

J&K STATE POWER DEVELOPMENT CORPORATION

TENDER DOCUMENT

NIT NO. EPDJ/PDC/NIT/02 Dt. 06-06-2011

FOR

DESIGN, MANUFACTURING, SUPPLY, ERECTION, TESTING & COMMISSIONING

OF

**3-PHASE, 50HZ, 2.0MVA 7KV-12KV/11KV SERVO CONTROLLED
AUTOMATIC VOLTAGE REGULATOR TRANSFORMER**

TO BE INSTALLED AT

3X0.5 MW BHADERWAH HEP J&K

EXECUTIVE ENGINEER
ELECTRIC PROJECT DIVISION, JKSPDC
2nd Floor, Trikuta Complex, B.C Road
JAMMU (J&K)
PHONE/FAX :0191-2570321

GOVERNMENT OF JAMMU AND KASHMIR
J&K State Power Development Corporation
OFFICE OF THE EXECUTIVE ENGINEER ELECTRIC PROJECT DIVISION
2nd Floor Trikuta Complex B.C. Road Jammu (J&K)

NO: EPDJ/PDC/NIT/02

DT: 06-06-2011

SHORT TERM TENDER NOTICE

Sealed tenders (in two parts) affixed with revenue stamps worth Rs: 5/- (Rs: Five only) on behalf of Governor of Jammu and Kashmir State are invited from the original Manufacturers or their duly authorized representatives for Design, manufacture, supply, testing, commissioning of oil immersed naturally cooled , 3-phase 50Hz copper double wound 2000 KVA Servo controlled Manual /Automatic Voltage Regulator Transformer with Control panels & provision for By pass panel as per scope mentioned below for 3x0.5MW Bhaderwah HEP .

S.no	Item	Quantity
1	Design, manufacture, supply, installation, testing, commissioning of oil immersed naturally cooled, 3-phase 50Hz, copper double wound 2000KVA, Servo controlled/ Manual Automatic Voltage Regulator Transformer with Control panels & provision for Bypass Panel for use on System Voltage of 11KV for synchronizing supply between Generating end and Grid supply which varies from 7KV to 12 KV.	One Unit

The detailed tender document for the above job can be had from the Office of the Executive Engineer Electric Project Division PDC on any working day during office hours upto 2 pm against cash/Demand Draft of Rs: 500/- (Non-refundable) in favour of the Executive Engineer Electric Project Division PDC Jammu.

The tenders shall be received through speed post/Regd. Post/Courier only.

1. Last Date for sale of tenders : 28-06-2011 (upto 2 p.m)
2. Last Date for receipt of tenders : 30-06-2011 (upto 2 p.m)

The tenders shall be opened on 02-07-2011 at 10 AM or any other convenient date in the Office of Executive Engineer Electric Project Division PDC Jammu in presence of the tenderers who may like to be present. The tenders should be accompanied with 2% Earnest Money in the shape of Bank Draft/ CDR/ FDR pledged to the Chief Pay and Accounts Officer, PDC Kishtwar.

Sd/-
Executive Engineer
Electric Project Divn. PDC
Jammu

Copy to the:-

1. Managing Director J&K State, PDC Jammu / Srinagar for inf.
2. Chief Engineer, Generation Wing PDC Jammu.
3. Superintending Engineer, Gen. Circle III PDC Jammu
4. Director Finance , JKSPDC, Srinagar for inf.
5. The Company Secretary, JKSPDC Srinagar for information and putting the tender on website of JKSPDC
6. Chief Accounts Officer, Corporate Office PDC for inf.
7. CP & AO, PDC Kishtwar for inf.
8. AEE Sub- Division Bhaderwah for inf.

GENERAL TERMS & CONDITIONS AND INSTRUCTIONS TO THE TENDERERS

1.1 Invitation, Receipt and Opening of Tenders.

1.1.1 For and on behalf of Governor of Jammu & Kashmir State sealed tenders are hereby invited from original manufacturers or their duly authorized representatives for Design, Manufacture, supply, erection, testing and Commissioning of 3 phase 50 Hz, Oil immersed Naturally cooled 7KV-12KV/11KV HT/HT Automatic Voltage Regulator Transformer for synchronizing Generating end Supply i.e 0.4KV stepped upto 11KV and Grid supply varying between 7KV and 12 KV at 3x0.5 MVA Bhaderwah HEP ,Sarthingal, Bhaderwah (J&K) ,as per terms and conditions, technical specifications and schedule thereto of this Tender document.

1.1.2 The tender should be addressed to Executive Engineer, Electric Project Division PDC 2nd Floor Trikuta Complex B.C. Road Jammu and should reach this office on or before 30.06.2011 upto 2 PM.

1.1.3 The tenders shall be opened on the prescribed date or any subsequent day as per the availability of the members of the Tender Opening Committee. The tenderers or their authorized representative may ,if so desire, be present at the time of opening of tenders

1.1.4 In case the due date of receipt of tenders falls on a holiday or the holiday being declared subsequently the tenders will be received on next working day.

1.1.5 The Tenders should be submitted in two parts viz. Part I & Part II as described in clause 1.1.6 below in separate envelopes duly super superscribed as Part I & Part II and enclosed in a common envelope with name of the tenderer, NIT No. and due date of receipt superscribed on it

1.1.6 The offers/ tenders submitted in two parts shall contain as under:-

1.1.6.1 Part-I: (Technical Bid) super scribed as "Qualification Bid For NIT No. EPDJ /PDC / NIT/02 Dt. 06-06-2011'should contain

- a) Tender Proforma
- b) Technical Details
- c) Guaranteed Technical Particulars
- d) Commercial terms and conditions.
- g) Earnest Money Deposit.
- h) Cost of Tender in the form of Draft if Tender is downloaded from website.
- i) List of past supplies and past performance certificates duly supported by necessary documents
- j) Copies of Test certificates of similar /higher ratings from Govt. approved test houses/laboratories.
- k) Catalogues/Drawings, Registration certificate/Industrial License to manufacture the product
- l) Guarantee period offered
- j) Type test certificate / warranty period of 3yrs from the date of commissioning (in lieu of type test certificate)

1.1.6.2 Part-II: (Price Bid) super scribed as PRICE BID AGAINST NIT NO. EPDJ/PDC/NIT/02 DT. 06-06-2011 should contain

- a) Price bid strictly as per schedule annexed to this tender document.
- b) Delivery period.
- c) Terms of payment.

The Tenderer shall ensure timely submission of tender in the office of the **Executive Engineer, EPD JKSPDC, Jammu** through speed post/registered post or courier only.The

tenders received by hand or after due date, even if posted earlier, shall not be entertained.

- 1.1.7** On the date of opening of tenders, only the technical and qualification part (Part-I) of the tender shall be opened first in presence of tenderers who may be present. The Price Bid (Part-II) shall be opened only in case of such of tenderers who on scrutiny of Part –I viz Technical Bid of the offer are found to have qualified for opening of Price Bid. The price bids of tenderers who do not qualify in Technical Comparison shall be returned to them without opening.
- 1.1.8** The tender should be complete in all the respects. All the terms and conditions of the tender document including technical specifications should be carefully studied for the sake of submitting complete and comprehensive tender. Failure to comply with any of the terms and conditions or instructions which are likely to render fair comparison of tenders, as a whole, impossible may lead to rejection even if otherwise it is competitive offer/ tender.
- 1.1.9** Any request by post, by hand, by fax or telegraphically for any modification, addition, deletion etc. in the tender after last date of receipt of tenders shall not be considered.
- 1.1.9.1.1 The tenders shall be prepared in a formal manner with all quotations written both in words and figures. The tender should be typed or written in ink and be legible. Any tender written with pencil shall be rejected. There shall be no erasures or over writings and if any corrections are made the same shall be neatly done and attested. A systematic form of totalling should be adopted to avoid any ambiguity. The detailed description of the equipment offered should be given. The rates so written must be secured with a transparent tape over them.
- 1.1.10** The rates / prices must be quoted in Indian Currency alone and any mistake in converting foreign exchange component into Indian Currency will not justify the claim whatsoever of tenderer for increase in prices. Foreign exchange component, if any, shall have to be arranged by the tenderer and bank charges, if any, on this account shall be to the account of the tenderer. In the price bid, the tenderer shall clearly indicate the rates/ prices for complete job which includes material, labour, erection, testing, commissioning, packing, forwarding, freight, insurance, excise duty, CST, local sales tax and any other tax which is leviable upto completion/commissioning of job at site

1.2 SCOPE OF WORK

Bhaderwah HEP is located at Sarthingal ,Bhaderwah J&k . 3 no. units of 500KW Pelton Wheel Turbine installed have generation voltage of 400Volts which is stepped up through 2 no 1.0 MVA 0.4/11KV (Delta-Star) Power Transformers to 11KV level for transmission. This is required to be synchronized with 11KV Power evacuation Line feeding load at Bhaderwah Receiving Station. As the available Voltage level of 11KV Power evacuation Line varies from 7KV to 11KV ,at times it becomes impossible to synchronize the Generating Units with Power evacuation Line .In order to overcome the synchronization problem ,a 2.0 MVA 3Phase ,50Hz., Servo controlled Manual/Automatic Voltage Regulator Transformer is proposed to be erected .The scope of work involves design, manufacture, assembly, testing, supply, delivery including installation, testing and commissioning , Trial run and adjustments as necessary for such an Outdoor type 7KV-12KV/11KV,3-Phase 50Hz.,HT/HT Automatic Voltage Regulator Transformer with Bypass arrangement at 3x0.5 MW Bhaderwah HEP.

1.3 LOCATION AND TRANSPORT:

The nearest rail head on the board gauge line is at Jammu/ Udampur from where the equipment / machinery parts are to be carried through Road Transport to the site of power house:

- a) Location of power house : Sarthingal, Tehsil , Bhaderwah

	: District: Doda, Province : Jammu
b) Road Distance	: 210 Km from Jammu
	: 140 Km from Udhampur
c) Maximum ambient air temperature	50 ⁰ C
d) Maximum daily average ambient air temperature	40 ⁰ C
e) Maximum yearly weighted average ambient air temperature	32 ⁰ C
f) Minimum ambient air temperature	-15 ⁰ C
g) Altitude above M.S.L not exceeding	1700M
h) Average number of rainy days per annum	100.
i) Average annual rainfall	70Cms.
j) Maximum wind pressure	195Kgs/sq.m

1.4. ELIGIBILITY OF BIDDERS

- THE manufacturers possessing the necessary competence shall be eligible to bid for works detailed under "scope of works".
- The bidder shall have the following minimum Qualification Criteria for submitting the bid.
 - 1) The bidder must have successfully executed similar jobs
 - 2) The offer of those bidders, who shall provide satisfactory evidence of their capability and adequacy of resources to carry out the contract effectively , shall be considered for evaluation. Bids shall include the following information .
 - a) Copies of original documents defining the constitution or legal status place of registration and principal place of business, written power of attorney of the signatory of the bid to commit the Bid.
 - b) Total annual turnover for last three(3) years.
 - c) Details of the works executed during last three years.
 - d) Performance of the works of similar nature executed during last years as prime contractor.
 - e) Description of the plant for carrying out the work.
 - f) Report on the financial standing of the bidder including profit and loss statements, balance sheets and auditors reports for the past three(3) years.
- The bidder shall furnish detail of work in hand and current contract commitments.
- The bidder shall furnish list of testing facilities and adequate plant and manufacturing capacity available to execute the works properly and expeditiously within time period specified. The evidence shall consist of written details of the installed manufacturing capacities and present commitments(excluding the work under this specification).
- The bidder shall have adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment as required under the scope of work.
- The bidder shall have established Quality Assurance System and Organization designed to achieve high level of equipment reliability during the manufacture, field installation activities and operations.
- The bidder shall submit the above details with documentary evidence to fulfill the above eligibility requirements.
- The purchase of bidding documents will not entitle the bidder(s) to qualify the eligibility criteria set for the bidder. The details furnished by the bidder along with the bid will be examined in detail as per requirement of bidding documents and accordingly his eligibility will be established.
- Notwithstanding anything stated above the owner reserves the right to assess the bidder's capability and capacity to perform the contract, should the circumstances warrant.

1.5 Earnest Money

- 1.5.1 Earnest Money amounting to 2% of the value of the offer in the shape of Bank Draft/CDR pledged to the CP&AO Kishtwar must be furnished along with the offer in the Part-I of the tender.
- 1.5.2 No tenderer, unless or otherwise specified in the specifications, terms & conditions shall be exempted from depositing earnest money to the required tune of 2%.
- 1.5.3 Tenders not accompanied with required amount of earnest money will be rejected and their price bid shall not be opened.
- 1.5.4 The earnest money of the tenderer(s) shall be forfeited if they withdraw their tender or revise the prices of their offer within the validity period or violate any terms & conditions contained therein. For this the contract shall be deemed to have been entered into from the date of letter of intent.
- 1.5.5 Earnest money deposit shall be released in favour of unsuccessful tenderer(s) immediately after finalization of the supply order .

1.6 Security Deposit/Performance Guarantee

Earnest money deposit shall be released in favour of successful tenderer after furnishing of required amount of security deposit. The tenderer shall be required to furnish a security deposit/performance guarantee equivalent to 10% of the value of the order in the shape of Bank Guarantee pledged to the Chief Pay & Accounts Officer Jammu for successful execution of job. The security deposit shall be furnished by the tenderer within one month from the date of issuance of order for the job and after commissioning, the same shall be considered as performance guarantee for 12 months from date of successful commissioning.

1.7 Modifications prior to date of tender opening:

The Executive Engineer Electric Project Division ,JKSPDC Jammu may revise or amend the specifications and other conditions prior to the date notified for receiving the tenders. Such revision or amendments, if any, will be communicated to all prospective tenderers as an addendum to this invitation for tenders through the media used for original NIT. In such case, if considered necessary, the date of receiving the tenders may also be extended at the discretion of the **Executive Engineer, EPD JKSPDC Jammu.**

1.8 Delivery/ Completion

Tenderers should state clearly the earliest delivery / completion period of the job reckoned from the date of award of supply by the Executive Engineer, Electric Project Division PDC Jammu. The delivery/completion period being the essence of the supply, preference may be given to the tenderer offering minimum delivery period.

1.9 Validity

The tenders should be valid for a period of 180 days from the date of opening of the price bid.

1.10 Award of Supply order

- 1.10.1** The purchaser will determine to its satisfaction whether the bidder selected as having

Submitted the lowest evaluated responsive bid is qualified to satisfactorily perform the job. An affirmative determination will be a prerequisite for award of the contract to the bidder. A negative determination will result in rejection of the lowest bidder's bid in which event the purchase will proceed to the next lowest evaluated bid to make a similar determination of bidder's capabilities to perform the contract satisfactorily.

1.10.2 The, **Executive Engineer, EPD JKSPDC Jammu**, reserves the right to reject any or all tenders without assigning any reason thereof.

1.10.3 Any effort on behalf of tenderer or his representative to approach / influence any officer / official of the department or otherwise on any account shall render the tender liable for summary rejection.

1.11. Prices

1.11.1 The tenderer shall clearly indicate the rates/ prices for complete job FOR Sarthingal Bhaderwah HEP, Bhaderwah J&K which includes material, labour, erection, testing commissioning, packing, forwarding, freight, insurance, excise duty, CST, local sales tax, entry tax and any other taxes /duties which are leviable upto completion/commissioning of job .The Taxes/duties & charges of freight, insurance shall be payable against freight, insurance shall be payable against documentary proof & shall not in any case exceed the amount stated in the bid.

1.11.2 CST/VAT/ENTRY TAX & EXCISE DUTY

The material/equipment on order is required for use in generation/transmission of electrical energy to public. Local Taxes i.e VAT/Entry Tax ,as applicable ,shall be levied on the goods/equipment.

1.11.3 Price Variation

The Prices shall be FIRM. No price variation shall be allowed upto completion period of the job.

1.11.4 Terms & Mode of Payment

Payment for the equipment supplied shall be made in Indian Currency in the following manner:

- i) 60%of Ex. Works price shall be paid on receipt of machinery equipment & material on submission of following documents:
 - a) Evidence of dispatch .
 - b) Contractors detailed invoice, packing list identifying contents of each package.
 - c) Insurance certificate.
 - d) Contractors guarantee certificate of quality.
 - e) Material Inspection & Clearance certificate for dispatch issued by supplier's representative & contractors factory inspection report.
 - f) Test certificate.
- ii) 20% payment shall be made after receipt & erection of the equipment and
- 9iii) Balance 20% payment shall be made after completion of testing & commissioning of the project and taking it over by the owner.

1.12 General

- 1.12.1 The price of tender documents shall not be refunded under any circumstances whatsoever.
- 1.12.2 The tenderer shall be deemed to have carefully examined various stipulations in this NIT and also to have fully informed himself with all conditions local and otherwise affecting the execution of the contract. Failure to do so shall be at his risk and cost.
- 1.12.3 Raw material shall be the sole responsibility of the tenderer. The tenderer shall take special note of this responsibility while furnishing their tender.
- 1.12.4 Ambiguity in rates, if any, shall be interpreted in favour of the Department.

1.13 Demurrage, Wharf age

All demurrage , Wharf age & other expenses incurred due to delayed clearance of the material or any form shall be on a/c of contractor

1.14 LEGAL REMEDY:

All the legal proceedings in connection with the supply order will be subject to the jurisdiction of local courts in Jammu of J&K State.

1.15 ARBITRATION:-

In the event of any dispute or difference relating to the interpretation & application of the provision of this agreement between JKSPDC & the contractor the same shall be settled to the extent possible applicable between JKSPDC & the contractor. In case the parties are unable to settle the dispute each party shall appoint one arbitrator & third arbitrator shall be nominated by the said two arbitrators. The rules governing the proceeding between the arbitrator shall be those of J&K Arbitration & Conciliation Act 1997. The venue of the arbitration proceeding shall be in the state of J&K.

Provided that the arbitral tribunal shall not have any right /jurisdiction to avoid any interest on claim which is determined by it in the arbitration proceedings conducted by the tribunal. Neither party shall be entitled to suspend such work to which dispute relates & payment of any shall be continued to be made in term of the contract during the pendency of the arbitration proceedings.

1.16 PENALTY FOR DELAYED EXECUTION:-

Time allowed for execution of works as specified is the essence of the contract . In case the contractor fails to comply with their frame for completion of work ,the penalty shall be payable by contractor to purchaser @ 1 % week aggregating max. to limit 10% of total contract value for delay in completion of work. The purchaser may without prejudice to any other method of recovery ,deduct the amount of the penalty from the payment due or to become due to the contractor. The payment for penalty shall not relieve the contractor from his obligation to complete the work or from any other of his obligations and liabilities under the contract.

1.17 GUARANTEE/ WARRANTY:-

1.17.1 The ordered equipment/ material shall be guaranteed against defective material or bad workmanship for a minimum period of 12 months from the date of commissioning of equipment at site if Type Test certificate for the product is submitted . In case of non submission of Type Test Certificate guarantee for a minimum period of five years shall be required to be provided from the date of commissioning of the product.

1.17.2 The firm shall have to replace / repair free of cost whole or part of the equipment found to be defective during the guarantee period.

1.18 COMPLETION PERIOD:-

The order shall be completed within 90 days from the date of allotment of supply order . Technical and commercial clarifications if any shall be obtained in such a way so that the completion period is not effected. The department shall have the right to cancel the order if the progress is not found in accordance with the completion schedule.

WORK TO BE IN ACCORDANCE WITH THE CONTRACT:

The Contractor shall execute and complete the Works and remedy any defects therein in strict accordance with the Contract to the satisfaction of the Engineer-in-Charge and shall comply with and adhere strictly to the Engineer-in-Charge's instructions and directions on any matter whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions and directions only from the Engineer-in-Charge, or, subject to the limitations referred to in Clause-2 hereof, from the Engineer-in-Charge's Representative

PROGRAMME TO BE FURNISHED:

- (i) The Contractor shall within 30 days after the Commencement Date, submit to the Engineer-in-Charge, for his approval a detailed work program with 2 sets of CDs of same indicating the following:
 - (a) The order in which the Contractor proposes to carry out the Works (including design, manufacture, supply, erection, testing and commissioning) so as to complete the works within specified time schedule.
 - (b) The times when submission and approval of the Contractor's drawings are required
 - (c) The times by which the Contractor requires the JKSPDC
 - to furnish data/specification drawings, if any
 - to have completed any other associated Works

The approval by the Engineer-in-Charge of the program shall not relieve the Contractor from any of his obligations under the Contract.

- (ii) The program shall cover activities on the site and procurement and delivery activities and no material alteration to such program shall be made without prior approval of Chief Engineer Generation Wing JKSPDC
- (iii) The program shall be in the form of a network diagram which shall show in detail and in orderly sequence all activities, their descriptions, duration, and dependencies or precedencies, necessary to the completion of the Works.
- (iv) The Contractor shall base his program on the completion times and periods and other relevant Contract requirements and shall co-ordinate his program with information given to him by the Engineer-in-Charge concerning the project program and program of other Contractors to be engaged on the site to the extent that this can be done within the framework of the periods and information available at the time.
- (v) The Contractor shall, supply to the Engineer-in-Charge, at such times as he may direct during the progress of the Works, such written particulars, photographs and information as are reasonably required by the Engineer-in Charge to enable a progress record to be maintained in respect of the Works.
- (vi) The Contractor shall also submit a narrative report periodically with updated analysis which shall include but not be limited to the description of the problem areas, current and anticipated, delaying factors and their impact and an explanation of the corrective actions taken or proposed.

CONTRACTOR'S SUPERINTENDENCE:

The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer-in-Charge may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorize representative approved of in writing by the Engineer-in-Charge, which approval may at any time be withdrawn, shall give his whole time to the superintendence of the Works. Such authorized representative shall receive on behalf of the Contractor, instructions from the Engineer-in-Charge or subject to the provisions of Clause-2 hereof the Engineer-in-Charge's Representative. If approval of the representative is withdrawn by the Engineer-in-Charge, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as herein after mentioned, after receiving notice of such withdrawal, remove the representative from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another representative approved by the Engineer-in-Charge.

CONTRACTOR'S EMPLOYEES:

- (i) The Contractor shall provide on the Site in connection with the execution and the completion of the Works and the remedying of any defects therein;
 - (a) only such technical assistants as are skilled and experienced in their respective trades and such foremen and leading hands as are competent to give proper superintendence of the Works; and
 - (b) such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely fulfilling of the Contractor's obligations under the Contract.

The Engineer-in-Charge shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person provided by the Contractor who in the opinion of the Engineer-in- Charge, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on the site is otherwise considered by the

Engineer-in-Charge to be undesirable and such persons shall not be again allowed upon the Works without the written consent of the Engineer-in-Charge. Any person so removed from the Works shall be replaced as soon as possible by a competent substitute approved by the Engineer-in-Charge

LABOUR:

The contractor shall make its own arrangements for the engagement of all labour, local or otherwise, and their payment, housing feeding and transport. The contractor shall comply with all the relevant labour laws applicable to the contractor's personnel, including laws relating to their employment, health, safety welfare, and shall allow them all their legal rights. The contractor shall require his employees to obey all applicable laws, including those concerning safety at work. Further the contractor should provide and maintain all necessary accommodation and welfare facility for the contractor's personnel and shall not permit any of the contractor's personnel to maintain any temporary or permanent living quarter within the structure forming part of the permanent works

RETURNS OF LABOUR:

The Contractor shall, deliver to the Engineer-in-Charge or Engineer-in-Charge's Representative or at his office, a return in detail in such form and at such intervals as the Engineer-in-Charge may prescribe showing the supervisory staff and the number of the several classes of labour from time to time employed by the Contractor on the site and such information in respect of the Contractor's plant, equipment and machinery as the Engineer-in-Charge may require.

1.19 AGREEMENT:-

The successful tenderer shall execute an agreement with the Department on stamp paper valuing Rs 100/- immediately after allotment of contract order .

1.20 MATERIAL / WORKMANSHIP:-

1.20.1 All material shall be of the best class and quality available in the market and be capable of satisfactory operation when exposed to the tropical and other specified atmospheric conditions. All work shall be performed and completed thoroughly with good workman ship and shall follow the best modern practice in the manufacturing of equipment notwithstanding any omission in these specifications.

1.20.2 The components of the equipment shall be of reputed make and conform to relevant IS amended upto date.

(i) Manner of execution

The goods to be supplied shall be manufactured and all Works to be done shall be executed in the manner set out in the Contract.

Where the manner of manufacture and execution is not set out in the Contract, the Work shall be executed in a proper and workman like manner in accordance with recognized good practice.

ii)Covering up work

The Contractor shall give the Engineer-in-Charge full opportunity to examine, measure and test any work on site which is about to be covered up or put out of view.

The Contractor shall give due notice to the Engineer-in-Charge whenever such work is ready for examination, measurement or testing.

The Engineer-in-Charge shall then, unless otherwise, notify the Contractor that he considers it unnecessary, without unreasonable delay carry out the examination, measurement or testing.

iii) Uncovering work

If so instructed by the Engineer-in-Charge, the Contractor shall expose any parts of the works. The Contractor shall reinstate and make good such works to the satisfaction of the Engineer-in-Charge.

1.21 INSPECTION AND TESTING

1) Independent Inspection

The Engineer-in-Charge shall have the right to inspect and/ or to test the goods to confirm their conformity to the contract specification at no extra cost to the purchaser. The Technical specifications shall specify inspection and tests required by Engineer-in-charge. The engineer-in-charge may, delegate inspection and testing of contracted equipment or a part there of to an independent inspector and such independent Inspector shall be considered as the Engineer-in-charge's Representative. Notice of such appointment shall be given by the Engineer-in-charge to the Contractor.

2) INSPECTION AND TESTING DURING FABRICATION/ MANUFACTURE

Any departmental representative or independent inspector nominated by Engineer-in-charge shall be entitled during fabrication/ manufacture to inspect, examine & test the material & workmanship & check the progress of manufacture of goods to be supplied under the contract. This shall take place on the contractor's premises .If the goods are being manufacture in on other premises, the contractor shall obtain permission for the Engineer-in-charge to carry out such inspection , examination and testing on those premises.

The contractor shall certify that his persons conducting the tests are qualified specialist on the subject matter of relevant tests.

No such inspection , examination or testing shall release the contractor from any obligation under the contract.

3) The contractor shall give at least 15 days notice to the Chief Engineer, Generation Wing his intention to carry out the tests. The contractor shall agree with the chief engineer, Generation wing Jammu shall give the Contractor at least 24 hours notice of his intention to attend the tests.

4) Facilities for testing

Where the Contract provides for tests on the premises of the Contractor or of any sub-contractor, the Contractor shall provide such assistance, documents, labour, materials, electricity, fuel. Apparatus and instruments as may be necessary to carry out the tests efficiently.

5) Certificate of testing

When the Goods have passed the tests referred to in this Contract, the Chief Engineer, Generation Wing Jammu shall furnish to the certificate within 15 days.

6) Rejection

If, as a result of the inspection , examination or testing , the Engineer-in-charge or his representative decides that any work is defective or otherwise not in accordance with

the Contract , he may reject such work and shall notify the Contractor thereof immediately. The notice shall state the Engineer-in-charge's objections with reasons.

The contractor shall then, with all speed , make good the defect or ensure that any rejected work complies with the Contract.

If the Engineer-in-charge requires works to be re-tested , the tests shall be repeated under the same terms and conditions. All costs incurred for the repetition of the tests shall be borne by the Contractor.

1.22 SUSPENSION OF WORKS, TRANSPORTATION OR ERECTION:

(i) Order to Suspend

The Engineer-in-Charge or his representative may, at any time instruct the Contractor to:

- (a) Suspend progress of the Works, or
- (b) Suspend transportation of the Goods, if fabricated/ manufactured at a place other than on the site, which are ready for transportation to the site at the time specified in the program, or if no time is specified, at the time appropriate for it to be transported, or
- (c) Suspend the erection of the Goods which have been delivered to the site

The Contractor shall, during suspension, protect and secure the Works or Goods affected at the Contractor's Works or elsewhere or on the site, as the case may be, against any deterioration, loss or damage.

(ii) Cost of Suspension

The additional cost, if any, incurred by the Contractor in protecting, securing and insuring the Works or the Goods in following the Engineer-in-Charge or his representative's instructions under Sub-clause (i) of this Clause and in resumption of the Work, shall be added to the Contract Price.

The Contractor shall not be entitled to be paid any additional costs if such suspension is necessary by reason of some default on the part of Contractor.

The Contractor shall not be entitled to additional costs unless he notifies the Engineer-in-Charge or his representative of his intention to make such claim, within 30 days after receipt of the order to suspend progress or transportation or erection.

(iii) Suspension Lasting more than 90 days

If suspension under Sub-Clause (i) of this clause has continued for more than 90 days, and the suspension is not due to Contractor's default, the Contractor may, by written notice to the Engineer- in-Charge, request for permission within 30 days after the expiry of the above period to proceed with the Works.

If permission is not granted within that time, the Contractor may treat the suspension as an omission, of the section it affects or if the suspension affects the whole of the Works, as an abandonment of the Contract by the JKSPDC.

1.23 TIME FOR COMPLETION, EFFECTIVE DATE AND COMMENCEMENT DATE:

The Contract shall become effective on the date of signing of Contract Agreement between JKSPDC & successful bidder. The effective date shall be considered as commencement date.

The time for completion shall be reckoned from Commencement Date i.e. the date of signing of Contract Agreement between JKSPDC & successful bidder.

The complete work envisaged in the tender is to be completed **within 3 (three) Calendar months** of Contract Agreement between JKSPDC & successful bidder. The bidder shall submit a bar chart along with the bid giving schedule for completion of entire works covering supply as well as services indicating commencement and completion of each activity and foundation work if any considering zero date as the date of signing of Contract Agreement between JKSPDC & successful bidder.

The Works shall be completed and shall have passed the tests as per the prevalent Regulations/Act on completion within the time indicated above.

1.24 EXTENSION OF TIME FOR COMPLETION:

The Contractor may claim an extension of the Time for Completion, if the completion of the Works is delayed by any of the following causes:

- (i) Extra or additional work ordered in writing under Clause-32 hereof.
- (ii) Any suspension of the works under Clause-1.22 hereof except when due to the Contractor's default.
- (iii) Any force majeure conditions.

The Contractor shall give to the Engineer-in-Charge, notice of his intention to make a claim for an extension of time within 14 days of the circumstances for becoming known to the Contractor for such an extension. The notice shall be followed as soon as possible with full supporting details.

The Engineer-in-Charge will evaluate such details and grant the Contractor from time to time, either prospectively or retrospectively; such extension of Time for Completion as may be justified provided always that, the circumstances leading to the extension of Time for completion are other than through a default of the Contractor. The Engineer-in-Charge shall notify the Contractor accordingly.

1.25 RATE OF PROGRESS:

If for any reason, which does not entitle the Contractor to an extension of Time for Completion, the rate of progress of the Works or any section at any time is not commensurate with the time for completion set out under clause 1.23 here of and in the opinion of the Engineer-in-Charge does not ensure completion by the prescribed Time or extended Time for Completion, the Engineer-in-Charge shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as are necessary and the Engineer-in-Charge may approve to expedite progress so as to complete the Works or such section by the prescribed time or extended time. The Contractor shall not be entitled to any additional payment for taking such steps.

1.26 LIQUIDATED DAMAGES FOR DELAY:

If the Contractor fails to complete the Work as specified in Clause 1.23 hereof, the purchaser shall, without prejudice to its other remedies under the Contract, deduct the amount from any monies in its hands, due or which may become due to the Contractor, as liquidated damages (which is a genuine pre-estimate agreed by the parties hereto of the loss or damage which the purchaser would have suffered on account of delay without

giving any proof of the loss or damages) a sum equivalent to 1.0% of the Contract price per week of delay or part thereof subject to a maximum of 10% of the Contract price. For spares, the penalty for delay in supply beyond the dates stipulated shall be 1 % of the price of undelivered spares per month or part thereof subject to maximum of 10% of the value of spares ordered.

The payment or deduction of such damages shall not relieve the Contractor from his obligations to complete the works or from any of his obligations and liabilities under the Contract.

1.27 PROLONGED DELAY:

If at any time it appears to the Engineer-in-Charge that the Contractor is unable to adhere to the prescribed time schedule and the delay is not due to a cause for which the JKSPDC or some other Contractor employed by it is responsible or if the aggregate of the liquidated damages levied in terms of the provisions under Clause-1.26 hereof has reached a maximum of ten percent of the Contract Price, then the JKSPDC may at its discretion, by further notice to the Contractor either:

- i) require the Contractor to complete, or
- ii) may itself complete at the Contractor's risk and cost, provided that it does so in a reasonable manner, or
- iii) terminate the Contract.

If the JKSPDC terminates the Contract, it shall be entitled to recover from the Contractor any loss it has suffered.

1.28 TESTS ON COMPLETION:

(i) Notice of Tests

The Contractor shall give to the Engineer-in-Charge, fifteen days' notice of the date after which he will be ready to make the Tests on completion hereinafter called the Tests. Unless otherwise agreed, the Tests shall take place within fifteen days after the said date, on such day or days as the Engineer-in-Charge notifies the Contractor.

(ii) Time for Tests

If the Engineer-in-Charge fails to notify a time after having been asked to do so, or does not attend at the time and place notified, the Contractor shall again give Engineer Incharge 10 Days notice failing which the contractor shall be entitled to proceed with the Test in his absence and such tests shall be deemed to have been carried out in the presence of Engineer-in-Charge.

(iii) Delayed Tests

If the Tests are being unduly delayed by Contractor, the Engineer-in-Charge may, by a notice, require the Contractor to make the Tests within twenty one days after the receipt of such notice. The Contractor shall make the Tests on such days within that period as the Contractor may fix and of which he shall give notice to the Engineer-in-Charge.

If the Contractor fails to make the Tests within twenty one days, the Engineer-in-Charge may himself proceed with the Tests. All Tests so made by the Engineer-in-Charge shall be at the risk and cost of the Contractor and the cost thereof shall be deducted from the Contract Price. The Tests shall then be deemed to have been made in the presence of the Contractor and the results of the Tests shall be accepted as accurate.

(iv) Facilities for Tests on Completion

Except where otherwise specified, the Contractor shall provide, at his cost, such labour, materials, electricity, fuel, apparatus, and other necessary equipments as may be required to carry out the Tests.

(v) Re-Testing

If the Works or any section fails to pass the Tests, the Engineer-in-Charge may require such Tests to be repeated on the same terms and conditions. The costs on account of repetition of the Tests under this Sub-Clause or under Sub-Clause-31 (vii) hereof shall be borne by the Contractor.

(vi) Disagreement as to Results of Tests

If the Engineer-in-Charge and the Contractor disagree on the interpretation of the Test results, each shall give a statement of his views to the other within fourteen days after such disagreement arises. The statement shall be accompanied by all relevant evidence. In case of such disagreement, the decision of Chief Engineer, Generation Wing shall be final.

(vii) Consequences of Failure to Pass Tests on Completion

If the Works or any section fails to pass the Tests on the repetition thereof under Sub-Clause (v) of this Clause, the Engineer-in-Charge shall be entitled to:

- (a) order one further repetition of the Tests under the conditions of Sub-Clause (v) of this Clause, or
- (b) reject the Works or section in which event the contractor shall replace that part of work or section without any cost to the purchaser within reasonable time without affecting the completion schedule. Testing on this part of work or section shall be performed in the presence of Engineer-in charge or his representative as per procedure specified above.

(viii) Use by the JKSPDC

In considering the results of Tests carried out under Sub-Clauses -1.29 (iii), 1.29 (iv) and 1.30 (vii) hereof, the Engineer-in-Charge shall make allowances for the effect of any use of the Works by the JKSPDC on the performance or other characteristics of the Works.

(ix) Test Certificate

As soon as the Works or any section thereof has passed the Tests, a joint protocol shall be signed based upon which the Engineer-in-Charge shall issue a Certificate to the Contractor to that effect within seven days of signing the protocol and submission of all relevant documents.

1.29 TAKING OVER:

(i) Taking over

The Works shall be taken over by the JKSPDC when they have been completed in accordance with the Contract and duly inspected & cleared for energisation by **Electrical Inspection Agency of JKPDD/Any other agency nominated by JKSPDC for the purpose**, except in minor respects that do not affect the use of the Works for their intended purpose, have passed the Tests on Completion and a Taking Over Certificate

has been issued in accordance with Sub-Clause (ii) of this Clause. The mandatory spares, testing instruments & devices, tools & tackles and consumables etc required for operation & maintenance of Power House and auxiliaries shall be taken over by JKSPDC at the time of issue of last taking over certificate of works under the Contract

(ii) Taking Over Certificate

The Contractor may apply to the Engineer-in-Charge for issue of a Taking Over Certificate not earlier than fourteen days before he proposes to carry out commissioning and acceptance tests on each equipment of the Power House.

The Engineer-in-Charge shall, within thirty days after the receipt of the Contractor's application either:

- (a) Issue the Taking Over Certificate to the Contractor stating the date on which the Works were complete and ready for taking over, or
- (b) Reject the application giving his reasons and specifying the work required to be done by the Contractor to enable the Taking Over Certificate to be issued.

If the Works are divided by the Contract into sections, the Contractor shall be entitled to apply for separate Taking Over Certificates for each such section.

(iii) Use before Taking Over

The JKSPDC shall not use any part of the Works unless a Taking Over Certificate has been issued in respect thereof.

If nevertheless, the JKSPDC uses any part of the Works, that part which is used shall be deemed to have been taken over at the date of such use. The Engineer-in-Charge shall, on request of the Contractor, issue a Taking Over Certificate accordingly. If the JKSPDC uses any part of the Works before taking over, the Contractor shall be given the earliest opportunity of taking such steps as may be necessary to carry out the Test on Completion.

The Works shall not be deemed to have been taken over if they are not substantially in accordance with the Contract.

The provisions set out under Clauses-1.28 and 1.30 hereof shall apply as if the part had been taken over on the date it was taken into use.

(iv) Interference with Tests on Completion

If the Contractor is prevented from carrying out the tests on completion by a cause for which the Engineer-in-Charge or other Contractors employed by the JKSPDC are responsible, the JKSPDC shall be deemed to have taken over the Works on the date when the Tests on Completion would have been completed but for such prevention, the Engineer-in-Charge shall issue a Taking Over Certificate accordingly.

The Works shall not be deemed to have been taken over if they are not substantially in accordance with the Contract.

If the Works are taken over under this Clause, the Contractor shall, nevertheless, carry out the Tests on Completion during the Defects Liability Period. The Engineer-in-Charge shall require the Tests on Completion to be carried out by fourteen day's notice and in accordance with the relevant provisions of Clause-1.28 hereof.

1.30 DEFECTS AFTER TAKING OVER:

(i) Defects Liability Period

- a) The expression " Defects Liability Period" shall mean a period of Twelve months from the date the Works are taken over under Clause-1.29 (i) hereof and the Taking Over Certificate is issued in accordance with Clause-1.29 (ii) hereof
- b) Where any part of the Works is taken over separately, the Defects Liability Period for that part shall commence on the date it was taken over.
- c) The defect liability period for each item of mandatory spare parts shall be 12 months after particular spare item has been put into operation.

(ii) Notice of Defects

If any defect appears or damage occurs during the defect liability period, the Engineer-in-Charge shall forthwith notify the Contractor thereof. However, delay or failure of the Engineer-in-Charge in notifying shall not relieve the Contractor from his liability for remedying the defects at his own cost.

(iii) Making Good Defects

Upon the receipt of such notice the Contractor shall be responsible for making good any defect in or damage to any part of the Works which may appear or occur during the Defects liability Period and which arises from either;

- (a) any defective materials, workmanship or design, or
- (b) any act or omission of the Contractor during the Defects Liability Period.

The Contractor shall make good the defect or damage as soon as practicable but not later than 45 days and at his own cost.

(iv) Extension of Defects Liability Period

The provisions of this Clause shall apply to all replacements or renewals carried out by the Contractor as if the replacement and renewals had been taken over on the date they were completed.

The Defects Liability Period for the Works shall be extended by a period equal to the period during which the Works can not be used by reasons of a defect or damage. If only a part of the Works is affected, the Defect Liability Period shall be extended only for that part.

(v) Failure to Remedy Defects

If the Contractor fails to remedy a defect or damage within a time stipulated in clause 31(iii) , the Engineer-in-Charge may fix a final time for remedying the defect or damage.

If the Contractor fails to do so, the Engineer-in-Charge may carry out the work himself or by others at the Contractor's risk and cost. The costs actually incurred by the Engineer-in-Charge in remedying the defect or damage shall be recovered from any payments due or which may become due to the Contractor.

(vi) Removal of Defective Work

If the defect or damage is such that repairs can not be expeditiously carried out on the site, the Contractor may, with the consent of the Engineer-in-Charge and after furnishing a proper security acceptable to the JKSPDC in case the item is paid for, remove from the site, for the purposes of repair, any part of the Works which is defective or damaged.

(vii) Further Tests on Completion

If the replacements or renewals are such that they may affect the performance of the Works, the Engineer-in-Charge may request that the Tests on Completion be repeated to the extent necessary. The request shall be made by notice **within thirty days** after the replacement or renewal. The Tests shall be carried out in accordance with Clause-1.28 hereof.

(viii) Right of Access

Until the Final Certificate of Payment has been issued, the Contractor shall have the right of access to all parts of the Works and to records of the working and performance of the Works.

Such right of access shall be during the JKSPDC's normal working hours at the Contractor's risk and cost. Access shall also be granted to any duly authorized representative of the Contractor, whose name has been communicated in writing to the Engineer-in-Charge.

Subject to the Engineer-in-Charge's approval, the Contractor may also, at his own risk and cost, make any tests which he considers desirable.

(ix) Defects Liability Certificate

When the Defect, Liability Period for the Works or any part thereof has expired and the Contractor has fulfilled all his obligations under the Contract for defects in the Works or that part, the Engineer-in-Charge shall issue, within thirty days, to the Contractor, a Defects Liability Certificate to that effect.

No certificate other than the Defects Liability Certificate referred to herein above shall be deemed to constitute approval of the Works.

(x) Exclusive Remedies

The JKSPDC's remedies under this Clause shall be in place of and to the exclusion of any other remedy in relation to defects whatsoever.

1.31 VARIATIONS:

- (i) The JKSPDC may make any variation in the form, quality or quantity of the Works or any part thereof or substitution for original specifications, design, drawings and instructions that may, in his opinion be necessary and for that purpose, or if for any other reason it shall, in his opinion be desirable, he shall have power to order the Contractor to do the following and the Contractor shall do the same;
 - a) increase or decrease the quantity of any work included in the Contract,
 - b) omit or substitute any such work,

- c) change the drawings, designs specifications, character or quality or kind of any such work,
- d) change the levels, lines, positions and dimensions of any part of the Works,
- e) execute additional work of any kind necessary for the completion of the Works,
- f) change any specified sequence, method or timing of construction of any part of the Works,
- g) change method of dispatch or packing, and
- h) Change the place of delivery.

No such variations shall in any way vitiate or invalidate the Contract. Any altered, additional or substituted work which the Contractor may be directed to do in the manner above specified as part of the Work, shall be carried out by the Contractor on the same conditions in all respects on which he agreed to do the main Work.

The contractor may also at any time propose variations of the Works to the Engineer-in-Charge.

(ii) Procedure to order variation

The Engineer-in-Charge shall notify the Contractor of the nature and form of the variation considered necessary. After having received such notice, the Contractor shall submit to the Engineer-in-Charge.

- a) a description of work, if any, to be performed and a programme for its execution, and
- b) the Contractor's proposal for any modifications to the programme, if considered necessary, according to Clause-1.24 hereof or to any of the Contractor's obligations under the Contract, and
- c) the Contractor's proposals for adjustment to the Contract Price.

Following the receipt of the Contractor's submission, the Engineer-in-Charge shall, decide as soon as possible whether or not the variation shall be carried out.

If the Engineer-in-Charge decides that the variation shall be carried out, he shall notify the Contractor to proceed with the variations. If the Engineer-in-Charge and the Contractor are unable to agree the adjustment of the Contract Price, the provisions of Sub-Clause (iii) of this Clause shall apply.

(iii) Disagreement on Adjustment of the Contract Price

If the Contractor and the Engineer-in-Charge are unable to agree on the adjustment of the Contract Price, the adjustment shall be determined in accordance with the rates specified in the Schedule of Prices.

No payment shall be made for the items of Work ordered to be omitted.

Varied items and additional items of Work which are not provided in the Schedule of Prices, shall be paid on the basis of actual expenditure relating to that item including cost of materials, fabrication/machinery handling and installation at site plus 25% (twenty five percent) towards overheads including profits.

The price of varied items determined by the Engineer-in-Charge and approved by Chief Engineer, Generation Wing Jammu shall be final and binding on the Contractor. No claim of the Contractor shall be entertained by JKSPDC in this regard.

(iv) Contractor to Proceed

On receipt of the notification to proceed with the variations, the Contractor shall forthwith proceed to carry out the variation and be bound to these conditions in doing so as if such variation was stated in the Contract.

The work shall not be delayed pending the granting of an extension of the time for completion or an adjustment to the Contract Price under Sub-Clause (iii) of this Clause and the Contractor shall execute the varied work at the same terms and conditions provided in the Contract.

(v) Records of costs

In any case where the Contractor is instructed to proceed with a variation prior to the determination of the adjustment to the Contract Price in respect thereof, the Contractor shall keep records of the cost of undertaking the variation and of time expended thereon. Such records shall be open to inspection by the Engineer-in-Charge at all reasonable times.

k complies with the Contract.

1.32 RISK AND RESPONSIBILITY:

i Allocation of Risks and Responsibility

The Risks of loss of or damage to physical property and of death and personal injury, which arise in consequence of the performance of the Contract, shall be allocated between the JKSPDC and the Contractor as follows:

- (a) the JKSPDC : the JKSPDC's Risks as specified in Sub-Clause (ii) below.
- (b) the contractor: the Contractor's Risks specified in Sub-Clause. (iii) below.

ii JKSPDC's Risks

The JKSPDC's Risks are:

- (a) loss or damage due to the use or occupation of the Works or any part thereof by the JKSPDC; except as may be provided for in the Contract;
- (b) loss or damage to the extent that it is due to the design of any part of the Works by the JKSPDC or those for whom the JKSPDC is responsible.

iii Contractor's Risks:

The Contractor's Risks are all risks other than those identified as the JKSPDC's Risks.

1.33 CARE OF THE WORKS AND PASSING OF RISK:

(i) Contractor's Responsibility for the Care of the Works.

The Contractor shall be responsible for the care of the Works or any section thereof from the Commencement Date until the Risk Transfer Date applicable thereto under Sub-Clause (ii) of this Clause.

The Contractor shall also be responsible for the care of any part of the Works upon which any outstanding work is being performed by the Contractor during the Defects Liability Period until completion of such outstanding work.

(ii) Risk Transfer Date

The Risk Transfer Date in relation to the Works or a section thereof is the earliest of either:

- (a) the date of issue of the Taking Over Certificate, or
- (b) the date when the Works are deemed to have been taken over in accordance with **Clause-1.29** hereof, or
- (c) the date of expiry of the notice of termination when the Contract is terminated by the JKSPDC in accordance with these Conditions.

(iii) Passing of Risk of Loss or of Damage to the Works

The risk of loss or of damage to the Works or any section thereof shall pass from the Contractor to the JKSPDC on the Risk Transfer Date applicable thereto.

(iv) Loss or Damage Before Risk Transfer Date

Loss of or damage to the Works or any section thereof occurring before the Risk Transfer Date shall:

- (a) to the extent caused by any of the Contractor's risks, be made good forthwith by the Contractor at his own cost, and
- (b) to the extent caused by any of the JKSPDC's Risks, be made good by the Contractor at the JKSPDC's expense if so required by the Engineer-in-Charge within thirty days of the occurrence of the loss or damage. The price for making good such loss and damage shall be in all circumstances reasonable and shall be agreed by the JKSPDC and the Contractor, or in the absence of agreement, the JKSPDC shall fix a reasonable price which shall be final and binding.

(v) Loss or Damage after Risk Transfer Date

After the Risk Transfer Date, the Contractor's liability in respect of loss of or damage to any part of the Works shall, except in the case of gross misconduct, be limited:

- (a) to the fulfillment of the Contractor's obligations under **Clause-1.30** hereof in respect of defects therein, and
- (b) to making good forthwith loss or damage caused by the Contractor during the Defects Liability Period.

1.34 : DAMAGE TO PROPERTY AND INJURY TO PERSONS:

(i) Contractor's Liability

Except as provided under Sub-Clause (iii) of this Clause, the Contractor shall be liable for and shall indemnify the JKSPDC against all losses, expenses and claims in respect of any loss of or damage to physical property, death or personal injury occurring before the issue of the last Defects Liability Certificate to the extent caused by;

- (a) defective design, material or workmanship of the Contractor.

- (b) negligence or breach of statutory duty of the Contractor, his sub-contractors or their respective employees and agents.

(ii) JKSPDC's Liability

The JKSPDC shall be liable for and shall indemnify the Contractor against all losses, expenses or claims in respect of loss of or damage to any physical property or of death or personal injury whenever occurring, to the extent caused by any of the JKSPDC's Risks.

(iii) Accidents

The Contractor shall be liable for and shall indemnify the JKSPDC against all losses, expenses or claims arising in connection with the death of or injury to any person employed by the Contractor or his sub-contractors for the purposes of the Works.

1.35 LIMITATIONS OF LIABILITY:

(i) Liability after expiration of Defects Liability Period

The Contractor shall have no liability to the JKSPDC for any loss of or damage to the JKSPDC's physical property which occurs after the expiration of the Defects Liability Period unless caused by gross misconduct of the Contractor.

(ii) Exclusive Remedies

The JKSPDC and the Contractor intend that their respective rights, obligations and liabilities as provided for in these conditions shall alone govern their rights under the Contract and in relation to the Works.

Accordingly, the remedies provided under the Contract in respect of or in consequence of:

- a) any breach of Contract, or
- b) any negligent act or omission, or
- c) death or personal injury, or
- d) loss or damage to any property

are to be to the exclusion of any other remedy that either may have against the other under the law governing the Contract or otherwise.

(iii) Mitigation of Loss or Damage

In all cases the party claiming a breach of Contract or a right to be indemnified in accordance with the Contract shall be obliged to take all reasonable measures to mitigate the loss or damage.

1.36 DEFAULT:

(i) Notice of Default

If the Contractor is not executing the Works in accordance with the Contract or is neglecting to perform his obligations there under so as to seriously affect the carrying out of the Works, the Engineer-in-Charge or his representative may give notice to the Contractor requiring him to make good such failure or neglect.

(ii) Contractor's Default

If the Contractor;

- (a) has failed to comply, within a reasonable time, with a notice under Sub-Clause (i) of this Clause, or
- (b) assigns the Contract or subcontracts the whole or part of the Works without the JKSPDC's written consent, or
- (c) becomes bankrupt or insolvent, has a receiving order made against him or compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors or goes into liquidation.

The JKSPDC may, after having given seven days' notice to the Contractor, terminate the Contract and expel the Contractor from the site. Any such expulsion and termination shall be without prejudice to any other rights or powers of the JKSPDC under the Contract. The JKSPDC may upon such termination, complete the Works itself or by any other Contractor.

(iii) Valuation at Date of Termination

The Engineer-in-Charge shall, as soon as possible after such termination, certify the value of the Works and all sums then due to the Contractor as at the date of termination in accordance with Clause-33 hereof.

(iv) Payment after Termination

The JKSPDC shall not be liable to make any further payments to the Contractor until the Works have been completed and the Defects Liability Period is over. The JKSPDC shall be entitled to recover from the Contractor the extra costs, if any, of completing the Works after allowing for any sum due to the Contractor under Sub-Clause (iii) of this Clause. If there is no such extra cost, the JKSPDC shall pay any balance due to the Contractor.

(v) Effect on Liability for Delay

The Contractor's liability under Clauses-27 and 28 hereof shall immediately cease when the JKSPDC expels him from the site without prejudice to any liability there under that may have already occurred.

1.37- INCREASE OR DECREASE OF COSTS

- i) The Ex-factory Contract Price of equipment/material supplied and Contract price for erection, testing and commissioning shall only be subjected to price adjustment on account of changes in equipment/material and labour rates and shall be computed in accordance with the conditions and relevant formulae.
- ii) No price adjustment shall be allowed on:
 - a) The amount of Contract price paid as advance to the Contractor.
 - b) Spares, tools & tackles, testing equipment etc. required for operation & maintenance.
 - c) Recommended spares, optional type test and special test charges.
- iii) For the purpose of release of receipt of payments and price adjustments thereon, Contractor shall submit to the Engineer-in-Charge within 45 days of commencement date, a detailed billing schedule indicating sub-components and prices thereof along with

Ex-works dispatch schedule of these components for his approval. The Contractor would have to supply the following information also.

- a) The reasons for any adjustment claim.
 - b) Its effective date.
 - c) The amount of proposed price adjustment.
 - d) Documentary evidence based on published indices quoted in the bid to substantiate proposed price adjustment.
- iv) The total adjustment of contract price component for which price adjustment is allowed under this clause shall be the total contract price minus cost of survey work, cost of civil works, transportation charges and insurance charges subject to ceiling of plus or minus 20% (twenty percent). This shall be applicable equally to supply portion and to erection/ installation and commissioning portion
- v) Price adjustment shall apply for the delivery made/work carried out within the stipulated time or extension granted by the JKSPDC for delay attributable to JKSPDC and shall not apply to delivery made/work carried out beyond the stipulated time for reasons not attributable to the JKSPDC.
- vi) Price adjustment payable on service portion shall be restricted to the schedule date of completion of works of each assembly or actual date of completion of works of each assembly whichever is earlier. No price adjustment shall be allowed beyond schedule date of completion of works of each assembly in case of delay is due to the reasons not attributable to JKSPDC.

Schedule date of completion of works of each assembly shall be based on the approved works program.

1.38 : LIABILITY PERIOD:

The final payment by the purchaser in pursuance of the contract shall mean the release of the contractor from all his liabilities under the contract. Such final payments shall be made only at the end of defect liability period and till all such time all the contractual liabilities and responsibilities of the contractor shall prevail. All other payments made under the contract shall be treated as on account payments

1.39 DRAWINGS

The successful tenderer shall furnish 4 sets of drawings/ relevant literature (hard/soft copies) within 20 days of issue of order.

1.40 SPECIFICATION OF EQUIPMENTS

1.40.1 The technical specifications of equipment to be manufactured, supplied, are as per Annexure "A" enclosed with this tender document.

1.40.2 Deviations in Specifications:

Any deviation in specifications shall be elaborated in the Schedule attached failing which it shall be assumed that the equipment offered is in complete conformity with the required specification.

1.41 COMPLETENESS OF THE CONTRACT:-

All fittings or accessories which may not have been specifically mentioned above but are necessary for the smooth functioning of the equipment shall be deemed to be included in this contract order and shall have to be supplied without any extra cost / charges.

**Sd/-
Executive Engineer,
Electric Project Division, JKSPDC
Jammu.**

ANNEXURE-A

SPECIFICATIONS FOR SUPPLY OF 2.0MVA 7KV-12KV/11KV AUTOMATIC VOLTAGE

REGULATOR TRANSFORMER FOR 3X0.5 MW BHADERWAH HEP

1. SCOPE OF WORK

Bhaderwah HEP is located at Sarthingal , Bhaderwah J&k . 3 no. units of 500KW Pelton Wheel Turbine installed have generation voltage of 400Voltswhich is stepped up through 2 no 1.0 MVA 0.4/11KV (Delta-Star)Power Transformers to 11KV level for transmission. This is required to be synchronized with 11KV Power evacuation Line feeding load at Bhaderwah Receiving Station. As the available Voltage level of 11KV Power evacuation Line varies from 7KV to 11KV ,at times it becomes impossible to synchronize the Generating Units with Power evacuation Line .In order to overcome the synchronization problem ,a 2.0 MVA 3Phase ,50Hz., Servo controlled Manual/Automatic Voltage Regulator Transformer is proposed to be erected .The scope of work involves design, manufacture, assembly, testing, supply, delivery including installation, testing and commissioning , Trial run and adjustments as necessary for such an Outdoor type 7KV-12KV/11KV,3-Phase 50Hz.,HT/HT Automatic Voltage Regulator Transformer with Bypass arrangement at 3x0.5 MW Bhaderwah HEP.

2. Design Criteria

The design, manufacture and performance of the equipment shall comply with all currently applicable standard/regulations and safety codes applicable in the locality with vendor having sufficient manufacturing experience and good track record of performance in the said field and the vendor shall have no escape of his responsibility

The design of AVR should take care of protection against surge voltage and should be capable of surgeless switching. The winding should be suitable for withstanding the short circuit current, in the event of fault, without damage. The neutral terminal winding should be designed for the highest over current that can flow through this winding .The AVR should be suitable to operate occasionally in the overload condition as per IS -6600 and there should be no limitations imposed by bushing, auxillary equipments to meet this requirement.

The AVR tank should be hydraulically tested to ensure that they are leak -proof and should be subjected to vacuum as per CBIP specification and should be of sufficient strength to prevent distortion and leakage of oil. The Vendor should provide CPRI/Impulse/Heat Run Test certificates conducted on similar equipments and DGMS approval. The vendor should also nominate authorized persons to execute and supervise electrical installation work at site.

The Unit should have three distinct features viz, hand control, motorized control, automatic control for regulation of the output voltage with adequate controls and protections , monitoring systems and measuring instruments with first filling of oil as per IS-335 ,Bypass panel

TECHNICAL SPECIFICATION FOR 2.0 MVA 7-12KV/11KV 3-PHASE HT/HT AUTOMATIC VOLTAGE REGULATOR

Constructional Features	Oil immersed, Naturally cooled, On Load , Servo controlled Automatic Voltage Regulator Transformer
Mode of operation	1. Manual 2. Motorized 3. Automatic
Service	Outdoor
Capacity	2000 KVA
Voltage Level on Power evacuation Line to Receiving Station	7 KV to 12 KV,3 phase,50 Hz. (unbalanced load).
To Be Synchronized with	Generating voltage 0.4 KV stepped up to 11KV through 2x 1.0 MVA Dy Power Transformers.
Equipment	The equipment should consist of Step down / Step up Unit, Regulator Unit, Automatic Control Unit, and necessary control and protection circuits and panels and Bypass panel
Terminals	Input : Bare Bushing Output : Bare Bushing
Temperature Rise	50°C rise of Top oil over an ambient of 50°C
Tank & Oil	The Unit should be housed inside the sheet Steel Tank.

FITTINGS & ACCESSORIES

The AVR should be completed with all Standard fittings and Accessories for its successful operation including the following major items as per the requirement

1. Rating Plate, Roller, Plain oil level gauge and Conservator
2. Drain valve, Filter valve, sampling valve with plug and Earthing terminals.
3. Inspection cover, Thermometer pocket & Lifting Lugs
4. Silicagel Breather & Bucholtz Relay with Shut off valve
5. Pressed Steel Radiators with Shutoff valves
6. PRV or Explosion vent, OTI& WTI with Alarm Trip contacts.
7. PT for I/P & O/P Voltage measurement & Relay sensing.
8. Remote metering panel & Marshalling Box.

BYPASS PANEL

The supply, installation, testing and commissioning of Bypass panel is to be associated with Automatic Voltage Regulator and to facilitate the system to run in the event of maintenance of AVR .The Bypass panel Air Break /Loads Break switch, interconnectivity with proposed AVR & Existing 2x1.0 MVA X-mers & Incoming VCB

All Routine tests as per IS-2026 should be conducted at works of vendor free of cost . Type Test Report should be submitted before inspection of the product before dispatch by the person authorized to conduct such inspection.

Over and above the product should have unconditional guarantee to undertake repair/replacement of defective parts free of cost within 18 months from the date of supply or 12 months from the date of commissioning if proper Type Test Report of the product is submitted and in case the supplier is unable to produce Type Test Report , the guarantee period of three years will have to be provided .

2 TEMPERATURE RISE:

Each Transformer shall be capable of operating continuously at its normal rating without Exceeding following temperature rises in the above service conditions given in clause 2.

- i. 50°C in oil by Thermometer
- ii. 55°C in winding by resistance

3. WINDING CONNECTION & VECTORS

The primary winding & the secondary winding of the transformer shall be designed by the supplier according to the scope of the job.

<u>HIGHEST VOLTAGE FOR EQUIPMENT</u>	<u>RATED SHORT DURATION POWER frEQUENCY WITHSTAND VOLTAGE</u>	<u>RATED LIGHTING IMPULSE WITHSTAND VOLTAGE</u>
I. 12KV Rms	28 KV Rms	75KV Peak
II. 12KV Rms	28KV Rms	75KV Peak

**GUARANTEED TECHNICAL PARTICULARS OF 2.0 MVA 7-12KV/11KV AUTOMATIC VOLTAGE
REGULATOR TRANSFORMER**

S.No.	Schedule of Technical specifications	Specification Required
01.	Specifications	IS: 2026-1977 (as amended upto date)
02.	Type of Transformer	Copper Double Wound
03.	No. of phases in system	Three
04.	Phases	Three
05.	Frequency	50Hz \pm 3%
06.	Service	Outdoor
07.	Type of cooling	ONAN
08.	Rated power	2MVA on all tapings
09.	RATED VOLTAGE	
	a) Primary winding	11KV
	b) Secondary winding	11KV
10.	TAPPINGS	
	a) Tappings	ON LOAD- sensing from R/Stn. supply
	b) Rated power	All Tappings are full power tapings
	c) Rated voltage	11KV
	d) Tapped winding	Primary winding
	e) Tapping Range	to be provided by vendor
	f) Number of Tapping Positions /Stepless	---do---
11.	HIGHEST SYSTEM VOLTAGE FOR EQUIPMENT	
	a) Primary side	12KV
	b) Secondary side	12KV
12.	Method of system earthing	Effectively Earthed
13.	Insulation Level	
	a) Impulse Level	
	Primary side	75KV(peak)
	Secondary side	75KV(peak)
	b) Power Frequency Test Level	
	i primary side	28KV(rms)
	II. Secondary	28KV (rms)
	III.Neutral	2.5KV (rms)
14.	a) Winding connection	To be designed by manufacturer
	i. Primary Winding	-do-
	ii. Secondary Winding	-do-
	b) Connection symbol	-do-
	c) Neutral	- do-
15.	Altitude above MSL	1800M
16.	Whether un-balanced load is anticipated	yes
.	Losses	
	a) No Load	< 4KW.
	b) Full Load at 75 ^o C	< 19KW
18.	Impedance voltage at rated current	5%
19.	MINIMUM CLEARANCE IN AIR BETWEEN	
	a) Live conductive parts	
	Primary side	305mm

	Secondary side	305mm
	b) Live conductive parts & earthed structure	
	Primary side	153mm
	Secondary side	153mm
20.	Material of P & S Winding	Copper
21.	Flux Density	
22.	Over Fluxing	Suitable for over fluxing up to 12.5% of Any tapplings without injurious heating
23.	FITTINGS	To be furnished by manufacturer
	i) Conservator with drain plug & oil filling hole with blanking plate	
	ii) Plane oil gauge	
	iii) Air release device	
	iv) Rating plate	
	v) Terminal marking plate	
	vi) Earthing terminals	
	vii) Lifting lugs	
	viii) Drain valve with plug	
	ix) Dehydrated Breather	
	x) Filter valve	
	xi) Plain rollers duly fitted	
	xii) Pressure release vents	

Sd/-

**Executive Engineer,
Electric Project Division ,JKSPDC
Jammu.**

SCHEDULE (A)

TENDER FORM

From

TO

.....
.....
.....

The _Executive Engineer
Electric Project Division, JKSPDC
2nd Floor, Trikuta Complex, B.C Road, Jammu(J&K)

Sub:- Our Offer NO: _____
Dated : _____

Ref:- Electric Project Division PDC Jammu
NIT NO: EPDJ/PDC/NIT/02 DT: 06-06-2011

D/Sir,

This has reference to above mentioned NIT and our subject offer against the same.

1. I/We hereby affirm that I/We have read and have fully understood all terms , conditions, technical specifications of tender document received vide your NO:EPDJ/PDC/NIT/02 dt:06-06-2011
2. I/We hereby offer to supply genuine goods and material at the rates and quantities as described in our subject offer and shall execute the work(s) truly and faithfully within the time specified and set forth in the aforesaid offer. The goods and material to be supplied will be of the quality answerable in every respect with our offer / tender quoted above.
3. I/We shall be responsible for all complaints as regard the quality of material and all material and equipment shall comply in all respects with the requirement of quoted standard specifications.
4. I/We do hereby certify that the material and equipment offered are free from legal encumbrances and any claim regarding infringement and any patent of country of origin or India and shall be defended by us at our own cost and damages/ cost, if forwarded against purchaser in such a suits shall be borne by us.
5. I/We shall be hereby responsible for all complaints as regards quality of the material/ bad workmanship and for all such complaints the decision of the department will be final and binding on us.
6. I/we enclosed a Bank Draft NO:_____ dt:_____ for the prescribed amount of Rs:_____ (Rs: _____ drawn in favour of the _____ as earnest money as required in terms of tender specification. I/we fully understand that in the event of my / our tender being accepted, this earnest money shall be retained by you as security deposit payable by me/us for the faithful and satisfactory execution of the contract.
7. I/we undertake to furnish security deposit equivalent to 10% of the value of contract in the form of CDR/FDR from Nationalized Schedule Bank pledged to the **Chief Pay &Accounts Officer JKSPDC Kishtwar** for successful execution of contract.
8. I/we shall have no claims to the refund of the earnest money prescribed against this tender in the event of my / our non compliance of the purchase order, provided such order is placed within the period of validity of my / our tender as indicated in paragraph 10 below.
9. I/we further understand that my earnest money will stand forfeited even if I withdraw my tender at any stage during the currency of the period of validity.
10. My/our tender shall remain valid for a period of 180 days (one hundred and eighty days) from the date of opening of the tender against the NITNO: EPDJ/PDC/NIT/02 dt:06-06-2011
11. My/our tender along with the terms and conditions with relevant columns and annexure duly filled in under my / our attestation and with each page of the tender papers including the enclosed terms and conditions signed by me / us (in the capacity of sole owner / general

or special / attorney, in proof of which power of attorney is attached) is submitted for your favourable consideration.

12. I/we have read the enclosed terms and conditions carefully and have signed the same in token of their absolute and unqualified acceptance. My/our tender constitute a "firm" offer under the J&K contract Act and is open to an acceptance, in whole or in part. My/our offer, if accepted on the attached terms and conditions will constitute a legal binding contract and shall operate as contract as defined in the J&K Contract Act and the Sales of Goods Act.

Thanking you,

Yours faithfully

Signature

Name & Full address of tenderer

Place

Date

N.B Please sign and stamp each page

SCHEDULE (B)

Schedule of Deviation :

NIT NO:EPDJ/PDC/NIT/02 Dt. 06-06-2011

1. General conditions of contract.

S.no	Clause No.	Description of Deviation
1		
2		
3		
4		
5		
6		
7		
8		

2. Technical Specifications:

S.no	Clause No	Description of deviation
1		
2		
3		
4		
5		
6		
7		

Certificate: The tenderer hereby certifies that the above mentioned are the only deviations from the tender specifications.

Signature:

Name:
(In block letters)

Stamp

SCHEDULE (C)

NIT NO: _EPDJ/PDC/NIT/02Dt. 06-06-2011

(To be filled in and signed by the tenderer)

Schedule of PRICE BID:

S.no	Particulars	Rate	Amount
1	Unit Basic Cost		
2	Unit Packaging & Forwarding		
3	Unit Transit Insurance		
4	Unit Freight Destination		
5	Unit FOR site without Taxes & Duties		
6.	Unit Excise Duty		
7.	Unit C.S T		
8.	Unit Entry Tax		
9.	Unit Toll Tax		
10.	Unit other Taxes/levies if any		
11	Total Price /Unit F.O.R site (with all taxes & duties)		
12	Erection,Testing,Commissioning charges		
13	Service charges (if any)		
14	TOTAL COST FOR COMPLETE JOB		

Station.....

Signature

Name

STAMP

SCHEDULE (D)

(To be completed, filled in by the tenderer and enclosed with part I of the offer duly signed)

I. COMMERCIAL :

1	Quantity offered by the tenderer	
2	Amount of earnest money	
3	CDR/FDR/Bank	
	Guarantee No.	
	Valid upto	
4	Whether registered with Industries Department, J&K Government as small scale Industrial unit for the item quoted	Yes / No
5	Permanent / Provisional registration certificate from Industrial Department, J&K Government enclosed	Yes / No

II TECHNICAL

1	Whether the material quoted by the tenderer correspond to relevant I.S standard / ISO, If yes, give reference to the standard	Yes/ NO
2	Whether all types of test certificates are enclosed	Yes / No
3	Whether relevant drawings are enclosed	Yes / No
4	Whether the material fully correspond to NIT specifications	Yes / No
5	If not, have the deviations been pointed out	Yes / No
6	Whether the list giving status of post orders received from Power Dev. Department, PDC J&K Government enclosed	Yes / No

Signature of the tenderer

SCHEDULE - E

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

(TO BE FILLED IN AND SIGNED BY THE TENDERER

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

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

***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 Electricity.Board/ Purchaser	Purchase Order No.& Dt.	Status of supply	Commissioning Date	Performance Remarks

***2 ROUTINE TEST CERTIFICATES**

Signature with Stamp

SCHEDULE - F

**SCHEDULE OF DOCUMENTS IN RESPECT OF FINANCIAL RESOURCES / CAPACITY
OF THE TENDERER**

(TO BE FILLED IN AND SIGNED BY THE TENDERER
The tenderer shall refer relevant clauses before filling)

The tenderer shall attach along with this schedule the following documents to establish his financial resources.

1. Banker's Report
2. ITCC (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.

Date
Place

Signature
Name and Status
Whether authorized attorney of the Tendering Company
Name of the Tendering Company