
Name & Designation  
with seal of the bidder.

Schedule – V-A

**GTP FOR LT CABLE ACCESSORIES ie JOINTS & TERMINATIONS**  
**(Heat Shrinkable)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>JVVNL Requirement</b>
1	Manufacturer' Name& Address	
2	Brand Name &Country of Origin	
3	Kit Storage Temperature	50° C max
4	Voltage Grade	1.1kv
5	Applicable Standards	As per IS and Tech. Specification
6	Material to be used	Polymeric Heat shrink tubes.
7	Type Of Kit Offered	Straight through Joint.  Termination joint.
8	Shelf life of components in the kit	Unlimited.
9	Time Required for energisation after completion of termination/joint.	Immediate.
10	Impulse withstand on Low voltage kits.	As per IS 13573 joints classification,for cable size less than50sqmm.it will be 8kv & for cable size more than 50sqmm.it will be 20kv
11	Heating cycle in Air	As per IS-13573 part-I See 8.3
12	Heat Cycle in Water(Over sheath damage)	As per IS-13573 part-I See 8.3
13	Insulation resistance(Immersed)	As per IS-13573 part-I See 8.4
14	Insulation resistance(Air)	As per IS-13573 part-I See 8.4

15	Impact at ambient temp.	As per IS-13573 part-I
16	AC High voltage withstand(In Air)	As per IS-13573 part-I See 8.6
17	AC High voltage withstand(immersed)	As per IS-13573 part-I See 8.6
18	Examination of joint.	As per IS-13573 part-I See 8.8
19	Dielectric Strength for insulating Tube.	12kv/mm
20	Dielectric constant for insulating tube	3.5(min)
21	Tensile strength for insulating tube	8N/mm <sup>2</sup>
22	Ultimate Elongation for insulating tube	200 to 500%
23	Water Absorption for Insulating Tube	0.3%
24	Longitudinal Change for insulating tube	+10%
25	Heat Shock for insulating tube	30min@200 <sup>o</sup> c,
26	Flammability for insulating tube	pass
27	Heat Shrink Outer insulating tubes	As per specification (clause no.5.01& 5.02)
28	G.I. Wire mesh / Canister	As per cable size
29	Red mastic	As per cable size
30	G.I. Solid Collet	As per cable size
31	Earthing Conductor	As per requirement
32	Ferrule	As per specification
33	PVC NA Tape	As per requirement
34	PVC Adhesive Tape	As per requirement
35	Cleaning Liquid	As per requirement
36	Aluminum Oxide cloth	As per requirement

<b>37</b>	<b>Heat shrink break boot(Termination)</b>	<b>As per specification</b>
<b>38</b>	<b>List Of Contents Of Kit (To Be Furnished Separately)</b>	<b>Detailed component list with Quantity etc.</b>

**Schedule – VI (A)**

**JAIPUR VIDYUT VITRAN NIGAM LIMITED**

**A Govt. of Rajasthan Undertaking**

**DEPARTURE/DEVIATION FROM TECHNICAL SPECIFICATION**

The bidder shall state under this schedule the departure from the Purchaser's specification in respect of technical is as under:-

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S.No.	Main Deviations from Technical Specification.
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Certified that we agree to all the technical specification of the NIT except for the deviation to the extent indicated above.

**(Signature)**  
Name & Designation  
with seal of the bidder.



**Schedule – VI (B)**

**JAIPUR VIDYUT VITRAN NIGAM LIMITED**  
**A Govt. of Rajasthan Undertaking**  
**DEPARTURE FROM COMMERCIAL TERMS & CONDITIONS OF THE**  
**SPECIFICATION**

The bidder shall state under this schedule the departure from the Purchaser's specification in respect of Commercial terms & conditions:-

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S.No.	Main Deviations from Specification.
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Certified that we agree to all the commercial terms & conditions as laid down in General Conditions of Contract to the specification except for the deviation to the extent indicated above.

**(Signature)**  
Name & Designation  
with seal of the bidder.



**Schedule – VII**

**JAIPUR VIDYUT VITRAN NIGAM LIMITED**

**A Govt. of Rajasthan Undertaking**  
**LIST OF PAST SUPPLIES**

The bidder shall state under this schedule whether material and equipments, similar to those offered in the bid have been previously supplied by him. A list shall be given of such orders executed by him together with information regarding the names of purchasing organizations, quantities supplied and when the supplies were effected. This list should be in form given below:-

S.No.	Detailed particulars of items supplied	Qty	Order No. & Date	Name & details of purchasing authority	Date of Completion
1	2	3	4	5	6

If executed partially to be mentioned	whether still to be executed order	Delivery stipulated in	Remarks
7	8	9	10

**Note:** Separate schedules are to be furnished by the bidder for past supply to the JVVNL, Jaipur other State Electricity Boards and other Departments /Organisations.

**(Signature)**  
Name & Designation  
with seal of the bidder.

**SCHEDULE-VII-A**

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that M/s. \_\_\_\_\_ (Complete with address) have manufactured and supplied the goods/ equipments/ material during the following financial year(s) to the Electrical Utilities/ Government Departments/ Discoms/ SEBs as detailed out below:

S. No	Financial year in which material supplied	Detailed particulars of item(s) supplied	Name & particulars of purchasing authority	Order No. & Date against which item(s) supplied	Unit	Ordered		Actual Supplied Up to		Remarks
						Qty	Value (Rs.)	Qty	Value (Rs.)	

Signature

Signature of C.A.

Name & Designation  
With Seal of the Bidder  
Date \_\_\_\_\_  
Place \_\_\_\_\_

Name:  
Address  
  
Membership No.

The above particulars are true and correct based on explanations, records and books of accounts produced before us. Further the above certificate issued on the request of the company.

CA Firm(\_\_\_\_\_)

**Note: This CA certificate should be furnished on the letter head of CA.**



**SCHEDULE-VIII**

**JAIPUR VIDYUT VITRAN NIGAM LIMITED**

**DELIVERY SCHEDULE  
TN-4662  
PART – A**

The delivery Schedule of the material by the Purchaser Officer is as mentioned hereunder:-

<b>S.N o</b>	<b>Particular Of Material</b>	<b>Commencement Period</b>	<b>Rate Of Supply per Month</b>	<b>Period for Completion of delivery of Entire material</b>
1	HEAT SHRINKABLE TYPE LT INDOOR/ OUTDOOR CABLE END TERMINATIONS AND STRAIGHT THROUGH JOINTS FOR LT ARMOURED PVC/ XLPE, ALUMINIUM CABLES.	30 days from the date of receipt of purchase order.	Equal monthly instalment of assorted size.	Six months after commencement period.

**Note – In case ordered quantity is different than quoted quantity, then monthly delivery shall be adjusted proportionately . Bids in which monthly delivery schedule is not indicated, shall be ignored.**

**PART - B**

In case bidder deviates from the delivery schedule mentioned by the purchaser in Part-A , then the delivery Schedule of the material by the bidder shall be indicated / mentioned as under:-

<b>S.N o</b>	<b>Particular Of Material</b>	<b>Commencement Period</b>	<b>Rate Of Supply per Month</b>	<b>Period for Completion of delivery of Entire material</b>

Note: (i) During the commencement period, the process of model assembly and submission of B.O.M. for approval shall be got completed.  
(ii) During the commencement period the contractual formalities shall be got completed.

**Signature  
Name & Designation  
With Seal of the Bidder**



## Schedule – IX

### JAIPUR VIDYUT VITRAN NIGAM LIMITED

#### A Govt. of Rajasthan Undertaking

List of Equipments and Technical Hands Available with the Firm

(To be filled in by the bidders & enclosed with the bid)

Manufacturers and / or their authorized agents who are quoting against this bid are requested to furnish the following information along-with the bid. The Purchaser will have the discretion to ignore the bid without the under noted particulars and/or ignore the bid particulars.

1. Name and Address of Manufacturer.
2. Place where works exist.
3. Details of machinery particularly with B.H.P. of each item installed.
4. Details of staff employed in the works.
5. Date when started the manufacturing of item under reference.
6. List of items manufactured.
7. Literature and drawings of items manufactured showing their description, size, design and other important technical particulars.
8. Details of order so far, executed alongwith the names of organization to whom supplied.
9. Manufacturing capacity.
10. Is the workshop open for inspection by the representative of the board, if required?
11. Statement of financial resources and Banking Reference alongwith Balance-Sheet for previous two years.
12. Testing facilities available for the manufactured articles in the testing laboratory of works.
13. Whether the Firm is a small/medium/large scale industry.
14. Registration No. with :-
  - i. Small Scale, National/State.
  - ii. DGTD
  - iii. State Industries Department.

**(Signature)**

Name & Designation  
with seal of the bidder.

**GENERAL PARTICULARS ABOUT THE BID IN BRIEF**

**JAIPUR VIDYUT VITRAN NIGAM LIMITED  
( PROCUREMENT CIRCLE)  
NEAR RAM MANDIR , BANI-PARK, JAIPUR-302006**

**TELEPHONE: - 0141 2208098**

**TELE FAX: - 0141-2208098**

**FOR SUPPLY OF HEAT SHRINKABLE TYPE LT INDOOR/ OUTDOOR CABLE  
END TERMINATIONS AND STRAIGHT THROUGH JOINTS FOR LT ARMoured  
PVC/ XLPE, ALUMINIUM CABLES AGAINST BID NOTICE NO.  
JPD/SE(Proc)/SPO.III/TN-4662  
SINGLE PART BID**

<b>Last Date of receipt of bids</b>	<b>27.12.17 upto 01:30 PM</b>
<b>Date of opening of bids</b>	<b>28.12.17 upto 02:30PM</b>
<b>Cost of Specification</b>	<b>Rs. 2950.00 (Rs. Two Thousand Nine Hundred Fifty only)</b>
<b>Validity</b>	<b>120 days from the next date of opening of Techno commercial bid.</b>
<b>Bid Security to be deposited</b>	<b>i)General Bidder : Rs.16460/- ii)Sick Unit : Rs. 8230/- iii)SSI Unit of Rajasthan : Rs. 4115/-</b>

"In case **SSI units of Rajasthan** quotes less than the tendered quantity then they are required to furnish Bid Security @ 0.5% of the estimated value of quantity offered on the basis of estimated unit FOR destination price mentioned hereunder:

S.No.	Jointing Kits For LT Cables	Estimated Price in Rs.
1	300 Sq.mm O/D	730.00
2	185 Sq.mm O/D	415.00
3	120 Sq. mm O/D	415.00
4	95 Sq. mm O/D	300.00
5	400 Sq. mm STJ	1290.00
6	300 Sq.mm STJ	1006.00
7	185 Sq.mm STJ	755.00
8	120 Sq.mm STJ	755.00
9	95 Sq.mm STJ	460.00

**Note:- The bidder, in their own interest, are requested to read very carefully Section-I (Instruction to bidders), Section-II (General Condition of Contract) & Section-III (Technical Specification) before filling the bid. The Bid documents be downloaded from JVVNL website www.jaipurdiscom.com . No hard copy of the bidding documents will be provided to the bidders through this office. In case of any discrepancy found in bidding documents downloaded from the website and appended with the bid (as a bid document) and original copy of such document available in the office of Superintending Engineer (Proc.), Jaipur Discom, Jaipur then the copy available with Superintending Engineer (Proc.), Jaipur Discom, Jaipur will be considered as final document for all purpose. The**

**cost of Bid document as published in NIT shall be furnished along with downloaded bid document in the manner prescribed in bid document.**

Further, while furnishing / depositing the BG in lieu of bid security /bid security amount in the office of Sr. Accounts Officer (MM) /Accounts Officer (MM), JVVNL, Jaipur, the bidders shall also furnish a certificate of SSI unit of Rajasthan / sick unit and also to submit a letter mentioning the quantity offered by them."

The Micro, Small & Medium Scale Industries of Rajasthan and sick industries, other than Small Scale Industries, whose cases are pending before the Board of Industrial and Financial Reconstruction (BIFR) shall furnish self-attested documentary evidence duly attested by Notary to claim the above.

The bid security may be given in the form of banker's cheque or demand draft in favour of Accounts Officer (MM), JVVNL, Jaipur of a scheduled bank payable at Jaipur. Bid security can be furnished in form of bank guarantee( in specified format as mentioned in bid document), in favour of Sr. Accounts Officer (MM), JVVNL, Jaipur, of a scheduled bank in favour of Chief Engineer (MM), JVVNL, Jaipur up to stipulated date & time, and obtain a receipt/acknowledgement thereof. No other mode of deposit shall be accepted.

NOTE:-

3. Wherever EMD and Security Bank Guarantee (SBG), are appearing in the ITB, GCC & other Bidding Documents, same is hereby replaced by BID SECURITY as above.
4. VENDOR REGISTRATION: The relaxation/exemption given to the registered vendors of the Nigam in respect of EMD/SBG, wherever appearing in the ITB, GCC & other Bidding documents, are hereby WITHDRAWN

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**Important Notes:-**

1) Furnishing of proof of deposition of cost of bid document, Security deposit along with downloaded bid documents is essential otherwise the " BID OFFER " will not be opened.

2) Further, while furnishing / depositing the BG in lieu of bid security /bid security amount in the office of Sr. Accounts Officer (MM) /Accounts Officer (MM), JVVNL, Jaipur, the bidders shall also furnish a certificate of SSI unit of Rajasthan / sick unit and also to submit a letter **mentioning the quantity offered** by them." Please note that offered quantity mentioned in the technical specification and offered quantity along with bid should be same.

3)The Micro, Small & Medium Scale Industries of Rajasthan and sick industries, other than Small Scale Industries, whose cases are pending before the Board of Industrial and Financial Reconstruction (BIFR) shall furnish self-attested documentary evidence duly attested by Notary to claim the above.

4) The bid security may be given in the form of banker's cheque or demand draft in favour of Accounts Officer (MM), JVVNL, Jaipur of a scheduled bank payable at Jaipur. Bid security can be furnished in form of bank guarantee( in specified format as mentioned in bid document), in favour of Sr. Accounts Officer (MM), JVVNL, Jaipur, of a scheduled bank in favour of Chief Engineer (MM), JVVNL, Jaipur up to stipulated date & time, and obtain a receipt/acknowledgement thereof. No other mode of deposit shall be accepted.

**NOTE 2 :-**

- A. Wherever EMD and Security Bank Guarantee (SBG), are appearing in the ITB, GCC & other Bidding Documents, same is hereby replaced by BID SECURITY as above.**
- B. VENDOR REGISTRATION: The relaxation/exemption given to the registered vendors of the Nigam in respect of EMD/SBG, wherever appearing in the ITB, GCC & other Bidding documents, are hereby **WITHDRAWN****

5). The bidder(s) shall **quote prices strictly in the manner prescribed in Clause 1.09 of Section-I (Instructions to bidders). & Clause No. 1.33 Section-II ( General Conditions of contract) in Schedule-IV, otherwise their bid is liable for rejection. The prices quoted should be FIRM.**

6). The bid offer shall be furnished in **Single Part** in the following manner:

**i )First envelope containing proof of deposition of cost of Bid documents & Security deposit :-** Name of item, bid no., time of bid submission, due date for opening of bid and the word 'Envelope-I & Cost of bid documents and security deposit should be clearly written on the front side of the envelope. Furnishing of proof of deposition of cost of bid document and Security deposit is essential otherwise the " BID OFFER " will not be opened.

**ii) Second envelope for techno-commercial bid :-** Name of item, bid no., time of bid submission, due date for opening of bid and the word 'Envelope – II & Techno-Commercial Bid' should be clearly written on the front side of the envelope. Furnishing of downloaded bid documents is essential otherwise the " BID OFFER " will not be opened.

**iii) Third envelope for price bid.** Name of item, bid no., time of bid submission, due date for opening of bid and the word 'Envelope – III & Price Bid' should be clearly written on the front side of the envelope.

*Note : Envelope III containing price bid will be kept in the safe custody of the concerned engineer / officer. It will be opened at a later date in respect of those bidders whose offers are found / adjudged technically and commercially acceptable. The date of opening of "Price Bid" shall be intimated to successful bidders in due course of time. In case of deviation from the stipulated clauses of bid specifications, price bid of the bidder will not be opened.*

**iv) Fourth envelope containing above three envelopes.** Name of item, bid no., time of bid submission and due date for opening of bid should be clearly written on the front side of the envelope. (All the above envelopes shall be duly sealed individually).

**Note : However, two part bidding could be adopted for the item of special nature technology, sophistication or for any other item in the opinion of purchasing officer considered suitable for two part bidding system also irrespective of value.**

- v) The bidder(s) shall ensure that their bids are furnished /submitted strictly in the manner detailed in the specification.

( PLEASE NOTE THAT BID RECEIVED AFTER SPECIFIED TIME ON DUE DATE OF OPENING WILL NOT BE ACCEPTED AND SUCH OFFERS SHALL BE IGNORED.)

5. The bids not accompanied with pre qualifying requirement , technical requirement indicated in the specification and other requirement given here under will be considered as incomplete offer and sufficient grounds for offer to be passed over:

- i) Capacity, capability and competency proofing documents.
- a) Capacity/orders of similar and higher rating of bided equipment booked as on date of bidding with type and rating and construction details of equipment for which order received be indicated.
- b) Copy of purchase orders of Erstwhile RSEB or JVVNL for similar or higher rating equipment latest executed.
- i) Year wise past experience for last 5 years of similar or higher rating of bided equipment.
- ii) The details of testing facilities available at the works and copies of latest type test certificates, carried out on similar or higher rating.
- iii) Quality assurance plan.
- iv) Complete guaranteed technical particulars, out lines and general arrangement drawings alongwith Bill of Material.

6. Bids without Sections & schedules as mentioned in index shall be rejected.

7. Bids shall be furnished in single copy.

8. JVVNL has the right to reject any offer on the basis of track record of poor performance in execution of previous order / equipment supplied / after sales service while evaluating the Techno-commercial bid.

9. JVVNL reserves the right to accept minor deviations in standard terms and conditions and also in technical and constructional features as specified in the technical specification (Section-III).

10. Deviation of any kind shall not be quoted in price bid, if found quoted, the same shall be ignored.

11. The following facilities are to be provided by the supplier at his own cost to the inspecting officer of JVVNL.

- i) Suitable accommodation.
- ii) Local conveyance between arrival point, place of stay, works and departure point.
- iii) The supplier shall assist in arranging return ticket and reservation on the request of the inspecting officer for which the payment shall be made by the inspecting officer. In case of joint inspection, single or shared double room accommodation shall be provided.

**NOTE:- Please not that in the ITB, GCC and Specification Wherever Excise, VAT and all other Taxes are appearing same are being replaced by GST w.e.f. 01.07.2017.and wherever EMD / Vendor registration appears should be read as Bid security.**

**PERFORMA OF BANK GUARANTEE FOR BID SECURITY**

(Bank Guarantee in lieu of Bid security on non-judicial Stamp Paper of Rajasthan State of 0.25% of the B.G value or Rs. 25,000/- , whichever is less)

To,  
The Chief Engineer (MM ),  
Jaipur Vidyut VitranNigamLtd.,Jaipur

- \_\_\_\_\_.
1. Whereas .....(name of the Bidder) (hereinafter called "the Bidder") has submitted its bid dated.....(date of submission of bid) for .....(name of contract/ Name of the material with Bid no.)(hereinafter called " the Bid").
  2. KNOW ALL PEOPLE by these presents that WE.....(name of bank) of .....(name of country), having our registered office at..... (addresses of bank) (hereinafter called "the Bank"), are bound unto..... (name of Purchaser) (hereinafter called " the Purchaser") in the sum of Rs.\* \_\_\_\_\_ for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this .....day of .....20.....
  3. THE CONDITIONS of this obligation are:
    - (i) If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder in the Bid Form; or
    - (ii)If the bidder refuses to accept the correction of error in his Bid; or
    - (iii)If the Bidder, having been notified of the acceptance of its Bid by the purchaser during the period of bid validity:
      - (a) Fails or refuses to execute the Contract Agreement within the time specified in purchase/work order, if required, or
      - (b) Fails or refuses to furnish the performance security within the time specified in purchase/work order in accordance with the GCC, or
      - (c) Fails to commence supply of goods or services or execute work as per purchase/work order within time specified.
    - (iv) If the bidder breaches any provision of the Code of Integrity specified in the RTPP Act and Chapter VI of the RTPP Rules.
  4. We undertake to pay to the purchaser up to the above amount upon receipt of its first written demand, without the purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or all of the three conditions specifying the occurred condition or conditions.
  - 5.The decision of the CHIEF ENGINEER (MM),JAIPUR VIDYUT VITRAN NIGAM LIMITED, JAIPUR shall be final whether breach has been committed on the right to demand the amount of guarantee from us which has accrued to the purchaser.
  6. This guarantee shall not cease or determine, if the purchaser grants time or indulgence or vary the terms of the contract with the Contractor or without our consent or knowledge.
  7. The guarantee herein contained shall not be affected by any change in the constitution of the Contractor.
  8. We.....further undertake not to revoke this guarantee during its currency except with the previous consent of the CHIEF ENGINEER (MM),JAIPUR VIDYUT VITRAN NIGAM LIMITED, JAIPUR.
  9. All disputes arising under the said guarantee between the Bank and the Nigam or between the Contractor and the Nigam pertaining to the guarantee, shall be subject to the jurisdiction of Courts in Jaipur, Rajasthan alone.
  10. This guarantee will remain in force up to and including one hundred eighty (180) days after the date of the opening of bids, i.e. up to ....., with a further grace period of Ninety (90 ) days and any demand in respect thereof should reach the Bank not later than the above date.

Yours faithfully,  
Bankers (EXECUTENT)

Signed by the above named Bank in presence of :-  
(Signature with full Name and Address)

Witness :

1. \_\_\_\_\_
2. \_\_\_\_\_

Attested by Notary Public, First Class Magistrate or directly confirmed by the executing bank.

\* The Bidder should insert the amount of the guarantee in words and figures denominated in the currency of bid.

Note1 :- In case the bid is submitted by a Joint Venture, the Bid Bank guarantee shall be in the name of Lead partner or in the name of joint venture partners submitting the Bid covering all the partners of the joint venture.

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## **AMENDMENT IN ITB AND GCC**

- 1) Wherever EMD and Security Bank Guarantee (SBG), are appearing in the ITB, GCC & other Bidding Documents, same is hereby replaced by BID SECURITY as under:-

### **BID SECURITY**

Bid security shall be 2% of the estimated value of subject matter of procurement put to bid. In case of Small Scale Industries of Rajasthan it shall be 0.5% of the quantity offered for supply and in case of sick industries, other than Small Scale Industries, whose cases are pending with Board of Industrial and Financial Reconstruction, it shall be 1% of the value of bid. Every bidder, if not exempted, participating in the procurement process shall be required to furnish the bid security as specified in the notice inviting bids.

“In case of SSI units of Rajasthan quotes less than the tendered quantity then they are required to furnish Bid Security @ 0.5% of the estimated value of quantity offered on the basis of estimated unit FOR destination price mentioned in the technical specification .

In case the bidder offers any one rating or more, then he has to furnish the Bid Security @ 0.5% of the estimated value of quantity offered of that rating mentioned in the technical specification.

The Bid Security amount (as applicable) to be paid by Demand Draft/Banker's Cheque in favour of Account Officer(MM), JVVNL, Jaipur (payable at Jaipur) or Bank Guarantee, in specified format (as mentioned in the technical specifications), of a scheduled bank in favour of Chief Engineer (MM), JVVNL, Jaipur, be deposited in the office of the Sr.Accounts Officer (MM), JVVNL, Old Power House Premises, Bani Park, Jaipur-302006 upto 2.00 p.m. upto one WORKING day prior to schedule date of opening of respective bid.

The Micro, Small & Medium Scale Industries of Rajasthan and sick industries, other than Small Scale Industries, whose cases are pending before the Board of Industrial and Financial Reconstruction (BIFR) shall furnish self-attested documentary evidence duly attested by Notary to claim the above.

**2) Wherever Performance Bank Guarantee (PBG) and Composite Bank Guarantee (CBG) are appearing in the ITB, GCC & other Bidding Documents, same are hereby replaced by PERFORMANCE SECURITY as under:-**

**PERFORMANCE SECURITY:-**

- (i) Performance security shall be solicited from all successful bidders except the department's of the State Government and undertakings, corporations, autonomous bodies, registered societies, co-operative societies which are owned or controlled or managed by the State Government and undertakings of the Central Government. However, a performance security declaration shall be taken from them. The State Government may relax the provision of performance security in particular procurement or any class of procurement.
- (ii) The amount of performance security shall be **five percent** of the amount of supply order in case of procurement of goods and services and **ten percent** of the amount of work order in case of procurement of works. In case of Small Scale Industries of Rajasthan it shall be **one percent** of the amount of quantity ordered for supply of goods and in case of sick industries, other than Small Scale Industries, whose cases are pending before the Board of Industrial and Financial Reconstruction (BIFR), it shall be **two percent** of the amount of supply order.

Performance security from the successful bidder shall be taken or may adopt option after approval of purchaser to withheld **5%** (in case of established suppliers)/ **1%** (in case of Micro, Small & Medium scale industries of Rajasthan)/ **2%** (in case of sick industries) / **10%** (in case of other suppliers) amount in lieu of performance security from each bill on pro-rata/ proportionate basis. In case of successful bidder, the amount of bid security may be adjusted in arriving at the amount of the performance security, or refunded if the successful bidder furnishes the full amount of performance security.

**3) VENDOR REGISTRATION:- The relaxation/exemption given to the registered vendors of the Nigam in respect of EMD/SBG, wherever appearing in the ITB, GCC & other Bidding documents, are hereby WITHDRAWN.**

**4)The indirect taxes i.e. Excise Duty, Service Tax, VAT/CST, Entry Tax etc. mentioned in G.C.C., may now be read as G.S.T.**

**Appendix-1**

**Bidders are requested to furnish following details:**

- 1. Name of Firm :**
- 2. Office Address :**
- 3. Work's Address :**
- 4. Email Address :**
- 5. Phone / Mobile No. :**
- 6. Fax No. :**
- 7. Name of Firm's representative :**
- 8. Contact No. of Firm's representative :**
- 9. Receipt No . , date and details of Security deposit :-**

**JAIPUR VIDYUT VITRAN NIGAM LIMITED  
OFFICE OF THE SUPERINTENDING ENGINEER (PROC)  
OLD POWER HOUSE PREMISES, NEAR RAM MANDIR, BANIPARK, JAIPUR-6  
FAX:0141- 2208098, TELE:0141- 2208098**

**DETAILS OF BANKER FOR RTGS**

**FOR FURNISHING BID SECURITY / BANK GUARANTEE**

1	Account No.	51093320896
2	Account Holder Name	Accounts Officer(MM)
3.	Bank Name & Branch	State Bank of India , Collectorate Branch , Jaipur (Rajasthan)
4.	IFS Code	SBIN0031026
5.	Phone No. of Sr. Accounts Officer (MM), JVVNL, Jaipur	0141-2202608
6.	Email ID of Sr. Accounts Officer (MM) , JVVNL, Jaipur	sr_aomm@yahoo.com