



POWER DEVELOPMENT DEPARTMENT  
TENDER SPECIFICATION NO: SEPD/NIT- 199/2011

PART - I (SECTION - 1 & II)

**GENERAL TERMS AND CONDITIONS**

AND

PART- II (SECTION- III )

**TECHNICAL SPECIFICATIONS  
OF**

**220KV, 132 KV & 33 KV LIGHTNING ARRESTORS**

**FOR VARIOUS GRID STATIONS  
IN  
JAMMU & KASHMIR STATE**

2011

Tenders to be submitted to:  
The Chief Engineer,  
Elect. Planning & Design Wing,  
220 KV Grid Station Premises, Gladni,  
Narwal- Bala, Jammu.-180006

Correspondence Address :  
Superintending Engineer,  
Elect. Planning & Design Circle,  
220 KV Grid Station Premises,  
Gladni, Narwal- Bala, Jammu. - 180006.

**Office of the Superintending Engineer, Electric Planning & Design Circle PDD, 220 KV Grid  
Station Premises, Gladni Narwal Bala Grid Station Complex, Jammu.  
TELE-FAX- 0191-2476252.**

M/s. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**No. SEPD/J/NIT-199/2011.**

**Date:-**

Sub:- Procurement, of 220KV, 132 KV & 33 KV Outdoor Type LIGHTNING ARRESTORS complete with all accessories required for various Grid Stations in Jammu & Kashmir State against Tender specification No:SEPD/NIT-199/2011.

Ref:- Your letter No. Dated:

Dear Sir,

As desired vide your letter referred above, please find enclosed the requisite tender documents for NIT specification No. SEPD/J/NIT-199/2011 comprising of two parts as under:-

- a) General Terms & conditions, Part-I (Section-I&II).
- b) Technical specification of 220 KV, 132 KV & 33 KV Outdoor Type LIGHTNING ARRESTORS required for various Grid stations in Jammu & Kashmir State Part-II (Section-III).

The tender duly completed in all respects should reach the office of the Chief Engineer, Elect. Planning & Design Wing, 220 KV Grid Station premises Gladni Narwal Bala Jammu ( J&K State)- 180006 on or before \_\_\_\_\_ upto \_\_\_\_\_hrs. which shall be opened on the same day or any other convenient working day at \_\_\_\_\_hrs.

Yours sincerely

**Superintending Engineer,  
Elect. Planning & Design Circle,  
PDD, Jammu.**

**Copy to :-**

1. The chief Engineer, Planning & Design Wing, Jammu PDD 220 KV Grid Station premises Gladni, Narwal- Bala, Jammu for information.

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**PART –I**

**Section – I**

**GENERAL TERMS & CONDITIONS**

**OF**

**TENDER SPECIFICATION NO.SEPD/NIT-199/2011**

**FOR**

**198 KV, 120 KV & 30 KV Single Phase Lightning Arrestors**

**FOR**

**VARIOUS GRID STATIONS**

**OF**

**JAMMU & KASHMIR STATE.**

## SECTION - I

### GENERAL TERMS AND CONDITIONS

#### 1.1 INVITATION:

The Superintending Engineer, Electrical Planning and Designs Circle, Power Development Department, 220 KV Grid complex Gladni , Narwal-Bala Jammu-180006, on behalf of the Governor of Jammu & Kashmir State, hereby invites sealed tenders for the supply of **198 KV, 120 KV & 30 KV Single Phase Lightning Arrestors** as indicated in SCHEDULE of SPECIFICATION AND REQUIREMENTS viz. Annexure I&II. (Part-II, Section III). The purchaser reserves the right to modify the schedule of requirement, technical particulars and specifications at any time and then place orders as whole or in part and to reject any or all tendered received without assigning any reason whatsoever.

The tender document can be downloaded from the Website [www.panddpddjk.in](http://www.panddpddjk.in) Such tenders will enclose a DD of Rs.5000/- only towards the cost of tender pledged to The Chief Engineer, Electric Planning and Design Wing Jammu with their bids.

#### 1.2 GENERAL CONDITIONS:

The tender should be submitted in triplicate. Each copy should be separately tagged and clearly marked as **ORIGINAL, DUPLICATE** and **TRIPLICATE**. The tenders should be submitted in double sealed covers, both addressed to the Chief Engineer, Electric Planning and Design, Jammu (J&K) and sent either under registered cover

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or deposited in the office of Chief Engineer, Electric Planning and Design Wing, 220 KV Grid Station Premises Gladni, Narwal-Bala, Jammu-180006, on or before Upto \_\_\_\_\_ hrs. Both inner and outer covers should be sealed and superscribed as **“TENDER FOR 198 KV, 120 KV & 30 KV Single Phase Lightning Arrestors Against NIT No. 199/2011 Due on \_\_\_\_\_”** The tender should also invariably contain the name of the bidder firm. The tenders should be prepared in 2 separate parts, marked Part-I and Part-II, and submitted in separate sealed covers. Part-I of the tender shall be superscribed **"QUALIFICATION FOR NIT NO: 199/2011** and shall contain **Earnest Money**, list of **past supplies** and **past performance** duly supported by necessary documents, year wise **Turn Over, Income Tax Clearance Certificate, Guaranteed Technical Particulars**, technical details, authenticated Photostat copies of **Test Certificate of similar/ higher ratings** from Govt. approved test houses/laboratories, **Catalogues / Drawings, Registration Certificate / Industrial License, Check List** to ensure supply of essential information and such information as enumerated below:-

- 1.2.1.(a) Earnest money for an amount of Rs.70,000/- shall be paid by the tenderer in the form of CDR/BG pledged to the Chief Engineer, Elect. Planning and Design Wing, Jammu. Photocopies of the CDR/BG shall also be enclosed with duplicate and Triplicate copies.
- b) The local units registered with the Industries Department, Jammu and Kashmir State, shall pay earnest money as per directives issued by the State Government from time to time.

1.2.2(a) **List of orders** for similar items (Equipment having same or higher capacity) received and executed in the last three years giving reference to the orders, status of supplies etc.

**Note:-** Photocopies of last three Purchase Orders executed (of State Electricity Boards/Govt.Deptt.) are required to be enclosed with the offer.

(b) Attested photocopies of the valid **Type Test Certificates** from Govt. approved Test Houses/ Laboratories in respect of Equipment of **similar ratings** or **of higher ratings of the same Voltage level**, failing which the bid shall not be evaluated. In case of bids accompanied with valid type tests certificates of higher ratings, the tenderer will have to get the **Type Tests conducted** for the similar rating equipment if the order is placed with the firm and if the test charges are not quoted by the firm the highest rates quoted by any of the qualifying bidders shall be loaded for purpose of comparison.

1.2.3 **Performance Certificates of similar or higher rated equipment** from SEBs/Government Departments etc. for proving past performance, duly supported by documents.

1.2.4 (a) Year wise **Capital Turn Over** of the tenderers for the last three years.

1.2.4 (b) Income Tax clearance certificate.

1.2.5 **Guaranteed Technical Particulars** for the items quoted.

1.2.6 (a) No deviations in general /commercial terms and condition shall be acceptable . NIT condition shall be binding.

1.2.6 (b) No Technical deviations shall be accepted until and unless it has been properly reflected in the Schedule – C ( i.e. Schedule of Deviations)

1.2.6 (c) Tenderer will have to quote for the full quantity of the NIT. Any offer quoting for lesser quantity is liable to be rejected.

- 1.2.7 Part-II of the tenders shall be super scribed "**PRICE BID AGAINST NIT NO: 199/2011 FOR 198 KV, 120 KV & 30 KV Single Phase Lightening Arrestors**". This shall contain price quoted, delivery period, terms of payments, legal/ General Terms and other Conditions. The rates should be quoted separately for F.O.R. Jammu(Consignee's stores)as well as F.O.R. Srinagar(Consignee's stores) . However, breakup of the same shall be given as (a) Ex-Works cost (b) Excise Duty (c ) CST (Without Form-C/D) (d) Freight & Insurance (e) Local Taxes (Entry Tax & Toll Tax)
- 1.2.8 On the due date of opening of the tenders, only the part-I i.e. Qualification bid will be opened. The date of opening of part-II (i.e. price bid) shall be intimated only to those bidders whose part-I of the tender is found to be meeting with the technical part of the specifications. In case due date happens to be a holiday, the tender will be accepted and opened on the next working day or any other date convenient to the tender opening committee.
- 1.2.9 In case, it is not convenient/possible to open price bids on due date, the price bids will be opened on any other subsequent convenient day. In the later case the tenderer who qualify for opening of the price bids shall be intimated about the date of opening of these price bids.
- 1.2.10 Any tender not sent in separate and sealed covers as stipulated above shall not be entertained and is liable to the rejected/returned. Any tender not complying with aforesaid stipulations in Part-I and Part-II is liable to be rejected.
- 1.2.11 Any tender received by hand or by post after the due date of receipt of the tenders shall not be entertained even if the tender has been posted from the sending end before the due date of the opening.

1.2.12 The tender must be complete in all respects. The subsequent Clauses shall be carefully studied for the sake of submitting a complete and comprehensive tender. Failure to comply with any of these instructions or the offer with insufficient particulars, which is likely to complicate the fair comparison of the tender, shall not be considered. Any telegraphic offer, not followed by confirmation before the due date will not be considered.

Tenders will be accepted from the tenderers who have either purchased the Tender document from the office of the Superintending Engineer, against payment of Rs. 5,000.00 or has downloaded from the website & has enclosed the D.D of Rs. 5,000.00 with the offer.

1.2.13 In the price bid, the tenderer shall clearly indicate the break-up of their quoted rates/prices i.e. ex-works rate, element of duties and taxes, packing and forwarding charges, transit insurance, freight etc. However, the prices offered shall be Ex-destination basis. It shall be the responsibility of the contractor to deliver the goods/equipment at Ex-destination in good condition.

### 1.3 **PREPARATION OF TENDER:**

The tender shall be prepared in a formal manner with all quotations stated both in words and figures. There shall be no cuttings. Corrections, if any, such as totaling etc. should be neatly done and signed. A systematic form of totaling should be adopted to avoid any ambiguity with detailed description of the equipment offered.

### 1.4 **SCOPE:**

The specifications cover the design, manufacture testing, supply and delivery of 198KV, 120 KV & 30 KV Single Phase Lightning Arrestors and its erection, testing and commissioning shall be executed

at site by the Department/ Bidder as listed in the schedule of requirements (Section III) ( Refer Schedule – G). The successful tenderer, on whom order is placed for supply of equipment, shall be responsible for supervision of testing and commissioning of equipment ordered if required at site if purchaser so desires, for which tenderer should quote charges separately.

**1.5 RAW MATERIAL:**

All the raw material to be used in the manufacture of the goods /equipment to be supplied against the purchase order shall be of the best quality of its kind obtained from the market. The supplier shall be solely responsible for procurement of raw material required for this purpose.

**1.6 EARNEST MONEY/SECURITY DEPOSIT:**

- 1.6.1 Tenders shall be accompanied along with the earnest money in the form of CDR/Bank guarantee pledged to Chief Engineer, Electric Planning & Designs Wing, Jammu for an amount of Rs.70,000/- valid for one year.
- 1.6.2 Tenders not accompanied by the correct amount of earnest money shall be rejected and their price bid is liable to be ignored.
- 1.6.3 In case of successful tenderers, the amount of earnest money will be treated as part of security deposit. The actual amount of security deposit to be obtained will be subject to a minimum of 5% of the value of contract.
- 1.6.4 The successful tenderer, whenever it happens to be a private person or firm, has to furnish security deposit @ 5 % of the value of the order as the case may be . The Earnest money will be adjusted towards security deposit in the case of successful tenderer for faithful execution of the contract.

- 1.6.5 The earnest money will be forfeited in case of withdrawal/ revision of prices of their offer within the validity of the tender.
- 1.6.6 In case of the unsuccessful tenderers, the earnest money shall be refunded within 60 days from the issue of the purchase order to the successful tenderer.
- 1.6.7 Security deposit shall be released in favour of successful tenderer after obtaining report with regard to successful execution of the contract from the consignee.

**1.7 PLACE OF MANUFACTURE AND INSPECTION:**

The tenderer shall state in his tender the make, the place of manufacturer, testing and inspection of the equipment offered in the tender. The purchaser or his duly authorized engineer shall have access to tenderer's works at any time during working hours for the purpose of inspecting the manufacture and testing of material and complete equipment and the tenderer shall provide the necessary facilities for inspection. For any particular inspection, at least three weeks advance notice shall be given. No material shall be despatched without prior inspection and approval of test certificate by the purchaser or is authorized Inspection Agency unless otherwise directed. However the department reserves the right to get the material/equipment inspected through CPRI.

**1.8 PRICES:**

- 1.8.1 The Quoted Prices shall be Variable with the base date one month prior to date of opening of tender.

Clear cut IEEMA Formula for working out variations along with value of all parameters must be indicated. The ceiling for price variation must also be stated which will be taken into account while comparing the offer. Price Variation would be applicable both on Positive as well as Negative side.

1.8.2 The prices shall be quoted separately FOR Jammu( consignee's stores) as well as F.O.R Srinagar (consignee's stores) which will form the basis of the contract. It shall be the responsibility of the contractor to deliver the goods /equipment at site in good condition. Besides, the Ex-works price, duties and taxes applicable, shall also be mentioned in order to compute the Excise Duty and CST component etc. indicating clearly the rates applicable/chargeable. Any ambiguity in this regard shall be dealt in accordance with the departmental practice.

1.8.3 The rates quoted should be both in figures and words. No extra payment, unless otherwise specified, will be made for packing, carriage, handling and transportation of material.

**1.9 VALIDITY/ EXTENSION OF VALIDITY AND CLARIFICATIONS:**

1.9.1 The tender should be unconditionally valid for a period of 365 days from the date of opening of the tenders. Any tenderer revising the offer within the validity period is likely to be black listed.

1.9.2 Bidder shall not be requested or permitted to alter their bids after the deadline of receipt of bids/ tenders. The purchaser shall ask the bidders for clarification needed to evaluate their bids but shall not ask or permit the bidders to change the substance or price of their bids after the bid opening. Requests for clarification and the bidder's response shall be made in writing.

**1.9.3 EXTENSION OF VALIDITY OF BIDS:**

Purchaser shall complete evaluation of bids and award of contracts within the initial period of bid validity so that extensions are not

necessary. Any extension of bid validity if required shall be requested from all the bidders in writing. Bidder shall have the right to refuse to grant such an extension without forfeiting their bid security, but those who are willing to extend the validity of their bids, shall be required to provide a suitable extension of bid security.

- 1.9.4 Any party who makes post tender developments directly or indirectly may be blacklisted for a period of three (3) years.

**1.10 DELIVERY :**

The delivery of equipment/material, unless otherwise specified in Annexure- II i.e. Schedule of Requirements, may be required to commence within 6 months from the issue of the purchase order and completed within 3 months thereafter.

**1.11 DAMAGES FOR DELAY FOR NEGLIGENCE IN EXECUTION OF ORDERS:**

- 1.11.1 For supplies with respect to delivery schedule stipulated above, a Penalty @ ½% (Half percent) of the cost of the undelivered portion per week of the period of delay subject to a maximum of 5% cost of undelivered equipment as damages will be leviable. However, in case of part of equipment supplied within the delivery period but which can not be commissioned due to the late delivery of portion of such equipment, the damages will be recovered at the rate of ½% per week of the period of delay, subject to a maximum of 5% of the total contract price as damages.

- 1.11.2 In case the supplier fails to rectify/ replace the defective/ damaged material (including transit damages / shortages) supplied by them within one month from the date of intimation of such shortages/damages, a penalty of ½% per week, subject to a maximum of 5% the cost of equipment that could not be commissioned due to failure of the firm to rectify/ replace the defective/ damaged material.
- 1.11.3 In case of failure to deliver, in full or part of the equipment within delivery period, purchaser will have the right to make a risk purchase at the cost of supplier or cancel the contract and claim reasonable compensation /damages.

#### **1.12 TERMS OF PAYMENT:**

- 1.12.1 Unless otherwise provided, 90% of the value of the item of equipment despatched after satisfactory inspection against R.R/ despatch documents through recognized bank (J&K Bank) and balance 10% after receipt and verification of material in good condition in consignee's stores.
- 1.12.2 100% payment with taxes and duties shall be made against receipt and verification of material at consignee's stores if material is despatched by road transport.
- 1.12.3 Advance payment clause is not accepted since it requires Govt. sanction which is time consuming process. Advance payment clause shall alter evaluation of bid as per standard practice of the department.

- 1.12.4 Payment against letter of credit is not acceptable since it requires Govt. sanction which besides time consuming is normally denied.

**1.13 WARRANTY:**

- 1.13.1 The supplier shall be responsible to replace free of cost along with the transportation and insurance expenses to the purchaser up to the destination, the material specified in the schedule of requirements, the whole or any part of the material which under normal, proper use and maintenance prove defective due to design or manufacturing defects or bad workmanship within 12 months from the date of commissioning or 18 months from the date of despatch, which ever expires earlier provided the consignee gives prompt notice of such defects to the supplier. Such replacement shall be the supplier's responsibility. Supplier's responsibility arising out of supplying of materials or its use within warranty period or otherwise, shall not in any case exceed the cost of correcting the defects or replacing the defective equipment within or even beyond the expiry of the period mentioned above. The firm shall have to furnish performance guarantee value @ 5% of the purchase order.

- 1.13.2 The above provisions shall also apply to the material replaced/repared by the supplier under this clause in case the same is again found to be defective within 12 months from its replacement/repairs.

**1.14. INSURANCE:**

- 1.14.1. The rates are required to be quoted on FOR Destination basis. However, it is the responsibility of the supplier to deliver the goods

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in sound condition at the destination. For this purpose, the supplier shall insure the material against all risks during transit for full delivered value of the material up to destination. All formalities in connection with making/settling of claims, with railways / Roadways and Insurance Company, shall be carried out by the supplier. Necessary information required in connection with making/settling such claims, shall be provided by the consignee.

All damages and/or shortage during transit as covered by the insurance shall be made good immediately on receipt of such information from consignee without waiting for settlement of the claims. However, in case of apparent damages and/or shortage, the consignee shall obtain the loss/damage certificate from the Railway / Transport authorities and send the same to the supplier within a period of 30 days from the date of receipt of material. A certificate shall be submitted by the supplier with each consignment to this effect that the material has been duly insured.

1.14.2 The consignee shall report losses and damages to the firm within 30 days of the arrival of the equipment at site. It will however, be the suppliers responsibility to prefer timely claims on the insurance underwriters and to arrange replacement thereof to the consignee within 30 days without waiting for settlement of claims with underwriters etc.

**1.15. INTIMATION TO CHIEF ENGINEER, PLG. & DESIGNS POWER DEVELOPMENT DEPARTMENT AND CONSIGNEE.**

1.15.1 The supplier will have to intimate the probable date of despatched followed by telegraphic/Fax intimation regarding the actual date of RR to the Consignee to enable him to arrange payment, failing which demurrage, wharf age etc. will be to suppliers account. A copy each of such intimation should also be sent to Chief Engineer, Planning & Designs Power Development Department, Jammu and Chief Engineer of concerned System and Operation Wing, for ready reference simultaneously.

**1.16 CENTRAL SALES TAX/ VALUE ADDED TAX/ ENTRY TAX AND EXISE DUTY:**

1.16.1 The material on order is required for use in transmission/ distribution of electrical energy to public.

Local Taxes i.e.Value Added Tax /Entry Tax, as applicable ,shall be levied on the goods/equipment.

**1.16.2 CENTRAL SALES TAX.**

FORM-C/D shall not be furnished by the Deptt. CST is required to be quoted accordingly.

And When the CST is to be paid by the supplier, the same shall be paid by the consignee subject to the submission of the following certificate:

- A. Certified that the transaction on which tax has been claimed, has been/ will be included in the return submitted/to be submitted to the Sale Tax Authorities for the assessment of the sales tax and the amount claimed from the Power Development Department has been/shall be paid to the Sales Tax Authorities.

- B. Certified that the goods on which sales tax has been charged have not been exempted under Central Sales Tax Act, as per provisions of the rules made thereunder, and the charges on account of the sales tax of these goods are correct under the provision of the relevant Act or rules made thereunder.
  - C. Certified that we shall indemnify the Power Development Department in case it is found at a later stage that wrong or incorrect payment has been made on account of the sales tax paid by us.
  - D. Certified that the payment has been made under protest. The bills for the sales tax and insurance charges, if any, shall be submitted separately.
  - E. The Power Development Department being a department of the J&K Government, as such, CST shall be payable extra without furnishing any declaration form.
- 1.16.3 The tenderer shall reflect ED & CST as actually applicable/ chargeable at the time of tendering and shall furnish proof (Certificate from the Superintendent, Excise duty, concerned range) for confirming ED / CST rates quoted.
- 1.16.4 For evaluation of bids for comparison, the ED / CST component shall be worked out on the basis of quoted rates only in case it is well evidenced, otherwise it shall be worked out as per maximum ED / CST rates received against the tender notification.

1.16.5 For actual payment of ED/ CST, the quoted rates shall be the basis, if the rates prevalent / ruling at the time of valid actual delivery are at par or higher than the quoted rates. However, in case the ruling rates of ED / CST at the time of valid actual delivery are lower than the quoted rates, then the ruling rates shall be the basis of actual payment of ED / CST.

1.16.6 The documentary evidence in respect of ED / CST actually paid at the time of actual delivery shall be furnished by the tenderer as a proof thereof.

1.16.7 The supplier shall pay service tax as applicable for the services rendered and charged by him

**1.17 CHARGES:**

No variation or modification or waiver of any of the terms and provision hereafter shall be deemed valid unless mutually agreed upon by purchaser and the supplier in writing.

**1.18 PACKING:**

All material shall be suitably packed and despatched, and shall be conforming to the relevant ISS, railway / highway rules, and transported direct to site and the supplier shall be responsible for all damages/losses due to improper packing. All crates shall be marked with proper signs indicating up and down side of the crates and also unpacking instructions considered necessary by the supplier. The contents of crates shall have place marks corresponding to the number in the packing list to enable easy identification. The quoted prices shall be deemed to include the cost of packing.

**1.19 SPECIAL INSTRUCTIONS:**

- a. Tenders not submitted on the lines indicated above are liable to be rejected without correspondence.
- b. Requests for extending the above mentioned due date of receipt of tenders is likely to be ignored.
- c. Tender will be entertained from manufacturers of equipment or their authorized agents who should send their offers, certificates issued to them by their principals appointing them as their authorized agents.
- d. No printed general conditions of sales attached with the tender shall be accepted. Any technical deviation from the clauses in the tender specification must be clearly reflected in the Schedule of deviations viz Schedule C, otherwise it shall be deemed that offer is in line with the requirement of specifications.
- e. The tenderer will submit with the offer, the performance report issued by the Electricity Boards/Government Departments in respect of equipment of similar specification supplied under different purchase orders executed earlier by the tenderer/manufacturer.
- f. Tenderer will quote for the full quantity of the NIT. Any offer quoting for the part quantity is liable to be rejected.
- g. The tender should be accompanied by a reference list of purchase orders received/executed by the tenderer for similar equipment of same specification as indicated in NIT in the following Performa:

Designation and Full particulars Of the purchaser	Purchase order No. & date	Quantity and brief description of equipment
1	2	3
Status of supplies		Performance remarks
4.		5.

**1.20 INTERCHANGEABILITY:**

Corresponding parts of similar items shall be interchangeable in every respect.

**1.21 CANCELLATION:**

The purchaser reserves the right to cancel the purchase order in case of default on the part of the supplier and also prior to receipt of intimation regarding taking in hand of the manufacture of material against the purchase order.

**1.22 DESPATCH INSTRUCTIONS:**

The equipment/material shall be despatched to Jammu/ Srinagar duly consigned to the consignee to whom R/R and other despatched documents are to be sent through J&K Bank Limited. All bank charges for negotiation of RR etc. shall be to the suppliers account. A telegraphic /Fax information shall have to be sent to the consignee to retire the documents without delay and make further arrangements for proper despatched. It is to be noted that no RR shall be accepted or acknowledged without being preceded by a proforma invoice along with test certificate well in advance, to ensure the consignee to check

that bill/s have been raised as per terms of the order and that the equipment/material has been duly tested.

**1.23 ADDITIONAL QUANTITY:**

The purchaser reserves the right to order additional equipment as specified upto 50% of the ordered quantities at the same rate and conditions any time during the pendency of the contract.

**1.24 CIVIL SUIT/LEGAL REMEDY:**

All legal proceedings in connection with the order will be subject to the jurisdiction of local courts of Jammu & Kashmir.

**1.25 ARBITRATION:**

In case of any doubt, dispute or difference arising out of the purchase order, the case shall be referred to the State Government for decision under J&K State Arbitration Act only.

**1.26 EXECUTION OF CONTRACT:**

It will be obligatory on the part of the successful tenderer to execute a legal contract/agreement with the purchaser on stamped paper immediately after the issue of the purchase order.

Sufficient number of extra copies of the contract and specifications shall be supplied, the cost of which shall be deemed to have been included in the tender prices.

**1.27 VARIATIONS:**

The tenderer should specify the limits of variation that are likely to occur in various parameters of the equipment/material at the stage of quotation and that of supply. In other words, indication of variation at tendering stage and

detailed designing stage be clearly brought out. Any variation beyond the tolerance of relevant Indian Standards shall not be accepted. Where such parameters are not covered by ISS, the variation shall be restricted to that mutually agreed upon.

**DM**

**J.E**

**Asstt. Ex. Engineer**

**T.O**

**Executive Engineer**

**Superintending Engineer**

## PART I

### SECTION-II

**SECTION – II****SUPPLEMENTARY CONDITIONS OF TENDERS  
(TO BE READ ALONG WITH SECTION-I)****2.1 SCOPE:**

This section of the specification deals with supplementary conditions of contract in addition to those stipulated in Section-I. Detailed specification and particulars of equipment are given in the subsequent section-III (Part-II) and these sections shall be deemed to form part of the detailed specification for the equipment. The tenderers may also note that certain other conditions have been stipulated under this section dealing with technical specifications. The offer, therefore, should satisfy these conditions also in addition to those mentioned under Section-I.

**2.2 LOCATION:**

**VARIOUS GRID STATIONS SCATTERED THROUGHOUT THE STATE OF J&K.**

**2.3 COMMUNICATION AND TRANSPORT:**

The bridges and culverts enroute from Jammu Railway Station to respective sites have a limited loading capacity and, therefore, the weight of the heaviest package shall be restricted to limit, if any, specified in Annexure-II.

**2.4 DELIVERY AND THE COMPLETION PERIOD:**

Early delivery of equipment may be an important consideration in the award of contract. The tenderers shall, therefore, quote shortest delivery period possible.

**2.5 QUANTITIES:**

The quantities of the equipment are given in Annexure-II viz. the Schedule of Requirement in Section- III. The purchaser reserves the right to increase or decrease the final quantities at time of placing the order for which rates quoted/accepted shall be valid.

**2.6 COMPLETENESS OF TENDER:**

The tenders shall be complete in all respects and shall include all minor accessories not specifically mentioned in the specification schedules, but which are essential for the completeness of work. The tenderer shall also not be eligible for any extra cost in respect of such minor accessories, not specifically included in the tenderer's specification schedules.

**2.7 EXTRAS:**

2.7.1 The tenderer shall, when asked in writing by the purchaser, perform extra work and furnish extra material not covered in the specification or included in the schedule but which may form inseparable part of the work contracted for.

2.7.2.1 For such material supplied or items of work done, for which rates are not available in the contractor schedule, payment shall be made at the rates as mutually agreed upon between the purchaser and the tenderer. This shall, however, not apply to the minor accessories

specified in clause 2.6 for which no extra amount is payable.

## **2.8 SPARES:**

The tenderer shall recommend the quantity required and quote spare parts as in his opinion would be required for ten years normal working of equipment offered. He shall also quote unit rate for additional spare parts. The spare parts shall comply with requirement of specification for complete equipment. The tenderer shall be required to supply such additional quantities of spare parts at contract price as may be ordered from time to time after the expiry of the contract. In case the tenderer contemplates to close down the manufacture of the item, he shall intimate the purchaser well in time to decide.

## **2.9. PRICES:**

2.9.1 Item wise prices shall be quoted for various items of equipment as given in Annexure-II.

2.9.2 The tenderer shall quote variable prices FOR Consignee Stores separately for Jammu as well as for Srinagar which shall form the basis for the evaluation of bids and subsequently the financial comparison of bids. In this connection clause 1.8 may be referred to.

## **2.10 STANDARDS:**

Unless otherwise specified, all material and equipments shall comply in all respects with the requirement of the latest issue of Indian Standards or International Electro Technical/ Commission Standards (IEC). If the tenderer offers equipment manufactured to standards other than those mentioned above, their salient points compared to

the specified standards shall be clearly brought out in the tender, making at the same time, necessary corrections for operation under the conditions specified therein. A complete set of the standard specifications adopted by the tenderer shall in that case, be supplied in English language.

**2.11 MAKER'S STANDARDS AND DEPARTURE FROM SPECIFICATIONS:**

- 2.11.1 The general principles on which these specifications are drawn is to permit adaptation of modern manufacturing standards and the tenderer is requested to tender for his own standard equipment as far as possible provided these comply in all respects with the conditions of the specifications given in Part-II of the NIT.
- 2.11.2 Should the contractor wish to depart from the provision of these specifications either on account of manufacturing practice or for any other reason, he shall specifically draw attention to the proposed point of departure in the schedule of deviations in specifications, which will enable relative merits or demerits of his proposals fully appreciated or known.
- 2.11.3 Any deviation in Commercial and General Terms and Conditions shall not be entertained. Except for the Technical deviations which are

specifically brought out in the schedule of deviations viz Schedule-C, it shall be taken that the tender fully conforms to the requirements of the technical specification. In the event of NIT specifications and the General Terms and Conditions and tendered specifications and General Terms and Conditions are found to be at variance, the NIT specifications and General Terms/ Conditions shall be held binding.

2.11.4 Except for the Technical deviations which are specifically brought out in the schedule-C, it shall be taken that the tender fully conforms to the requirements of these technical specifications.

In the event of NIT specifications and the general terms conditions and contract specifications general terms and conditions are found to be at variance during the execution of the contract, NIT specifications and general terms conditions shall be held as binding, unless the Technical deviations have been duly approved by the purchaser.

**2.12 INTERCHANGEABILITY:**

All parts shall be made accurately to standard gauge wherever possible so as to facilitate replacement and repair. All corresponding parts of similar equipment including the spare parts shall be interchangeable.

**2.13 MATERIALS AND WORKMANSHIP:**

2.13.1 All materials shall be of the best class and capable of satisfactory

operation when exposed to the tropical sun and other specified atmospheric conditions. All works shall be performed and completed in a thoroughly workman like manner and shall follow the modern practice in the manufacturing and installation of equipment, notwithstanding any omissions in these specifications.

**2.14 FAILURE TO MEET WITH GUARANTEE AND REQUIREMENTS OF THE SPECIFICATIONS:**

2.14.1 Should the factory tests for the operation of equipment under specified service conditions, show that it does not meet with guarantees and/or requirement of the specifications, it shall be optional with the purchaser to accept or reject the equipment and direct the contractor to proceed at once to furnish such new parts as may be necessary to make it meet the guarantee and requirements.

2.14.2 If after installation, the operation of the equipment proves to be unsatisfactory to the purchaser, he shall have the right to operate it until it can be taken out of service without loss to him, for correction of defects, errors or for replacement in case of rejection.

**2.15 INSPECTION AND TESTING:**

2.15.1 The tenderer shall state in his tender the place of manufacturing, testing and inspection of various items of equipment included in these specifications.

- 2.15.2 All materials shall comply with the requirements of tests specified in the governing standards and in addition to such other tests as are stipulated in these specifications.
- 2.15.3 Duplicate copies of the manufacturer's test certificate shall be submitted to the Purchaser as soon as tests are completed.
- 2.15.4 In addition to the aforesaid test and those included in the Contract, the purchaser reserves to himself the right of having at his expense, any inspection or test of reasonable natures carried out at materials.
- 2.15.5 All material and requirements covered under these specification shall be submitted for inspections by the purchaser and/or authorized agent/agents during the various stages of the manufacture. The demand for inspection shall be made in time so that inspection can be carried out according to schedule. No portion of the work shall be considered complete in accordance with the terms of the tender unless the purchaser/his authorized agents shall have certified in writing that the same has been inspected and approved by him.
- 2.15.6 The suppliers shall be at his own expense provide to the purchaser and/or the authorized agent/s of the purchaser all reasonable facilities and such accommodation as may be necessary for satisfying themselves that

the material are being and/or have been manufactured in accordance with the requirements. The authorized agents of the purchaser shall have full and free access at any time during the execution of the contract to the contractor's works for the aforesaid purpose, and they may require the contractor to make arrangements for inspection of items at any other place specified by the agents, and if the contractor has been permitted to employ the services of sub-contractors, he shall in his contract with the sub-contractor reserve to the authorized agents of the purchaser a similar right.

2.15.7 The contractor shall provide without any extra charges all materials, tools, labour and assistance of every kind which the authorized agent of the purchaser may demand of him for any test and examination other than special or independent test which he shall require to be made in the contractor's premises and the contractors shall bear and pay all costs to attendant thereon.

2.15.8 The Bidder/ Contractor shall offer the equipment of its patent type for which all the type tests [ as per relevant IS/IEC specifications] have already been got done.

The equipment shall be inspected by CPRI on behalf of the Department . The inspection charges, on this account, shall be initially borne by the contractor in the first instance which shall be reimbursed to the contractor as per actual against documentary evidence when the same is billed for in the Invoice

The firm shall have to arrange all the routine, acceptance tests through CPRI as per the relevant IEC/IS specifications amended up to date. The firm shall also furnish the type tests certificates to the CPRI Inspector and obtain their clearance . However, if the CPRI Inspector is not satisfied

with any of the type test reports the firm shall have to get the equipment type tested for that very particular test at their own cost as per the relevant IEC/IS specifications.

**2.16 INSTRUCTION BOOKS/MANUALS AND SPARE PARTS:**

2.16.1 The contractor shall supply nine sets, free of cost of the following:-

- a) Complete Instruction book/manuals for erection, testing and commissioning of equipment.
- b) Full instructions for the operation and maintenance of the equipment.
- c) List of spare parts with prices.

2.16.2 The instruction book shall be supplied well before completion of the delivery period of the equipment.

**2.17 DRAWINGS:**

2.17.1 The tenderer shall submit alongwith his tender all drawings as called for in the technical specifications.

2.17.2 Within thirty days of the receipt of the order the contractor shall furnish to the purchaser free of cost ten sets of all contract drawings listed in schedule-I including all accompanying descriptive pamphlets. These drawings shall demonstrate fully the apparatus to be furnished that will conform to the provision and intents of the specifications. The drawings shall be accurately drawn to scale and shall be clear to read all information in English language. Subsequently, revisions of these drawings, if any, shall also be submitted for approval of the purchaser in

a similar manner before fabrication, manufacture or assembly is commenced.

2.17.3 Within one month from the date of receipt of the proper and correct drawings and other descriptive pamphlets, the purchaser shall communicate the approval to the contractor, if no discrepancies are noticed in the drawings.

2.17.4 After approval of the drawings by the purchaser the contractor shall within one month furnish six sets of approved drawings together with one set on translucent prints for suitable reproduction by direct contact method.

2.17.5 Upon approval by the purchaser, the drawings shall become the contract drawings and thereafter, the contractor shall not depart from them in any way whatsoever except with the written permission of the purchaser.

2.17.6 Any manufacturing work in connection with the equipment prior to the approval of the drawings shall be at the contractor's risk. The contractor shall make changes in the designs which are necessary to make the equipment conform to the provision and intentions of these specifications without additional cost to the purchaser. Approval of the contract drawings shall not be considered to have relieved the contractor of any part of contractor's obligation to meet all the requirements of contract or of the responsibility for the correctness of the contractor's drawing submitted for approval.

**2.18 NOTICE TO CONTRACTOR:**

A notice to the contractor may be sent by mail or cable to his address given in the tender or delivered by hand/posted to his duly authorized representative at site. Such delivery/posting shall be deemed as good services of such notice.

**2.19 FINANCIAL RESOURCES AND EXPERIENCE:**

2.19.1 The tenderer is requested to submit a statement of facts in details as to his previous experience in performing a similar or comparable work and of the business and technical organization, financial resources and manufacturing facilities available and to be used in performing the contract work.

2.19.2 The tenderer is further requested to furnish the information specifically on the following points:-

- A) Standing of the firm as designer and manufacturer of the equipment covered by the specifications.
- B) Particulars of equipment/material etc. produced so far at his works.
- C) List of important locations for which material have been supplied and/or erected in India or else where.
- D) Bankers report.
- E) Income and sales tax clearance certificates.
- F) Yearly turnover.

**2.20 PATENT RIGHTS:**

The contractor shall at his cost defend any claim which infringes any patent of the country of origin or India if notified promptly in

writing and given authentic information and assistance for the defence, and contractor shall pay all damages and costs awarded against the purchaser in such suit or proceedings for patent infringement. In case the equipment in such suit or proceedings is held constitute infringement and the use of the equipment or parts thereof is prohibited, the contractor shall at his own expenses either procure for the purchaser the right to continue using the equipment, or parts thereof, or replacement of same with non-infringing one, or remove the equipment and refund the purchaser prices plus transportation and installation costs thereof, besides payment of damages suffered by the department.

**2.21            RESPONSIBILITY FOR OBTAINING INFORMATION AND  
TAKING ACTION IN TIME:**

Whenever any information or clarification in respect of designs or construction of materials have to be obtained from the purchaser/various other authorities, the contractor shall be responsible for taking action well in time so that there are no delays on this account. The contractor shall also take prompt action in all other matters such as indenting necessary railway wagons etc. The completion period offered in the tender shall be deemed to include the time taken for such incidental work. The request for extension of the delivery of completion dates on such ground shall not be entertained.

**2.22            PACKING AND MARKING:**

2.22.1 The equipment shall be packed suitably for transportation direct to site in a manner suitable for tropical conditions and the contractor shall be responsible for all damages due to improper preparation for transportation and inadequate packing.

2.22.2 Special care should be taken to provide ample protection against termites and mechanical devices. For transport by road from the rail head to site wherever necessary proper arrangements for attaching slings for lifting shall be provided. Markings on packing shall be clearly marked with signs showing the up and down sides of the boxes and any handling and unpacking instruction considered necessary. Bolts, nuts etc. shall be supplied in boxes suitably packed to prevent stacks being torn in transit. The contents of such packages shall bear marking that can be readily identified from the packing list. All packing cases, packing material shall remain the property of the purchaser.

2.22.3 Each part shall properly match and marked to ensure correct assembly on alignment of part in the field.

2.23 **CONDITIONS OF CONTRACT:**

The work covered in this specification shall be carried out in accordance with the conditions of the contract as per E.C. 31 of J&K Financial Code Volume-II.

2.24 **INSTRUCTIONS TO TENDERERS:**

Tenders shall be submitted in the bidding schedule, included in the last part of the presentative specification. These schedules must be duly filled in, signed and submitted by the tenderer failing which the offer is likely to be ignored.

2.25 **CLIMATIC CONDITIONS:**

2.25.1 The climatic conditions in Jammu Province:

1. Minimum temperature of Air in shade	-6°C
2. Maximum temperature of Air in shade	46°C
3. Maximum temperature of Air in Sun	60°C
4. Relative Humidity:	
Maximum	82%
Minimum	10%
5. No.of rainy days per year	85 Approx.
6. Average rainfall per year	118mm
7. Average No.of thunderstorm days/year	30 days
8. No.of months tropical monsoon	3 months (July-Sept.)
9. Maximum wind pressure	130kg/mt <sup>2</sup>
10. Height above sea level	300m to 2200m
11. Seismic coefficient:	
Horizontal	0.1 g
Vertical	0.95 g

**2.25.2 CLIMATIC AND ISOCERAUNIC CONDITIONS OF KASHMIR VALLEY:**

I. The climate and is oceanic conditions at the site of work are  
Approximately given as under:-

1)	Maximum temperature of air in shade.	30.61°C
2)	Minimum temperature of air in shade.	-20°C
3)	Maximum temperature of air in Sun	45°C
4)	Height above sea level	1500m to 2500m
5)	Maximum relative humidity	90%
6)	Minimum relative humidity	15%
7)	Average number of thunder storm days per year	15
8)	Average rainfall	80cm
9)	Maximum wind pressure	100kg/m <sup>2</sup>
10)	Average number of rainy /cloudy days per annum	106

For purpose of specifications, the limit of max. ambient Temperature shall be 40°C peak and 35°C average over a 24 hour period (minimum temperature of the air in shade of -20°C may be noted.)

II. The equipment offered shall be suitable for continuous operations at their full rated capacity under the above conditions.

**III. PROTECTION AGAINST EARTH QUAKES:-**

All the supporting structures should withstand repeated earth quakes (suitable for zone-V condition) and wind loads of 130kg/m<sup>2</sup> on the projected area (Non-simultaneous) without damage and spurious operation of the equipment due to heavy vibrations.

**DM****J.E****A.E. E.****T.O.****Executive Engineer****Superintending Engineer**

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**PART-II**

**SECTION –III**

**TECHNICAL SPECIFICATIONS**

**OF**

**TENDER SPECIFICATION NO. SEPD/NIT- 199/2011**

**FOR**

**198 KV, 120 KV & 30 KV, SINGLE OPHASE LIGHTNING  
ARRESTORS**

**FOR**

**VARIOUS GRID STATIONS**

**OF**

**IN JAMMU & KASHMIR STATE.**

39.

**PART-II**

**SECTION-III**

**TECHNICAL SPECIFICATIONS FOR LIGHTNING ARRESTORS**

**3.1 SCOPE:**

This specification covers the design, manufacture, assembly, testing at manufacturer's works, supply and delivery of **LIGHTNING ARRESTORS** as per enclosed schedule of requirement for protection of 220/132/33 KV Sub Station equipments against lightning and switching surges.

**3.2 STANDARDS:**

This lightning arrestors shall conform in all respects to IS:3070 (Part-I) 1985. (amended upto date), except where specified otherwise. Equipment meeting any other authoritative standard which ensure equal or better quality than the standards mentioned above, shall also be acceptable. Where the equipment offered conforms to any other standard, the salient points of difference between the standard adopted and the specified standard shall be brought out in the tender.

**3.3 TYPE:**

3.3.1 The lightning arrestors shall be of station type heavy duty conforming to modern design. The tenderers should quote for Gapless type lightning arrestors conforming to relevant latest Gapless Type standards.

3.3.2 All lightning arrestors shall be suitable for outdoor installation at 220 /132/ 33 KV levels at various Grid Stations in J&K State. It may be assumed that under single line to ground fault conditions, the maximum line to earth voltage shall not exceed 80% of the maximum line to line voltage.

### 3.4 TECHNICAL PARTICULARS OF ARRESTORS:

The technical particulars of the OUTDOOR STATION TYPE HEAVY DUTY LIGHTNING ARRESTORS shall be under:-

SNo	Particulars	220 KV	132 KV	33 KV
i)	Rated voltage of arrester (KV rms)	198KV	120	30
ii)	Continuous operating voltage (COV) KV rms	184	102	25
iii)	Installation	Outdoor	Outdoor	outdoor
iv)	Type	.....Heavy duty, station class, gapless		
v)	No. of columns	Single	Single	Single
vi)	Type of mounting	Pedestal	Pedestal	Pedestal
vii)	Connection	Phase to ground		
viii)	Nominal discharge current (8/20 micro sec.)	10 KAp	10 KAp	10 KAp
ix)	Long duration discharge class	3	3	3
x)	Min. energy handling capacity (KJ/KV of arrester voltage ).	5 KJ/KV	5 KJ/KV	4 KJ/KV
xi)	Prospective symmetrical fault Current for pressure relief test (KA rms)	40 for 0.2 sec.	40 for 0.2 sec.	40 for 0.2 sec.
xii)	High current impulse test value (4/10 micro sec.)	100 KAP	100 KAP	100 KAP
xiii)	Max. Residual voltage for	600 KVp	330 (at	100 (at
a)	Lighting impulse current (KVp)	at 10 KA	10 KA)	10 KA)
b)	Switching impulse current	500 KVp at 1 KA	280 KVp (at 1 KA)	-
c)	Steep current impulse at nominal discharge current	650 KVp (10 KAp)	380 KVp (10 KAp)	-
xiv)	Max. PD level at 1.05 COV	50 pico coulombs		
xv)	Seismic acceleration	0.3 g of horizontal		
xvi)	Max. cantilever strength (Kg-m)	1000	325	325

xvii)	Max. RIV at 1.1 times phase voltage for frequency between 0.5 MHz and 2 MHz in all positions of the equipment.	1000 micro V at 156 KV rms	500 microV at 92 KV	-
xviii)	Arrester Housing : a) Rated voltage b) One minute power frequency withstand voltage KV rms c) Lightning impulse withstand voltage d) Minimum total creepage distance e) Pollution level (as per IEC 71)	245 KV 460 KV 1050 KVp 6125 mm 25mm/ KV rated voltage heavy	145 KV 275 KV 650 KVp 3625 mm 25mm/ KV rated voltage heavy	36 KV 70 KV 170 KV 900mm 25mm/ KV rated voltage heavy

**3.5 LOCATION:**

The lightning arrestors shall be located at the line entries to sub-station and also as near the power transformer as possible. The connections of the lightning arrestors shall be such that the length of connections leads are minimum. The maximum permissible separation between the lightning arrestors and the transformer/equipment to be protected shall be clearly indicated in the tender.

**3.6 CLIMATIC CONDITION:**  
See general condition.

**3.7 PROTECTION LEVELS:**

3.7.1 The lines are protected by overhead ground wires from direct strokes. Insulators strings consisting of suitable numbers of suspension / tension insulators of size 255mm x 146mm are provided.

**3.7.2 IMPULSE WITHSTAND VOLTAGE EQUIPMENT:**

The Sub Station is shielded by ground wires to protect its equipment against direct lightning strokes. The basic insulation levels of equipment are as given in items 3.4 .

**3.8 TYPE OF MOUNTING:**

The lightning arrestors shall be suitable for mounting on steel structures. The necessary flanges, bolts and nuts, anchor bolts washers, etc. required to secure the lightning arrestors to the supporting structure shall be supplied alongwith the equipment.

### **3.9 SURGE MONITORS:**

3.9.1 Each lightning arrestor of different voltage levels shall be provided with one surge monitor of hermetically sealed type suitable for outdoor installation. The surge monitors shall be designed for the same current withstand strength as the lightning arrestors. The surge monitors shall be able to record every surge which cause the

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arrestors to discharge. An inspection window shall be provided on the monitor to enable reading the arrestors discharge recorded by monitor.

3.9.2 The suitable insulating bases shall be provided with the surge monitors.

3.9.3 The prices of the surge monitors and insulating bases shall be quoted separately.

### **3.10 TERMINAL CONNECTORS:**

3.10.1 Each lightning arrestor shall be provided with solder-less terminal connector of appropriate size suitable for receiving ACSR ZEBRA conductors. Each terminal connector shall be suitable for vertical or horizontal connection take-off.

3.10.2 The grounding terminal connectors shall be provided on the each lightning arrestors.

### **3.11 PRESSURE RELIEF DEVICE:**

The arrestors shall be provided with efficient pressure relief device to prevent explosive shattering of the housing following prolonged passage of fault current or internal flash over of the arrestors. The pressure relief device shall be suitable for passage of minimum prospective fault current of 40KA through the lightning arrestors for at least 0.2 second and low current of 800 Amps until venting occurs.

### **3.12 LONG DURATION CURRENT:**

- 3.12.1 The long duration current impulse test for heavy duty 10 KA Arrestors shall be as per IS or equivalent standard (amended upto date). The long duration class shall be as under:
1. For 198 KV LAs ... Class III
  2. For 120 KV LAs ... Class III
  3. For 30 KV LAs ... Class III

**3.13 GALVANIZATION:**

- 3.13 All ferrous parts including nuts and bolts etc. shall be hot dip galvanized as per IS: 2629-1966 ( as amended upto date).

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**3.14 TESTS:**

- 3.14.1 The lightning arrestors shall be subjected to the various type and routine tests as per IS: 3070 (Part-II)-1974 (amended upto date).
- 3.14.2 The pressure relief device shall be type tested in accordance with clause 65 of IEC publication 99 (i) 1970.
- 3.14.3 Six (6) certified copies of test reports of the type tests on the lightning arrestors as per IS: 3070 (Part-I)-1974 (as amended upto date) and that of pressure relief device as per IEC publication (99)-1970 shall be submitted by the contractor alongwith the tender.
- 3.14.4 Routine and acceptance tests shall be conducted on the lightning arrestors in the presence of purchaser's representative if so desired by the purchaser.
- 3.14.5 All test reports shall be submitted to and got approved by the purchaser before dispatching the equipment.

**3.15 DRAWING AND TECHNICAL LITERATURE:**

- 3.15.1 The following drawings shall be enclosed with the tender:-
- (i) Drawings showing outlines of the complete lightning arrestors.
  - (ii) Drawings showing clearances from grounded objects and

between adjacent poles of lightning arrestors required at various heights of lightning arrestors.

- (iii) Drawing showing mounting details.
- (iv) Drawing showing details of pressure relief devices.
- (v) Drawing showing details of surge monitors.
- (vi) Drawing showing details of terminal connectors.
- (vii) Oscillograms and test reports.
- (viii) The technical literature which the tenderer may like to supply.

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3.15.2 Four copies of the above drawings together with technical literature of lightning arrestors and surge counters shall also be submitted by the contractor within 30 days from the award of contract. These drawings shall give complete details of the various component of the equipment ordered. After their approval, the contractor shall submit seven complete sets of final drawings.

**3.16 GUARANTEED TECHNICAL PARTICULARS:**

3.16.1 The tenderer shall furnish complete guaranteed technical particulars as called for in Annexure-II contained in the specification.

**3.17 SPARES AND TOOLS:**

The lightning arrestors and surge monitors shall be supplied with one set of all special tools as may be required to dismantle and re-assemble the equipment. Additional spare parts for lightning arrestors, surge monitors etc. as recommended by the tenderer shall also be quoted. Item wise unit prices shall be given in the concerned bidding schedules of this specification.

**3.18 COMPLETENESS OF REQUIREMENT:**

Any fittings accessories or apparatus which may not have been specifically mentioned in those specifications, but which are usual or necessary in the equipment of similar plants shall be included in the contract and shall be supplied by the contractor without

extra charges. All plant and equipment shall be complete in all details whether such details are mentioned in specifications or not.

**DM**

**J.E**

**A.E.E**

**XEN**

**S.E**

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**TECHNICAL PARTICULARS OF ARRESTORS:**

**Annexure-1**

The technical particulars of the OUTDOOR STATION TYPE HEAVY DUTY LIGHTNING ARRESTORS shall be under:-

SNo	Particulars	220 KV	132 KV	33 KV
i)	Rated voltage of arrester (KV rms)	198KV	120	30
ii)	Continuous operating voltage (COV) KV rms	184	102	25
iii)	Installation	Outdoor	Outdoor	outdoor
iv)	Type	.....Heavy duty, station class, gapless		
v)	No. of columns	Single	Single	Single
vi)	Type of mounting	Pedestal	Pedestal	Pedestal
vii)	Connection	Phase to ground		
viii)	Nominal discharge current (8/20 micro sec.)	10 KAp	10 KAp	10 KAp
ix)	Long duration discharge class	3	3	3
x)	Min. energy handling capacity (KJ/KV of arrester voltage ).	5 KJ/KV	5 KJ/KV	4 KJ/KV
xi)	Prospective symmetrical fault Current for pressure relief test (KA rms)	40 for 0.2 sec.	40 for 0.2 sec.	40 for 0.2 sec.
xii)	High current impulse test value (4/10 micro sec.)	100 KAP	100 KAP	100 KAP
xiii)	Max. Residual voltage for	600 KVp	330 (at	100 (at
a)	Lighting impulse current (KVp)	at 10 KA	10 KA)	10 KA)
b)	Switching impulse current	500 KVp at 1 KA	280 KVp (at 1 KA)	-
c)	Steep current impulse at nominal discharge current	650 KVp (10 KAp)	380 KVp (10 KAp)	-
xiv)	Max. PD level at 1.05 COV	50 pico coulombs		

xv)	Seismic acceleration	0.3 g of horizontal		
xvi)	Max. cantilever strength (Kg-m)	1000	325	325
xvii)	Max. RIV at 1.1 times phase voltage for frequency between 0.5 MHz and 2 MHz in all positions of the equipment.	1000 micro V at 156 KV rms	500 microV at 92 KV	-
xviii)	Arrester Housing : a) Rated voltage b) One minute power frequency withstand voltage KV rms c) Lightning impulse withstand voltage d) Minimum total creepage distance e) Pollution level (as per IEC 71)	245 KV 460 KV 1050 KVp 6125 mm 25mm/ KV rated voltage heavy	145 KV 275 KV 650 KVp 3625 mm 25mm/ KV rated voltage heavy	36 KV 70 KV 170 KV 900mm 25mm/ KV rated voltage heavy

46.

**ANNEXURE-II**  
**SCHEDULE OF EQUIPMENT AND DESIRED DELIVERY**  
(Read along with Section III)

<b>Quantity required in Grid Stations</b>				
<b>S.No.</b>	<b>Particulars</b>	<b>Jammu Region</b>	<b>Kashmir Region</b>	<b>Total (Nos.)</b>
A	<b>Lightening Arrestors, outdoor station Type, single pole, 10KA discharge current suitable for effectively Earthed system complete with surge monitors, insulating base and terminal connectors etc as per following ratings.</b>			
1.	198 KV rating for highest continuous rated system voltage of 245 KV.	<b>12</b>		<b>12</b>
2.	120 KV rating for highest continuous rated system voltage of 145 KV.	-	<b>39</b>	<b>39</b>

3.	30 KV rating for highest continuous rated system voltage of 36 KV.	<b>9</b>	<b>66</b>	<b>75</b>

**DM    JE    A.E.E    Executive Engineer    T.O    Superintending Engineer**

**SCHEDULE-A**

**SCHEDULE OF GUARANTEED TECHNICAL PARTICULARS  
IN RESPECT OF EQUIPMENT OFFERED  
(TO BE FILLED IN/FURNISHED BY THE TENDERER)**

1. Name of the manufacturer
2. Manufacture type designation
3. Model
4. Governing standard
5. Number of units per phase
6. Rated voltage (KV)
7. Continuous operating voltage (cov)
8. Long duration discharge class
9. Rated nominal discharge current (KA)
10. Maximum residual voltage for 10 KA discharge current of 8/20 micro second (KV peak)
11. Long duration test peak current (amps)
12. High current 4/10 micro second wave
  - i. Peak value of high current impulse (KA)
  - ii. Peak voltage (KV)
13. One minute dry power frequency withstand voltage of arrestor (KV rms)

14. One minute wet powers frequency withstands voltage of arrestors (KV rms)
15. Max. PD level at 1.05 COV
16. Whether grading ring provided Yes/No.
17. Pressure Relief Device
  - a) Maximum prospective high fault current (KA rms)
    - i. Symmetrical
    - ii. Asymmetrical
  - b) Minimum duration of flow of above current (second)
  - c) Maximum time to vent (second)
  - d) Magnitude of low current (Amp.Rms)
18. Cree page distance (mm)
  - i. Total
  - ii. Protected
19. Weight of complete single phase unit (Kg)
20. Height of completer unit from base of line side terminal (mm)
21. Minimum recommended spacing between arrestors center to center (mm)
22. Mounting flango dimensional details
23. Surge Monitor
  - i. Make
  - ii. Type/Model
  - iii. Rating
  - iv. Governing standard
  - v. Other particulars
24. Terminal connectors

- i. Make/Type
- ii. Suitable for conductor
- iii. Governing standard
- iv. Connected drawing
- v. Any other particulars
- vi. Details of insulation base.

Date:                      Signature

Place:                      Name & Status  
Whether authorized attorney of the Tendering company  
Name of the Tendering Company

Certified that the above offered values are within the permissible limits of relevant IEC / IS specifications.

SEAL

**SCHEDULE - B****SCHEDULE OF PRICES**

(TO BE FILLED IN/FURNISHED AND SIGNED BY THE TENDERER

The tenderer shall refer to relevant clauses in Part-I and Part-II before filling)

The tenderer is requested to furnish prices for equipment / spares / services etc. strictly as per following format to make the process of evaluation simpler without any confusion or to avoid likely slips in evaluation process if relevant information is provided in the tender in bits / vague terms / printed material.

DETAILS OF PRICES OFFERED IN RESPECT OF EQUIPMENT / SPARES / TESTS /

SUPERVISION JOB:

A: FOR JAMMU / SRINAGAR PRICES

S.NO.	PARTICULARS OF ITEM	NAME OF EQUIPMENT	COST OF SET OF SPARES AS PER SCHEDULE 'D'	COST OF TESTS ON EQUIPMENT AS PER SCHEDULE 'E'	SUPERVISION CHARGES ON ACCOUNT OF ERECTION, TESTING & COMMISSIONING, OF TRANS. AT SITE AS PER SCHEDULE 'G'
1.	2.	3.	4.	5.	6.
1.	Unit Ex-works Price (EWP)				
1.	2.	3.	4.	5.	6.

2.	Rebate on EWP, if any,				
3.	Duties / Taxes, (Refer clause 1.16 before quoting)				
i)	Excise duty (State percentage ED rate alongwith cost from Superintendent of concerned range)				
ii)	S.T. (CST or state S.T) (State percentage S.T. rate also).				
iii)	Any other levy Chargeable/ Entry Tax/ Toll Tax.				
4.	Unit freight charges & Insurance upto Jammu rail head/ Consignee's stores at Jammu/Srinagar (For insurance, item 4a of Clause 1.14 be referred to)				
5.	Unit price F.O.R i. Jammu ii. Srinagar				
6.	TOTAL				

**B. COMPUTED F.O.R. JAMMU/SRINAGAR COSTS**

S.NO.	PARTICULARS OF ITEMS	AMOUNT
1	2	3

7. Unit F.O.R. cost component on account of  
(as per row 5/6 above)
- i) Equipment / Insulation. Oil (as per column 3 / 4)
  - ii) Spares / T&P etc. (as per column 5)
  - iii) Testing (as per column 6)
  - iv) Supervision of Erection / testing / commissioning  
of equipment.
  - v) Capitalization of losses.
  - vi) Any other item such as interest etc. if any.
8. Computed unit F.O.R. Jammu / Srinagar Cost.
9. Quantity.
10. Computed F.O.R. Jammu / Srinagar Cost.

Dated:

Signature:

Place:

Name and status:

Whether authorized attorney of the tendering company.

Name of the tendering company.

**SCHEDULE - C****(TO BE FILLED IN AND SIGNED BY THE TENDERER)****SCHEDULE OF DEVIATIONS FOR SUPPLY AND DELIVERY OF EQUIPMENT****(Refer Clause 1.2.6, 2.11.3 & 2.11.4)**

We/I have carefully gone through the Technical Specifications and General Conditions of contract and We/I have satisfied ourselves-myself and hereby conform that our-my offer strictly conforms to the requirements of the technical specifications of the NIT except for the Technical Deviations which are given below.

<u>S.No.</u>	<u>Description</u>	<u>Stipulation on Specification on</u>	<u>Deviation</u>	<u>Remarks</u>
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Date.

Signature.

Place.

Name.

Status.

Whether authorized attorney of the tendering company.

Name of the Tendering Company.

**SCHEDULE - D**

**SCHEDULE OF REQUIREMENT, PRICE AND DELIVERY PERIOD  
OF SPARE PARTS**

(TO BE FILLED IN/FURNISHED AND SIGNED BY THE TENDERER.  
The tenderer shall refer clauses 2.8, 2.16 and 3.25 before filling)

The tenderer is requested to fill in here such spare parts as per following list / he recommends for five years operation. The purchaser reserves the right to purchase such of the quantity/ies as he finally decides upon at the unit prices filled in below:

S.No.	DESCRIPTION	QUANTITY	EX-WORKS PRICES	AMOUNT
1	2	3	4	5

- 1.
- 2.
- 3.
- 4.

**TOTAL EX-WORKS COST OF THE SPARES**

The rebate/ED/Taxes/F&I etc. applicable on the ex-work prices / other terms & conditions in reference to supply of spares be given in schedule-B, for Terms & Conditions/Prices.

Dated:  
Place:

Signature.  
Name and Status.  
Whether authorized attorney of the tendering company.  
Name of the tendering company.

**SCHEDULE-E**

**THE SCHEDULE OF TESTS TO BE CONDUCTED ON EQUIPMENT  
(TO BE FILLED IN/FURNISHED AND SIGNED BY THE TENDERER)**

(Refer Clauses 2.14, 2.15 and 3.16)

The tenderer is requested to give (fill in the following format) all the Type Tests as are necessary to be conducted on this equipment as per relevant IS/IEC standards/specifications. This is required in case the Department wishes to get the equipment type tested again in addition to the Type Tests already got conducted by the supplier.

S.No.	Description of tests	Charges if any	Remarks
1.	2.	3.	4.

1.

2.

3.

4.

5.

-

Total charges on account of tests:

The rebate / ED / Taxes / F&I etc. applicable on test charges.

The applicable terms and conditions in regard to tests / duties etc. shall be Given in Schedule-B for terms and conditions.

Dated:

Signature.

Place:

Name and Status.

Whether authorized attorney of the tendering company.

Name of the tendering company.

**SCHEDULE - F****SCHEDULE OF TOOLS AND SPECIAL ERECTION TOOLS****(TO BE FILLED IN/FURNISHED AND SIGNED BY THE TENDERER**

The tenderer shall refer clauses 3.22 before filling)

The tenderer is requested to fill in here such maintenance tools and special tools as he recommends for the erection and maintenance of the SF6 Breaker. The quantities and tools as be finally decided upon at the unit prices filled in below:

S.No.	Description	Quantity recommended	Unit Ex-Works Prices	Amount
1.	2.	3.	4.	5

1.

2.

3.

4.

5.

-

**TOTAL COST OF TOOLS:**

The rebate / ED / Taxes / F&I etc. applicable on quoted Ex-works prices.  
Terms and conditions in this regard, shall be given in schedule-B for terms and conditions.

Dated:

Place:

Signature.

Name and Status.

Whether authorized attorney of the tendering company.

Name of the tendering company.

**SCHEDULE - G****SCHEDULE OF CHARGES ON ACCOUNT OF SUPERVISION OF ERECTION,  
TESTING AND COMMISSIONING OF EQUIPMENT**

**(TO BE FILLED IN/FURNISHED AND SIGNED BY THE TENDERER  
The tenderer shall refer clause 3.29 before filling)**

S. No.	Item of work	*No. of days estimated for supervision job for erection, testing & commissioning for one unit	**Details of <u>supervisory staff</u>		To & Fro charges	Boarding & lodging charges per day	*** estimated charges on account of supervision on job per unit
			Category	Charges per day per category			
1	2	3	4	5	6	7	8

- i) Erection /  
Commissioning  
Engineer
- ii) Any  
other  
Category  
(such as  
technician  
etc. if  
required)

\* The number of days, required for supervision of erection, testing and commissioning of one unit to be executed departmentally under the supervision of erection / commissioning engineers of the firm, to be assumed at this end.



**SCHEDULE - H**

**SCHEDULE OF TERMS AND CONDITIONS  
FINANCIAL AND COMMERCIAL**

(TO BE FILLED IN/FURNISHED AND SIGNED BY THE TENDERER)

The tenderer shall refer to relevant clauses in Part-I before filling)

The tenderer is requested to furnish Terms and Conditions for equipment / spares / service etc. strictly as per following format to make the process of evaluation simpler without any confusion or to avoid lightly slips in evaluation process if relevant information is provided in the tender in bits /vague terms / printed material.

**DETAILS OF TERMS AND CONDITIONS**

**A. FINANCIAL TERMS AND CONDITIONS**

**TERMS AND CONDITIONS OFFERED FOR**

S.No.	PARTICULARS OF ITEMS	NAME OF EQUIPMENT	SPARES	TESTING OF EQUIPMENT	DEPUTATION OF SUPERVISORY STAFF FOR SUPERVISING ERECTION TESTING & COMMISSIONING OF EQUIPMENT AT SITE
	2	3	4	5	6
	The tenderer must specify Each item of the term & conditions given in				

	column 2,. hereunder, at respective space under each column 3 to 7 for equipment / T oil/spares/testing/supervision etc.				
1	<p><b>PRICES:</b> (the tenderer <b>MUST</b> refer to clause 1.8 &amp; 2.9 before quoting)</p> <p>i. Quoted prices shall be F.O.R destination i.e nearest Rail Head Jammu / consignee's stores at Jammu/Srinagar (Ex-work prices must also be specified for computing ED/CST components etc.)</p> <p>ii. The prices quoted shall be variable</p>				
ii)	MODVAT Benefits				
2.	<p>Rebate on Ex-works Prices (EWP) State under each column Rebate offered on EWP if any</p>				

<p>3.</p> <p>i.</p> <p>a)</p>	<p>Duties/taxes/levies</p> <p>(The tenderer MUST refer to clause 1.16 before quoting)</p> <p>State under each column, if</p> <p>EDextra/not Applicable/included in EWP</p>				
<p>b)</p>	<p>If extra or included in EWP Give percentage rate Chargeable or at which ED included in EWP</p>				
<p>ii)</p> <p>a)</p>	<p>Sale tax (Central or State, ST)</p> <p>State under each column, if</p> <p>ST extra/not applicable/included in EWP</p>				
<p>b)</p>	<p>If extra or included in EWP, give percentage Rate chargeable or at which ST included in EWP</p>				

iii)	Any other levy chargeable viz: Entry Tax & Toll Tax				
4. a)	Freight: Give freight chargeable upto Jammu Rail Head/Consignee's stores at Jammu/ Srinagar				
b)	Insurance (Refer to clause 1.14 before quoting) It is the responsibility of the Supplier to deliver goods at consignee's stores in good condition				
5.	Mode of Transport				

**B. GENERAL TERMS & CONDITIONS:-**

S. No.	Particulars of Item	Terms & Conditions Offered
1	2	3

The tenderers shall give details of below given general terms conditions in specific terms without reference to phrases such as 'clause-agreed to' or As per clauses ' etc.

6. Earnest money  
(Refer clause 1.6)
- Give particulars of Bank Guarantee/CDR of Rs. 70,000.00 pledged to Chief Engineer, Elect. Planning & Design, Jammu
7. Validity:  
(The tenderer MUST refer to clause 1.9 before quoting)  
The tender shall be unconditionally Valid for a period of 365 days from the Due date of opening of tenders.
8. Terms of payment:  
(Refer to clause 1.12 before quoting)
- Specify payment terms
- a. Payment terms acceptable are 90% against RR through bank & balance 10% after verification of material in Consignee's stores or 100% payment against receipt & verification of material in stores.
- b. Advance payment /payment against LOC are normally not acceptable because of procedural complications etc. involved. However, evaluation of bid in such cases is affected.

S. No.	Particulars of Item	Terms & Conditions Offered
1	2	3

9.

.i) Delivery period/ completion period                      Specify delivery period  
(Refer to clause 1.10 before quoting)

ii. The tenderer shall quote minimum possible delivery period.

iii. The tenderer shall furnish following terms conditions in brief using phrases such as 'clause—Agreed to' or 'As per clause---'. In case of deviation state briefly the point of difference over Relevant clause of the specification.

10. Damages or penalty for delay/negligence in Execution of order (clause-1.11)

11.

i) Warranty (clause 1.13) / Guarantee (3.32)

ii) Failure to meet GTP and specifications (clause 2.14)

S. No.	Particulars of Item	Terms & Conditions Offered
1	2	3

12. Cancellation (clause 1.21)  
 Additional quantities/ extras (clause 1.23  
 and 2.5/2.7)

13. Civil suit/legal remedy (clause: 1.24)

14. Arbitration (clause 1.25)

15. Inspection and testing (clause 2.15)

Besides comments to accept inspection & testing  
 clause, state facilities/ capability to conduct tests  
 as per IS.

16. Patent rights (clause 2.20)

17. Conditions of contract ( clause: 2.23)

18. Deviations: specify deviations in Specifications/  
 General terms conditions in the format  
 as per Schedule-I

i. a) Deviations in specification as Stipulated  
 in NIT.

b) Variation (clause: 1.27)

ii. Deviation in general term and conditions

e

19. Training of staff

S. No.	Particulars of Item	Terms & Conditions Offered
1	2	3

20. Observance of regulating safety Requirements  
The tenderer shall state if regulatory/statutory restrictions and safety requirements in respect of earthing arrangements, danger and other label, air clearances, provisions of anti-earthquake arrangements, pressure relief devices, defence and Highway Railway norms for transportation of equipment etc, have been taken care of in design offered for the desired equipment.
21. Capability of firm to manufacture Equipment of similar or higher ratings  
While furnishing information documents in this regard, the emphasis is laid on rating capacity of equipment required.
- i. In this regard, state facilities to manufacture desired equipment/standing of the firm as designer and manufacturer of the equipment covered by specifications.
  - ii. List of orders executed.
  - iii. Copies of type/ routine /special test certificate from recognized test houses in the country/outside.
  - iv. Performance certificate from SEBs/ NTPC/NHPC/Govt. Departments etc. in respect of equipment of same rating/capacity.

S. No.	Particulars of Item	Terms & Conditions Offered
1	2	3

22. Financial resource and experience (clause:

2.19) Enclose following reports:

- i. Banker's report.
- ii. I.T.C.C (Income Tax Clearance certificate)
- iii. Sale Tax Clearance Certificate.
- iv. Annual balance sheet/report for the preceding financial year.
- v. Certificate from the Superintendent Excise Duty Range concerned in support of ED rate.

23. Additional General terms and conditions for :

- i. Spares
- ii. Testing
- iii. Supervision/Services.

24. Any other term conditions not covered above:

Dated:

Signature:

Place:

Name and Status:

Whether authorized attorney of the tendering company

Name of the tendering company.

**NOTE:**

The tenderers are requested to take note of the following instructions while making offers in respect of terms conditions of the equipment/ spares/services:

1. As emphasized above, the terms and conditions shall be quoted in above format/ sequence to make the process of evaluation more uniform, simpler, concise, specific and confusion free, in unambiguous terms & consolidated simplified format given above.
2. No printed general terms and conditions enclosed with the tender shall be accepted.
3. The tenderer shall give categorical and complete information in each column (3 to 7), such as:
  - i) Ex-works prices.
  - ii) ED/CST/ any other levy applicable etc. each for equipment, spares tests etc.
  - iii) Freight and insurance etc. as asked for there in against each item of the particulars.
  - iv) Local Taxes VIZ: Entry Tax & Toll Tax.
4. The prices shall be variable which shall be the basis of evaluation/comparison of bids.

Any ambiguity in this regard ( Such as, vague or no mention or contradiction etc) shall be interpreted as per departmental practice to suit departmental interest so far as evaluation of bid/placement of order is concerned.

**SCHEDULE - I****SCHEDULE OF DRAWINGS AND TECHNICAL LITERATURE.**

(TO BE FILLED IN/FURNISHED AND SIGNED BY THE TENDERER

The tenderer shall refer clauses 2.17 and 3.28 before filling)

**A. TENDER DRAWINGS:**

- I. General outline drawing showing dimensions and shipping weights.
- ii. Sectional views showing the general construction features.
- iii. General arrangement of foundation and structure mounting/drilling plan.
- iv. Type test certificates and osoillograms.
- v. Crane requirements for assembling and dismantling of equipment, if any.
- vi. Dimension of the largest parts to be shipped and the position in which these are to be transported
- vii. Bushing drawing.

**B. COMPLETION OF DRAWINGS:**

All drawing listed above and corrected in accordance with the works as actually executed at site.

**C. CONTRACT DRAWINGS**

- i) General outline drawing front side elevations and plan of the equipment with detailed dimensions.
- ii) Foundation drawings.  
Drawing of each type of bushing giving dimensions/clearance etc.

**D. TECHNICAL LITERATURE:**

- i) Nine copies of the instructions books/operation and maintenance manuals and spare parts bulletins.
- ii) Description literature and data on equipment construction, winding, bushing etc.

Dated:

Signature:

Place:

Name and Status:

Whether authorized attorney of the tendering company

Name of the tendering company.

**SCHEDULE - J**

**SCHEDULE OF ORDERS EXECUTED/ROUTINE,TYPE AND SPECIAL  
TESTS/PERFORMANCE CERTIFICATES IN RESPECT OF EQUIPEMNT OF  
SAME OR HIGHER RATING**

(TO BE FILLED IN/FURNISHED AND SIGNED BY THE TENDERER

The tenderer shall refer clause 1.19 & other relevant clauses before filling)

The tenderer shall furnish the following information/certificates/documents to establish his capability to manufacture the equipment.

S.No.                    CERTIFICATES

1.                    LIST OF ORDERS EXECUTED

The tenderer shall furnish the list of orders executed in the following format:

S. No.	Description of Equipment	Name of Elec. Board/Purchaser	Purchase Order No. & Date
1.	2.	3.	4.

Status of Supply	Commissioning date	Performance Remarks
5.	6.	7.

**\*2.    ROUTINE TEST CERTIFICATES**

**\*3. TYPE/SPECIAL TEST CERTIFICATES.**

(Give list of test certificates from recognized test houses of National or International repute for equipment similar or higher rating. In this connection relevant clause 3.27 pertaining to TESTS in Section-III may please be referred to)

**\* 4. PERFORMANCE CERTIFICATE / DOCUMENTS**

(Give list of performance certificate from State Electricity Boards for equipment with similar or higher rating of equipment, or any other certificate/ document which must establish performance of such equipment beyond doubts. Otherwise the offer of the firm shall be rejected.

\* While furnishing the above certificates/documents, the emphasis shall be laid on rating and capacity of the equipment required.

Dated:

Signature:

Place:

Name and Status:

Whether authorized attorney of the tendering company

Name of the tendering company.

**SCHEDULE-K****SCHEDULE OF DOCUMENTS IN RESPECT OF FINANCIAL RESOURCES/CAPABILITY OF  
THE TENDERER**

(TO BE FILLED IN/FURNISHED AND SIGNED BY THE TENDERER

The tenderer shall refer relevant clauses before filling)

The tenderer shall attach alongwith this schedule the following documents to establish his financial resources:-

1. Banker's Report
2. I.T.C.C. (Income Tax Clearance Certificate)
3. Sales Tax Clearance Certificate.
4. Annual Balance Sheet/ Report.
5. Certificate from the Superintendent, Excise Duty Range concerned, in support of ED rate quoted as applicable.

Dated:

Signature:

Place:

Name and Status:

Whether authorized attorney of the tendering company

Name of the tendering company.



## ANNEXURE-II

**SCHEDULE OF EQUIPMENT AND DESIRED DELIVERY**

(Read along with Section III)

**Quantity required in Grid Stations**

S.No.	Particulars	Jammu Region	Kashmir Region							Total Nos.
			Chadura	Khrew	Danciwacha	Wanpoh	Wanganpora	Tethar	Kangan	
A	Lightening Arrestors, outdoor station Type, single pole, 10KA discharge current suitable for effectively Earthed system complete with surge monitors, insulating base and terminal connectors etc as per following ratings.									
1.	198 KV rating for highest continuous rated system voltage of 245 KV.	-----	---	---	---	---	---	---	---	-----
2.	120 KV rating for highest continuous rated system voltage of 145 KV.	----	09	12	09	03	03	---	03	39
3.	30 KV rating for highest continuous rated system voltage of 36 KV.	-----	18	18	15	06	03	03	03	66