

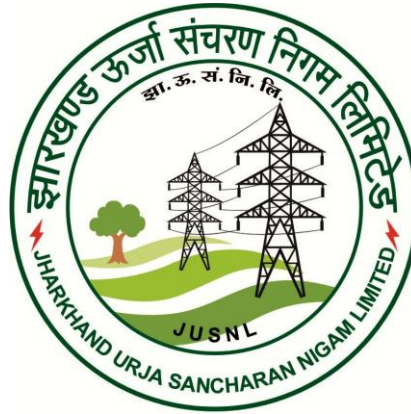
JHARKHAND URJA SANCHARAN NIGAM LIMITED

CRITL DEPARTMENT

**TECHNICAL SPECIFICATION AND GENERAL
CONDITION FOR SUPPLY OF**

**FULLY AUTOMATIC VARIABLE FREQUENCY CAPACITANCE AND TAN
DELTA TEST KIT SYSTEM WITH LAPTOP AND ACCESSORIES.**

N.I.T. NO. 05/ PR/ JUSNL/ 2015 – 16



**LAST DATE & TIME OF
RECEIPT OF TENDER**

: Upto 13.30 Hrs. on 18.05.2015

DATE OF OPENING OF TENDER

: At 15.30 Hrs. on 18.05.2015

SOLD TO M/S

**COST = Rs. 10000/-
NON-REFUNDABLE**

JHARKHAND URJA SANCHARAN NIGAM LTD

CIN –U40108JH2013-SGC001704

Engineering Building, Dhurwa, Ranchi 834004

email. cecritl.jusnl@rediffmail.com

NOTICE INVITING TENDER

TENDER NOTICE NO. 05/ PR/ JUSNL/ 2015-16

Sealed tender in two parts each in duplicate i.e. Techno & Commercial (Part-I) and price offer(Part-II) are invited from manufacturers having sound financial status for Design, Manufacturing, testing, Training and commissioning and supply of following material as per specification of NIT:

NIT No.	Description of materials	Quantity in Nos.	Earnest Money deposit in Rupees	Cost of Tender specification Document	Date of Submission of Tender	Date of opening of tender(Part-I)
05	<u>FULLY AUTOMATIC VARIABLE FREQUENCY CAPACITANCE and TAN DELTA TEST KIT SYSTEM with LAPTOP and accessories.</u>	01 Set	Rs 60,000/-	Rs 10,000	Upto 13.30 hrs of 18.05.2015	18.05.2015 at 03.30 PM

Terms and Conditions:

- I. **The Bidder should have the following Qualifying Requirements (QR):**
- II. The tenderer should be a manufacturer.
- III. The bidders should have to submit past experience of successful execution of similar material under Govt./ Semi Govt. / CPSU/SPSU/ SEB's/Reputed IPPs.
- IV. The average annual financial turnover of bidder during the last 03 (three) financial years, ending 31st March of the previous financial year should be at least 1 (one) crore.
- V. The bidder should have experience of having successfully completed similar orders during last five years ending last day of month previous to the one in which applications are invited.

order items means manufacturing and supply of Fully automatic variable frequency capacitance and tan delta test kit system for any of TPS under Govt./ Semi Govt. / CPSU/ SPSU/ SEB's/ reputed IPPs..
- VI. The bidder should have financial credibility /capacity of at least estimated cost. Bidder may submit Bank Solvency Certificate of any Indian Nationalized / Scheduled Commercial Bank in support of their financial credibility /capacity.
- VII. The tender document can be purchased from the office of C.E./CRITL on payment of cost of tender Documents in shape of DD or may be downloaded from the office website www.jusnl.org.in. The cost of tender document shall be deposited at the time of submission of tender paper in the shape of Bank Draft issued by any Nationalized/Scheduled Bank in favour of “, **JUSNL, Ranchi**”, payable at **Ranchi**. Tender shall not be considered without cost of tender document. Any type of tempering/alteration with tender document shall not be allowed and offer, if submitted so, will be summarily rejected.
- /III. Tender without Earnest Money shall not be considered. Offers shall be accompanied with the cost of tender document and earnest money deposit (EMD) of requisite value as specified above in a separate envelope 'A' failing which offers are liable for rejection. EMD may be furnished in form of Demand Draft/ Bank Guarantee from any Indian Nationalized Bank/ Schedule Commercial Bank in favour of “Accounts officer, JUSNL, Ranchi”, payable at Ranchi. The Bank Guarantee should

remain valid for guarantee period 24 months from date of commissioning or 30 months from date of receipt whichever earlier.

- IX. The Earnest Money will be forfeited on revocation of tender before expiry of validity of the tender or on refusal to enter into the contract after the award is made by JUSNL to the bidder.
- X. Any Corrigendum/Addendum/Extension of bid opening date and cancellation of NIT will be published through our website www.juvnl.org.in only and through newspaper. The bidders are requested to visit our website regularly for any addendum/corrigendum/extension till opening of NIT.
- XI. The due date of bid opening as mentioned in the tender will remain firm. However, in case of unforeseen circumstances or due to administrative reasons the bids are not opened on the due date, the same shall be opened on the next working day at the same time. In case the last date of submission of bids is declared as holiday, the bids received up to the time of closing of bids on the next working day shall be considered for opening.
- XII. The undersigned reserves the right to reject any or all tenders or to distribute the job among the bidders without assigning any reason thereof.
- XIII. For any clarification please contact Mobile No.9431584785. /9934169984.

Chief Engineer (CRITL)

JUSNL, Ranchi

JHARKHAND URJA SANCHARAN NIGAM LTD

CIN –U40108JH2013-SGC001704

Engineering Building, Dhurwa, Ranchi 8340024

email. cecritl.jusnl@rediffmail.com

NIT No. 05 /PR/ JUSNL/ 2015-16.

for

Manufacturing, testing & supply of **FULLY AUTOMATIC VARIABLE FREQUENCY CAPACITANCE and TAN DELTA MEASUREMENT TEST KIT SYSTEM with LAPTOP and accessories etc.**

Quantity: 01 (one) set,

Date/time for bids documents	Date/time for submission of bids and opening of bids
From 10.04.2015 at 10.30 hrs. to 16.05.2015 upto 14:00 hrs.	upto 18.05.2015 at 13.30 hrs. and opening on 18.05.2015 at 15:30 hrs.

Price of tender document:

Rs. 10,000/- only.

FIRM price

JHARKHAND URJA SANCHARAN NIGAM LTD

CIN –U40108JH2013-SGC001704

Engineering Building, Dhurwa, Ranchi 8340024

email. cecritl.jusnl@rediffmail.com

NIT No. 05/JUSNL/PR/15-16

Due Date of opening of part-I 18.05.2015

General Terms and Conditions for Submission of Tender for Supply of Materials/equipments/ items

1. Tenders are invited from reputed and experienced manufacturers only having adequate manufacturing & testing capacity, best facilities and capability for supply of **FULLY AUTOMATIC VARIABLE FREQUENCY CAPACITANCE and TAN DELTA TEST KIT SYSTEM with LAPTOP and accessories.**

as per specifications attached at Annexure 'B'. Offers of manufacturers who have no past experience and adequate manufacturing capacity of the tendered item may not be considered valid and may be rejected. Purchase preference will be given to manufacturing unit of Jharkhand State as per cl.18 of Jharkhand Industrial Policy, 2012.

2. **Quantity** : 01 (one) set

3. The tender should be submitted in the prescribed enclosed proforma only in two parts i.e. Part – I (Technical & Commercial Part) and Part – II (Price Part) in two separate envelopes.

4. Both parts of the tenders will be submitted upto 13.30 hrs on 18.05.2015 and the Part – I will be opened on same day **18.05.2015 at 15:30 hrs**. The undersigned may extend the due date of opening of Part – I with intimation to all tenderers.

The Price Part (Part–II) of those tenderers whose offers are found technically and commercially acceptable will be opened later on.

5. No offers/ tenders will be accepted after due date and time.

The desirous tenderers can download tender documents including terms and conditions, BoQ and technical specification from website www.juvnl.org.in. Original copy for payment of tender documents **Rs. 10000/-** only (non-refundable) **in shape of demand draft** issued by nationalized Bank in favour of , JUSNL,Ranchi payable at Ranchi must be submitted with tender. If original copy of tender fee not submitted by bidder on above mentioned due date and time then tender will not be considered.

6) **Deposit of earnest money:-**

a) Tender must be accompanied with an earnest money for Rs. 60,000/-(Sixty Thousand) only for the offered quantity, unless exempted from such deposit, **failing which the tender will be out rightly rejected.**

b) The earnest money should be deposited in the form of Bank Draft / Bank Guarantee **of any Nationalized Bank**, valid for **180 days** from date of opening of tender with claim period of another three months, subject to further extension if required drawn / issued in favour of the , **JUSNL**, payable at Ranchi.

c) Original copy of the Demand Draft / Bank Guarantee must be submitted along with tender.

d) Earnest money deposited by firms against any other tender of the NIGAM/ or of this office will not be considered as earnest money for the present tender under any circumstances.

e) No earnest money will be accepted after opening of the tender.

f) No interest on the earnest money deposited by the tenderer will be payable by the purchaser.

- g) State unit of Jharkhand must submit copy of their registration certificates of manufacturing of tendered item with tender.

7. **Exemption:**

The tenderers of following categories are exempted from deposit of earnest money subject to the conditions laid down below: -

- a) The firm registered with DGS&D for manufacture of the item for which tenders are to be submitted and the registration certificate should remain valid at the time of submission of the tender and during contract period. The tender in such case shall be accompanied with a certified photo state copy of the valid registration certificate failing which the tender shall be rejected. The monetary limit should be more than Rs. 5.00 crore as mentioned in the DGS&D certificates, failing which bidder has to deposit the full EMD amount.
- b) The State Govt./ Govt. of India undertaking.
- c) Firms registered with NSIC under single point registration scheme for manufacture of the item, provided that certificate is valid on the date of tender and during the period of delivery. The monetary limit should be more than Rs. 1.0 Crore as mentioned in the NSIC certificates, failing which bidder has to report the full EMD amount.
- d) The earnest money will be liable to be forfeited on revocation of tender before the validity of the quotations expires or on refusal to enter into a contract after the award (PO) is made to the tenderer.
- e) SSI unit of Jharkhand, registered with Department of Industries, Govt of Jharkhand / Industrial Area Development Authority, Govt of Jharkhand, for tendered item, valid on the due date of tender and during the period of contract. SSI unit of Jharkhand must submit self attested or notarized valid copy of SSI registration certificate for tendered item, issued from department of Industries/ Industrial Area Development Authority, Govt of Jharkhand, failing which, they will not be considered SSI unit.

The tender in such cases should be accompanied with self attested or notarized copy of the valid registration certificate, failing which tender shall be rejected.

- NB:** Aforementioned certificate must accompany with documentary evidence for its validity on the due date of the tender, failing which tenders will be rejected. As the documents mentioned herein above must be valid during the period of supply/ delivery also. Copy of the same shall be produced at the time of submission of bill for payment.

8. **Security Deposit and Contract Agreement:**

The successful tenderers shall have to deposit security money @ **10%** of the ordered value at the time of executing the contract agreement. However, the SSI units of Jharkhand having permanent valid registration with Department of Industries, Govt. of Jharkhand for the manufacture of the item will be exempted to deposit security money as per adopted state industrial policy'2012. In no any other case exemption from security money will be granted. Security money to be deposited may be adjusted from the earnest money deposited, if any.

The amount of security money shall be deposited with Accounts Officer, JUSNL, Ranchi in shape of Bank Draft/ Bank Guarantee (of any Nationalized Bank) in favour of JUSNL, payable at Ranchi will be treated as a performance guarantee. The security money thus deposited will be released after completion of satisfactory supply of approximately full ordered quantity of materials and expiry of guarantee period. Payment will be made only after depositing the security money and execution of contract agreement.

9. **Annual turnover:**

Annual turnover of the firm for preceding three financial years must be at least Rs. 1.0 Crore Certified / Attested copy of annual A/C (Balance sheet, profit & loss A/c etc) from practicing chartered Accountant or

both for financial year 2011-12, 2012-13 & 2013-14 must be submitted along with the offer to establish financial credibility of the bidders. In absence of the above credentials, offer may be rejected. However, SSI units of Jharkhand are exempted from annual turnover clause.

10. **Delivery:**

- 10.1 The delivery period for this work shall be 4 months from the date of notification of award.
- 10.2 The date of Award of the contract shall be the date of Notification of Award by way of issue of Brief Letter of Award that shall be subject to and followed by Detailed Letter of Award.
- 10.0 **Consignee:** Electrical Executive Engineer, Transmission Central store, Namkum, Ranchi.

The materials are to be delivered as mentioned in the delivery schedule i.e. **annexure – ‘H’** separately. Early delivery may be preferred. The proforma of schedule of delivery is enclosed with the tender. The commencement of delivery period shall be reckoned from the date of issue of LOI/PO whichever is earlier.

11. **Penalty / Liquidated damage:**

The delivery of goods will be guaranteed under liquidated damage clause. Our usual terms of LD-clause is ¼% (quarter percent) of the value of the materials delayed per week or part thereof subject to maximum 5% (Five percent) of agreemental value.

Material will be deemed to have been delivered only when all its component parts are also delivered in stores of JUSNL. If certain components are not delivered in time the equipment/item will be considered as delayed till such time as the missing parts are delivered.

12. **Price:**

- 12.1 Bidders shall quote their prices in the schedule specified.. The quoted price shall be on FOR destination delivery at site basis inclusive of all taxes, duties, levies etc., including service tax and all other costs, charges, expenses for successful completion of the complete scope of the work. However, rate and nature of taxes, levies included shall be indicated clearly.
- 12.2 The above prices shall be inclusive of charges on account of demonstration of equipment, supply, freight & insurance, and testing & commissioning of the equipment and nothing extra shall be payable on this account.
- 12.3 Bidders are required to quote for all the items of the package. JUSNL reserves the right to reject the bid of bidder(s) who have not quoted for all the items in the package.
- 12.4 **PRICE BASIS:** The price components shall be FIRM throughout the currency of the contract and no price escalation shall be payable under any circumstances.
- 12.5 **BASIS OF COMPARISON:**
- 12.6 Bids for incomplete scope of work shall run the risk of being rejected at the discretion of JUSNL.
- 12.7 The Bid evaluation shall be done in Two Stages – Technical and Commercial. **TECHNICAL EVALUATION:** The evaluation of technical Bids shall be carried out with respect to the technical specifications, QR specified in the Bid documents. The bidders whose equipment

meets the above requirements shall be called for the demonstration of equipment at any of the JUSNL substation located in Ranchi as per the convenience of JUSNL in the stage of technical evaluation. The bidders shall offer their equipment for demonstration within 30 days of intimation to do so. The compliance of the equipment to the technical specification shall be tested during the demonstration. The equipment that meets the above requirement shall be considered as technically acceptable. The commercial Bids of only those Bidders shall be opened who are technically acceptable.

12.8 Any conditional rebate/discount if offered by the bidder shall not be taken into consideration for the purpose of evaluation. However, the same shall be considered for the purpose of award.

12.9 Bids shall be evaluated for the complete package on the basis of lump-sum price. The lump-sum price shall include sales tax, excise duty, service tax and all other applicable levies etc. Bids stipulating delivery period beyond that specified under clause 'Delivery Period' will run the risk of rejection.

13 **Insurance:**

The materials are to be insured with NIGAM's underwriter under its Inland Marine Cargo policy in all cases for which the supplier should complete the NIGAM's proforma and send the original to the Chief Claim Officer, JUSNL, Ranchi for taking over a policy with copy to the consignees and paying officers concerned at the time of dispatch of each consignment. As such the Insurance premium should not be included in the quoted price. Failure to submit the insurance proforma duly filled in and signed by the suppliers shall make the suppliers liable for only damage during the transit of materials. Proforma for Insurance is enclosed as per annexure.

In case the materials are insured under the NIGAM's open policy the consignee concerned will take prompt action to lodge a claim with the supplier, Carrier and the Insurance Company with an intimation to the Chief Claim Officer of the NIGAM for the materials received short/ in damaged conditions and no recovery of the cost of such materials shall be effected from the supplier's bill except for sort supply for reason of defective packing or any other lapses on the part of consignor. If packing cases are found in intact conditions at the time of taking delivery and the materials therein are found short, the cost of such materials shall be recovered from the supplier's bill. Similarly the supplier will be liable for compensation for defective packing.

14. **Import License:**

Import license cannot be arranged by the NIGAM for such of these materials, which are under banned category of import. When import is desired to be effected by the tenderers under their own quota license, the value of quota specifically available against the tender should be stated. In case of availability of suitable indigenous make materials the same may be preferred.

15. **Tests:**

All routine tests will have to be conducted on the materials in case order is placed according to relevant standard and test certificate in triplicate will have to be furnished prior to supply of materials. Each lots of the materials shall be subjected to the test prescribed in the relevant standard (latest edition) before supply is affected. Untested material will not be accepted.

16. (i) **Inspection:**

The materials may be inspected by the NIGAM's representative during the process of manufacturing and prior to dispatch. The suppliers are requested to intimate the progress of manufacturing and testing at least 15 days in advance to Chief Engineer (CRITL), JUSNL Ranchi to enable them to depute an officer or an authorized representative for inspection. Failure to adhere to the specification will entail rejection of materials. All tests and inspection shall be made at the place of manufacture unless otherwise specially agreed upon by the manufacturer and purchaser at the time of purchase. The manufacturer shall offer the inspector representing the purchaser all reasonable facilities without charges to satisfy him that the material is being furnished in accordance with the specification. The materials cleared for dispatch after approval of inspection report should be dispatched/ delivered immediately to different consignees.

(ii) The purchaser has the right to have the tests carried out at his own cost by an independent agency whenever there is a dispute regarding the quality of supply.

(iii) During the pre-dispatch inspection the firm shall have to produce original copy of calibration certificate of testing equipments (not more than one year old)/ type test report/ BIS license/ NSIC, DGS&D or SSI registration certificate to the inspecting officer for verification. If there is any discrepancies found during verification the materials may not be accepted.

(iv) The pre-dispatch inspection & testing is mandatory unless an order for waiver of the same is given by the competent authority.

17. **Forfeiture of Earnest Money & Security Money Deposit:**

It should be clearly understood that in the event of the tenderers failing to accept and execute the telegraphic and detailed orders (P.O.), if its placed within the validity period of the offer, then the full amount of earnest money and security deposit will be forfeited and the NIGAM's decision in this respect will be final and binding on the tenderer. The forfeiture of earnest money and security money shall not in any way affect, limit or extinguish any remedy or relief to which above authority may at any time be lawfully entitled.

18. **Guaranteed Particulars:**

The performance particulars as required in the specifications should be sent along with the tender, other details not specified may also be given.

19. **Manufacturing Capacity:**

The tenderer must have sufficient manufacturing capacity to meet the delivery schedule as per clause 10. The bidder should also be financially sound to manufacture the tendered item within scheduled time.

In support of above capacity the tenderer must produce documentary evidence Viz Annual Accounts / Bankers Solvency certificate etc.

20. **Past Performance:**

Bidders must submit detailed list of executed purchase orders along with their copies for the same item or same item of higher size and capacity clearly indicating PO # and date with name of material and its quantity and also submit name and address of the ordering authority issued in atleast any one of the last 3 years from the due date of tender, failing which the offer may be rejected. The bidder may also submit performance certificate, if any, for the tendered item issued during the above period with the offer. However, successful past and present supplier of JUSNL for the supplied item will be exempted for the same item only.

Offer of those firms who have not completed full ordered quantity against previous Purchase Orders of JUSNL for this item issued during last one year from date of opening of this NIT, shall not be considered as valid and shall be rejected. On placement of order, Bidder has to supply full ordered quantity, failing which the bidder shall not be eligible to participate in forth coming tenders, for a period of at least one year from the date of issue of such purchase order. Past performance of the material supplied earlier by a bidder to JUSNL may be taken in to account while finalizing this tender.

21. **Deviation from Specification:**

If there are some deviations, then it must be mentioned in the schedule of deviations from specification sheet annexed separately. In case of not mentioning deviations in the deviation sheet and just mentioning it at any other place of the offer except in the tender proforma for part-I (Techno commercial part) will be treated as no deviations.

22. **Income Tax and Sales Tax:**

Attested copies of Sales Tax clearance certificate atleast valid upto March'2015 should accompany the tender, failing which the tender is liable to be rejected. State and Central Sales Tax registration number of the tenderer should also be stated. Self declaration certificate with a declaration separately that nothing is due to Income Tax Department and Sale Tax Department & payment of Income Tax & Sale Tax is up to date.

23. **Taxes & Duties and Landed Unit Rate Evaluation Process:**

(i)The bidders must quote entry tax amount if applicable on closing date of tender in price part II at the time of submission of the offer. In case the bidder doesn't quote entry tax amount in the price part-II, or just mention entry tax amount "NIL" or quote absurd rate of entry tax then applicable rate of entry tax on closing date of tender will be taken into account for evaluation of the tender. The evaluation of **L-1 bidder shall be made on the landed unit**

rate (i.e. FOR destination basis), which is inclusive of the ex-works price, excise duty, CST/VAT, freight, entry tax etc.

- (ii) Excise Duty / CST /Entry Tax shall be paid at the rate quoted by the bidder in the price part-II submitted with the offer against the NIT subject to **statutory variation** (in case of both, increase or decrease) imposed by the Government but any increase in taxes and / or duties because of the increase in the bidders annual-turn-over etc, for which the firm is functionary, would be borne by the firm.

No upward variation shall be payable beyond the contractual delivery schedule. In case supply against the contract is completed late and rate of ED/S. Tax undergoes upward revision, the payment will be continued on the basis of rates prevailing during the contractual schedule.

24 **Progress Report:**

The suppliers will have to submit monthly/ fortnightly progress report regularly until completion of delivery, to the Chief Engineer (CRITL), JUSNL Ranchi by the first week of every month following the month in which order is placed to monitor the progress made by the supplier towards proper execution of the order.

25. **Terms of Payment:**

- a) 100% payment will be made by Accounts Officer, JUSNL, Ranchi on submission of 10% Bank Guarantee from any Nationalised Bank of ordered value on non-judicial stamp Rs. 60/- (Rupees sixty) only valid for Guarantee period as per cl-38 and on receipt of SRV duly signed by the concerned consignee after receipt of the materials in good condition at site, installation, commissioning and Training and on presentation of

i) Supplier Invoice showing LOA reference, goods description, quality, unit price and total amount

ii) Proof of excise payment as per excise rules, if applicable.

iii) Delivery Challan iv) Lorry/ Goods/ Courier doc.

v) Factory Test reports vi) Prior submission of CPG as per contract provisions.

vii) Transit Insurance certificate

viii) Acceptance Certificate/ taking over Certificate by respective consignee.

along with approved routine test certificate, and duly filled check list for payment from Stores & Purchase wing.

b.) No advance payment shall be admissible under any circumstances whatsoever.

c.) Signing of LOA, submission of CPG(Contract Performance Guarantee) and signing of Contract Agreement shall be a prerequisite for release of payment. CPG shall be submitted to JUSNL within 30 days of the placement of LOA.

d.) Bills shall be submitted to the respective consignees for verification and forwarding of the same to the paying authority.

e.) TAXES AND DUTIES:

- f.) The prices shall be inclusive of all applicable taxes, levies, including Service Tax duties etc. However, special toll tax (for J&K only) and octroi/entry tax shall be payable extra wherever applicable and shall be reimbursed separately against documentary proof. MODVAT benefit wherever available shall be passed on to JUSNL. JUSNL shall issue "C-Form" for availing concessional rate of sales tax wherever applicable.

Rate in figures and in words must be quoted in the enclosed proforma of price part on **FIRM price**, subject to any statutory change in due course of time, indicating therein Ex-factory price, freight element up to destination, element of Excise duty, sales tax and other charges. The Ex-works price shall be quoted after considering benefit under CENVAT or any other scheme to be retained by the supplier. The materials are to be dispatched to various destinations in Jharkhand as may be required. The responsibility of safe delivery will rest with the supplier. If the price elements are not quoted separately as indicated above, the tender will be liable for rejection. Freight element will include loading, unloading, packing and forwarding complete. If any other taxes are levied or reduced by the Govt. the same will be added or subtracted respectively to the landed cost for evaluation of the tender. If Excise Duty, Sale Tax / VAT or Entry Tax is not quoted separately or proof of exemption of the same is not given, the relevant duty and / or tax at the maximum rate will be added to evaluate landed cost of the bidder.

Arithmetical errors will be rectified on the following basis: If there is discrepancy between unit price and the total price i.e obtained by multiplying the unit price and quantity, the unit price shall prevail and total price shall be corrected. If the bidder does not accept the correction of errors, his bid will be rejected & EMD will be forfeited. If there is a discrepancy between words and figures, the amount in words shall prevail.

- g) If the Bank Guarantee of any Nationalised Bank is not furnished, payment will be made after deducting 10% of the total order value from the first or consecutive bills after receipt of the materials in good condition along with approved routine test certificate duly filled check list for payment from Stores & Purchase wing. The deducted amount will be kept back as performance guarantee and will be released after successful completion of guarantee period.

For the above modes of payment ¼ % (Quarter percent) rebate will be deducted from the ex-factory price of the materials. However, Excise Duty part will be paid only after production of documentary evidence issued by Excise Department of their jurisdiction. Sales Tax will be paid on submission of upto date income tax and sales tax deposit certificate by competent authority of respective department. The paying officer will accept the Bank Guarantee after confirmation from the concerned bank. Supplier must submit documentary

evidence in support of claim for exemption from any tax or duty if any. The 10% amount / B.G. will be paid after expiry of Guarantee period.

26. **Validity of Bid:**

Tenderer should specify the validity period of their offer which should not be less than **180** (One Hundred eighty) days from the date of opening of tender, which may be extended on discretion of the NIGAM. The offers with lesser validity period may be out- rightly rejected.

27. **Raw Materials:**

No raw materials will be arranged by the NIGAM. Tenderers will have to arrange their requirements of raw materials themselves.

The Purchase reserves the right to inspect the raw material procured by the supplier for the purpose of manufacture of materials to check the genuineness of the raw materials. The purchase or his representative can demand the original invoices in respect of all the raw materials.

28. **Minimum Quantity:**

The requirement mentioned in the tender notice and general conditions is tentative and is subject to increase or decrease at the time of finalization of the tender.

29. In case the order is placed, the firm will have to dispatch the materials in the name of the consignee only and “self booking” will not be accepted.

30. The bidders should submit self-declaration Certificate, that the firm is not blacklisted from Central Govt / State Govt / Central or State Govt. undertakings/ Public Sector Undertaking etc. for the tendered item and also submit declaration Certificate that the firm is not related to any persons employed in the NIGAM or his/her close family member/blood relations / proxies.

31. **Contract Form:**

The successful tenderers will have to execute contract agreement in the NIGAM’s proforma after placement of the LOI/Purchase Order. The contract agreement is to be executed on Rs. 100.00 non -judicial stamp paper.

32. **Extension Order:**

In the event of an order being placed on the tenderer, the tenderer requested to give his concurrence that he is willing to accept additional order on the same terms and conditions if the extension order is placed by NIGAM within **12 (twelve)** month from the date of acceptance/ placement of order.

33. **Tolerance of Electrical Performance:**

Tolerance shall be according to relevant I.S.S. unless & otherwise stated in technical specification.

34. **Packing:**

Materials shall be delivered suitable packed. Although method of packing is left to the discretion of the manufacturer it should be robust enough for rough handling that occasioned during transportation by Rail/ Road. Further it is to clarify here that all the charges towards packing, forwarding, loading and unloading etc. Shall be borne by the supplier.

35. **Drawing & design of item:**

Drawing and design of item offered should accompany the tender. The tenderer shall submit design details supported by type test report of the manufactured item. The NIGAM reserves the right to reject the tenders if design parameters are considered qualitatively inferior or prefer, the tenders whose design parameters are qualitatively considered better. However, due opportunity to be heard will be given to bidders before taking decision in this regard.

36. **Type Test Certificate:**

a) Type-test certificate (for type-tested materials)

- i) Tenderers must submit attested/ certified copy of complete volume of type test certificates. as per relevant ISS issued from CPRI / ERDA, /National Test House Govt. of India, only for the tendered item, failing which the tender shall be rejected. The copy of test certificates must contain approved drawings, test report no & date, name of test, name of material, rating, serial no etc.
- (ii) The submitted type-test reports must be in conformity to the technical specification of this NIT, failing which, offer will be rejected.
- (iii) Specification (GTP) of the offered item must conform to the specification of the NIT, failing which the offer will be **rejected**.
- (iv) If the offered item [Guaranteed Technical Particulars (GTP)] is not proto-type of type tested design but conforming the technical specification of NIT, then one unit will randomly be selected and sealed by the Inspecting Authority of JUSNL, at the time of pre-despatch inspection, from the manufactured. The tenderer would have to get this unit type tested afresh at **CPRI** at his own cost. In such case 90% (ninety percent) payment of ordered value shall be made and balance 10% (ten percent) payment shall be released after submission of successful type test reports. If offered item is proto type of type tested design, fresh type test is not required.

37. **Bank Guarantee for repairs of equipments / materials at the supplier's works:**

In case the equipment fails, within the guarantee period and the same is required to be taken back to the supplier's factory, the same shall be covered up by suitable Bank Guarantee of any Nationalised Bank of equivalent cost of equipment for period required for replacement. Further Bank Guarantee shall be furnished by the supplier within one week's time on hearing from the consignees. He shall not lift the damaged/rejected equipment from our store unless the approval of acceptance of Bank Guarantee is received from our Accounts Officer, JUSNL.

38. **Guarantee Period:**

The materials shall be guaranteed for satisfactory performance and against defective or low quality materials and bad workmanship for minimum **24 months** from the date of commissioning or minimum **30 months** from the date of delivery in stores, whichever is earlier. If during the guarantee period the goods are found defective or defects observed in service, the same will be replaced/ repaired by the supplier free of all the charge within one month on receipt of intimation. In case defective stores/ materials are not replaced / rectified as per the above guarantee clause, the NIGAM shall recover an equivalent amount plus 15% supervision charges from any of the bills/ Bank Guarantee. Due weightage shall be given to the tenderers quoted for longer guarantee period.

39. **CONTRACT PERFORMANCE GUARANTEE:**

The contractor shall be required to furnish a Contract Performance Guarantee (CPG) for an amount equal to 10% (Ten percent) of the contract price from any Nationalised/ Public Sector Indian Bank in the prescribed form towards satisfactory performance of the contract, in favour of JUSNL within 30 days of issue of Brief L.O.A/ notification of Award. **The CPG shall be valid for a period up to three months after the date of expiry of the warranty period.**

39.1 CPG shall be returned to the contractor after the successful completion of the Warranty Period subject to condition that there is no recovery against the contract.

39.2 GUARANTEE / WARRANTY: The equipments and components supplied shall be under guarantee / warranty in the manner specified in the TS for a period of 02 (two) Years from the date of commissioning and 30 months from the date of acceptance (whichever earlier) of the material without any extra cost to JUSNL. In addition, Manufacturer's Standard guarantee shall also be passed on to JUSNL.

39. **Re-inspection Charge:**

Re-inspection charges as applicable shall be leviable in case it is found at the time of inspection at the works of the bidder that:

- a) The material /item/equipments was not ready for inspection and the inspection notice given by supplier was fictitious.
- b) Quantity offered for inspection is short by more than 50% from the quantity in the inspection call.
- c) Inspection is not arranged / not got carried out due to any reason an account of supplier.
- d) Material/ item/equipments is found not confirming to provisions of Purchase order/ GTP/ relevant BIS and thus rejected by inspecting officer.

Or

- e) Manufacturing defects are observed during physical/ visual inspection/ checking.

Or

- f) Quantity of item not found as per provisions of Purchase order.

40. **Termination of Contract:**

In case the contractor/ supplier fails to deliver the materials or any consignment there of within contracted period of delivery or in case the materials are found not in accordance with the prescribed specification the NIGAM shall exercise its discretionary power either:

A) To recover from the supplier the damages as provided in the penalty of general conditions of tender for supply under clause 11.

Or

B) To Purchase elsewhere after giving due notice to the contractor on account and at the risk of contractor such material not so delivered or other of similar description without canceling the contract in respect of consignment not yet due for delivery.

Or

C) To cancel the contract reserving NIGAM's right to recover damages.

Notwithstanding the powers, under (a), (b), (c) referred above are in addition to the rights and remedy available to this NIGAM under the General Law of India relating to contracts.

Note: a) In the event of risk purchase of stores of similar description, the option of the NIGAM shall be final. In the event of action taken under (a) or (b) above, the supplier shall be liable for any loss which the NIGAM sustain on the account but the supplier shall not be entitled to any saving on such purchases made against default.

b) The decision of the NIGAM shall be final as regards the acceptability of the stores supplied by the supplier on the NIGAM shall not be required to give any reason in writing or otherwise at any time for the rejection of the materials.

41. No documents submitted by bidders after opening of the tender (Part-I) on their own shall be accepted, unless and until asked for.

42. The tenderer must get all documents inclusive of their covering letter PAGINATED and INDEXED and mention their number in the covering letter in WORDS. Also all the documents

MUST bear the signature of the person who signed in the covering letter followed with the stamp of the tenderer. Overwriting / cut mark / use of whitener must not be done in all documents; otherwise the offer of the bidder may stand cancelled.

43. The NIGAM reserves the right to reject the lowest or any of the tender either in whole or in part without assigning any reason.

44. **Factory Inspection:**

NIGAM's officer/ authorized representative may inspect the factory regarding availability of adequate manufacturing and testing for producing quality materials in case tenderers being considered for placement of order by the NIGAM.

45. **General:**

Please again note that in incomplete offer not having specific comments on all the points of our specification and not supported by various information desired in our specifications shall be rejected out-right and no further correspondence shall be made with the supplier in respect of their offer which causes delay in finalizing the tender.

46. **Governing Language:**

The Contract shall be written in English or Hindi and shall be interpreted in accordance with the laws of the union of India.

47. **Jurisdiction of Court:**

The civil court Ranchi shall alone have an exclusive jurisdiction to decide any difference/ dispute/ cases for and against JUSNL / Contractors/ Suppliers arising out of or in respect of the NIT, or contract agreement, or Purchase order.

48. The NIGAM reserves the right to distribute the materials among successful bidders depending upon the offered delivery schedule as per the requirement.

49. The NIGAM reserves the right to cancel full or part of the awarded contract without assigning any reason of those firms which will be found defaulter for delay in supply of materials or his supply or his supply sub-standard quality of the materials or whose design parameters are considered technically inferior.

50. The NIGAM reserves the right to change/inlist/delete the specification/GTP of NIT till before opening of part-I, for which, bidder will be given due opportunity for submission of their fresh bids/revised bids.

Enclosure -

Chief Engineer (CRITL)
JUSNL Ranchi

- (i) Annexure 'A',
- (ii) Annexure 'B',
- (iii) Annexure 'C'
- (iv) Annexure 'D-I & D-II'
- (v) Annexure 'E'
- (vi) Annexure 'F'
- (vii) Annexure 'G'
- (viii) Annexure 'H'
- (ix) Annexure 'I'
- (x) Annexure 'J'
- (xi) Annexure 'K'
- (xii) Annexure 'L'

JHARKHAND URJA SANCHARAN NIGAM LTD

CIN –U40108JH2013-SGC001704

Engineering Building, Dhurwa, Ranchi 8340024

email. cecritl.jusnl@rediffmail.com

Annexure – ‘A’

NIT No. 05/JUSNL/PR/15-16 **Due Date of opening of part-I 18.05.2015**

The following conditions are to be strictly fulfilled by the firm while submitting their tenders:-

1. Tenders not accompanied by the prescribed earnest money will be rejected outright. The firm registered with DGS&D/ Registered with NSIC under single point registration for manufacture of the item/ undertaking of Govt. of Jharkhand/ Govt. of India are however exempted but for the proof of registration certified or attested copy should be submitted together with documentary evidence of validity period on the due date of tender alongwith the tender. Otherwise tender shall be liable to be rejected.
2. Tenderer has to accept the Guarantee clause, penalty clause, payment terms and security clause as per the terms and conditions of the tender otherwise tender will be considered as invalid.
3. The offers, which are not kept valid for acceptance, for at least 180 days from the date of opening of tenders, will be rejected.
4. Conditional/ Incomplete tenders which do not contain full details, technical particulars, literature test certificates, performance report, price of all equipments delivery period etc. will be rejected, GTP must be filled up item wise. Incomplete or mentioning ‘as per ‘IS’ shall not be acceptable.
5. The prices are specifically asked to be submitted as FOR destination and are not so furnished, the tender shall not be considered as valid and will be rejected.
6. Tender, which is not submitted in the NIGAM’s Prescribed proforma shall be rejected. Any additional particulars can be furnished in the accompanying letter of Statement.
7. Tender received in this Office after the due date and time shall be rejected.
8. Prices must be indicated bold in figure and Words failing which the tender may be rejected.
9. Tenderers have to quote **FIRM** price only.
10. Specification of the offered item must conform to the technical specification of NIT, failing which the offer shall be rejected.

Chief Engineer (CRITL)
JUSNL, Ranchi.

GENERAL TECHNICAL REQUIREMENTS

Annexure-‘B’

NIT No. 05 /JUSNL/PR/15-16 Due Date of opening of part-I 18.05.2015

TECHNICAL PART

SPECIFICATIONS OF AUTOMATIC CAPACITANCE TAN DELTA MEASUREMENT KIT

1 Application:

1.1 The intended use of Automatic test setup is for carrying out comprehensive testing & condition assessment of EHV apparatus such as Power & distribution transformers, bushings, CTs, Circuit breaker etc.

(i) The specification provides for Packing, Forwarding, Transportation, Transit insurance, Supply and delivery on FOR destination basis installation, testing and commissioning (including providing adequate training to JUSNL engineers of Fully Automatic Variable frequency capacitance and Tan delta test Kit under:-

(ii) Automatic On-site Variable frequency capacitance and Tan delta test Kit System complete with all accessories and computer interface, printer interface, analysis software and cables for measurement of Capacitance & tan Delta for Transformer Winding, Transformer Bushings, Capacitors and other insulation systems alongwith a Laptop computer system.

1.2 The equipments offered shall conform in all respects to high standard of engineering, design, workmanship and when used shall be capable of continuous commercial operation up to seller's guarantee in a manner acceptable to the purchaser and shall be complete in all respect with essential accessories.

1.3 Bidder shall comply strictly with all the requirements enumerated in the specification. If the bidder is unable to comply with any of the requirements he shall specifically list out all such deviations in the schedule of deviations. Bidder shall furnish all technical particulars and technical literature of the offered equipment along with the tender offer. These particulars should be essential to evaluate the bids. **If the bidder is not the manufacturer, the tender should be accompanied with an authorisation letter from the manufacturer or his office.**

1.4 The bidder shall arrange demonstration as per clause 9.0

1.5 Adequate Training and demonstration of kit at JSEB

2 GENERAL TECHNICAL REQUIREMENTS:

2.1 The test set shall be Fully automatic, computerized and designed for condition assessment of high voltage apparatus such as Power & distribution transformers, bushings., Circuit breaker, surge arrestor, cables, Current and voltage Transformers, Oil insulation, Capacitors etc.

- 2.2** The equipment shall be robust, portable, have automatic test sequences, automatic control with display option, result storage, mains/battery operation and user defined test procedures with dedicated software for control/acquisition, storage and analysis of the data.
- 2.3** The test set shall have built-in automatic line interference suppression for accurate, reliable & repeatable results even under highly charged switch yard conditions of 400kV..
- 2.4** The test voltage/current shall be automatically applied up to the preset values with no manual control required.
- 2.5** Necessary software shall be supplied to operate the kit or to download the results from the test kit to external PC/Laptop. The software should be able to export / convert the results to MS-EXCEL /MS-WORD or other formats. It shall also be able to prepare the test templates (in external laptop) in off-line mode without test equipment being connected.
- 2.6** The test report shall be automatically generated and should have date & time stamped.
- 2.7** The test set shall have all relevant safety features built-in like audio/visual indication of High voltage, open ground, short circuit, open circuit, over load etc. The test kit shall meet all the relevant safety specifications as per applicable national/international standards. Relevant type test certificates from a reputed certification agency shall be enclosed.
- 2.8** The kit shall be easy to operate and user friendly.
- 2.9** It should offer repeatability of test results in charged switchyard.
- 2.10** The kit shall be supplied in a sturdy transport case with wheels for easy transportation. The cables & other accessories can be supplied in a soft carry bag.
- 2.11** The kit shall be compatible for EMI / EMC/Vibration requirement as per relevant IEC .The copies of relevant certificate shall be enclosed.
- 2.12** Instrument should work with 90 – 260 Volts AC, 47 – 55 Hz frequency. All the necessary power cables /adapters shall be provided by the supplier.
- 2.13** The equipment shall be suitable to work continuously in tropical environmental conditions of temperature 0 to 50°C and RH 10-90%.
- 2.14** The Test system should be capable of performing all of the following tests.
- Capacitance and Tan delata with test voltage upto 10 KV
 - Measurement of Knee point voltage and curve plotting of CT magnetizing curve.

 - CVT testing- Capacitance and tandelta, ratio and secondary resistance.
 - Winding resistance of Power Transformer, CTs etc.
 - Excitation current of transformer windings.
 - Leakage reactance and frequency response of stray losses(FRSL)
 - Static contact resistance Measurement of Circuit breakers, Bus bar joints etc.

3 Testing Features:-

3.1 Capacitance & Tan delta Measurement:

a) Features Required:

- The equipment shall be suitable to measure capacitance and tan delta of EHV class transformers (1/2/3 windings), bushings, CT, windings of shunt reactors, bus & line CVT's and grading capacitors of CB's at site in a charged switchyard up to 400kV AC. The kit should have the feature of suppression of electrical and magnetic interference due to line frequency and it should also have the feature of measuring tan delta and capacitance at different frequencies than line frequency.
- The kit shall be capable of measuring capacitance and tan delta of each winding of EHV 1/3-phase transformers in suitable switching mode so that capacitance of other windings does not affect the reading etc.
- The kit shall be able to measure the ambient temperature and relative humidity with inbuilt/optional arrangement.

b) Application:

- The measuring principal should be fully automatic i.e. micro processor /PC based with direct measurement of electrical quantities without any need of standard capacitor or balancing principal involved.
- The frequency of test signal should be independent of power line frequency i.e. line frequency modulation should be adopted for getting test frequency different from Line Frequency and accuracy of measurement even in most severe conditions (System Voltage upto 400KV AC) of high electro static & electromagnetic interference conditions. The kit should have capability of suppression of maximum interference in & around 400KV AC and 500 KV DC Switchyards.
- It should have facility for measurement of magnetizing current and leakage reactance measurement of transformers.
- The output test voltage should be independent of input Voltage / Frequency.
- The test set should have automatic EHV electro static and electro-magnetic interference suppression by line frequency modulation and not by polarity reversal method or by injection of opposite interference signal.
- Facility to plot Frequency vs TAN Delta.

3.2 DEDICATED LAPTOP: Separate dedicated Laptop shall be provided for control of equipment & off –line analysis of the data. The lap top shall be Rugged type with following minimum configuration:

- Processor-Intel Core-i5, 2.30 GHz or higher processor with at least 3 MB L-3 integrated Cache,
- RAM - 3GB DDR3 RAM,

- Drives 320 GB HDD, DVD – CDRW Combo DRIVE,
- Display 14” TFT with Anti Glare Display
- Network Connections - 10/100/1000 GB NIC, 56K ITU V.90 Modem, Integrated Bluetooth,
- Li-ion Battery with minimum 2 hours backup time,
- Track point & Touchpad,
- Interfaces- Audio ports, External Mouse port, S-Video connection, USB ports.
- OS & Bundled Software - Latest Quick Heal Internet Security Anti-virus, Windows 7 Professional ---All licensed & supplied in original CD-Media
- Preferred Makes: HP COMPAQ/ IBM-Lenovo/ DELL / Sony – VAIO

4.0 After sales-service: The supplier should have adequate “After Sales Service” in India so that repair / calibration of the testing kit can be done in the short period of time.

5.0 SERVICE CONDITIONS:

Equipment to be supplied against this specification shall be suitable for satisfactory continuous operation under the following tropical conditions:-

1.	Location	IN THE STATE OF HARYANA
2.	Max. ambient air temp(^o C)	50
3.	Min. ambient air temp (^o C)	-2.5
4.	Maximum Relative humidity (%)	100
5.	Minimum Relative humidity (%)	26
6.	Average annual rainfall (mm)	900
7.	Max. wind pressure (Kg/sq.m.)	195
8.	Max. altitude above mean sea level (meters)	1000
9.	Isoceraunic level (days/year)	50
10.	Seismic level (horizontal acceleration)	0.3g

Note : Moderately hot and humid tropical climate conducive to rust and fungus growth. The climatic conditions are also prone to wide variations in ambient conditions. Smoke is also present in the atmosphere. Heavy lightening also occurs during May to October.

6.0 SALIENT FEATURES & TECHNICAL SPECIFICATIONS OF FULLY AUTOMATIC VARIABLE FREQUENCY CAPACITANCE and TAN DELTA TEST KIT TEST SYSTEM & LAPTOP etc.

6.1 TECHNICAL SPECIFICATIONS

A)		MAIN INSTRUMENT (HV SUPPLY+CONTROL UNIT)		
Sr. No.	Description	Required Technical	Part	
1.	Measuring range			
	i)	Capacitance (without resonating inductor) @ 50 Hz.		
		Range	1pF- 300nF (UST, GST & GSTg) at 12KV.	
		Accuracy	±(0.05% of reading + 0.1pF)	
		Resolution	6 digits	
ii)	Dissipation factor (Tan delta)			
	Range	0 – 10000%		

		Accuracy	Range 0....10% 0.1%reading+0.005%
			Range 0....10000%, 0.5% reading+0.020%
		Resolution	5 digits
	iii)	<u>Test Voltage</u>	
		Range	0-12 kV
		Accuracy	1% of reading±1 Volts
		Resolution	1 V without extender; 10V with extender
	iv)	Output Current at 10kV	
		i) Continuous	100mA (minimum)
		ii) Intermittent	300 mA for >2 minutes
	v)	<u>Test Frequency without loss of output power</u>	15 to 400 Hz
	vi)	<u>Category for transient safety</u>	CAT – IV
	vii)	<u>Noise Rejection</u>	Shall be demonstrated in live yard of 400kV S/Stn. as per cl. 6.0.
2.	Operating Temperature		0°C to 50 °C
3.	Relative Humidity		5% to 90% of RH
4.	Type of Display		LCD/TFT/LED built in or external Lap top screen
5.	Protection Classes & Safety classes		As per International Standards (Please specify)
6.	Input Supply available at station		230 Volts ± 10%AC, 50±5%Hz Instrument should work with 90-260 V A.C. and 47-55 Hz frequency in tropical environment condition of temperature 0 to 50 degree celcius and RH 5-90%.
7.	Interface		USB/Ethernet/RS232, with Laptop.

B)	Laptop Computer	
1.	Make	HP/DELL/Toshiba/IBM
2.	Model	Please Specify
3.	Processor	Intel Core <i>i5</i> ,2.66 GHZ
4.	Hard Disk Drive	320GB
5.	Memory	3GB DDR3
6.	Display	14" LED/TFT/LCD
7.	Battery Back-up	2 Hours (min)
8.	Ports	Two USB & one Ethernet port
9.	Card Reader	Three in One

6.2 SALIENT FEATURES

- i) **Test** system shall be able to measure and display Capacitance & Tan δ at UST, GST & GSTg modes, current, power, test voltage and frequency simultaneously without change of leads.
- ii) The **measuring** principle shall be fully automatic i.e. microprocessor / Laptop based without any balancing method involved as in case of Schering bridge.
- iii) The **equipment** shall display Capacitance & Tan Delta values at test temperature as well as corrected values of test results at 20°C reference temperature.
- iv) **Test** System shall be capable of performing in high interference (both electrostatics and electromagnetic) Switch Yard up to 400 kV as per international standards. Test Set should have circuitry/technology for suppression and cancellation of Interference currents. The test kit should have automatic EHV electrostatic and electromagnetic interference suppression by line frequency modulation and not by polarity reversal method or by injection of opposite interference signal.
- v) **The test** voltage should be independent of input voltage frequency so that no variation in frequency of test voltage is there during testing. It should have own sinusoidal wave generator
- vi) **Output** Power shall be independent of Main Fluctuations, Distortions and Harmonics to have highly accurate and repeatable results.
- vii) The test shall have solid state protection against HV surges and specimen failure including grounding interlock to ensure proper grounding of test set and hand held HV-ON interlock safety switch for dual hand operation to ensure the safety of user. The test set should have inbuilt over current protection.
- viii) **Test** system should have **auto self Test** feature. It shall have solid state protection against HV surges and specimen failure grounding interlock to ensure proper grounding of the kit and hand held HV-ON interlock safety switch for dual hand operation to ensure the safety of user. The kit should also have inbuilt over current protection.
- ix) **Test** system shall be able to withstand Shock and Vibrations as per ASTM D 999.75(Transport Shock Test) or equivalent other international standards.
- x) **Test** system shall be supplied with all accessories such as leads (HV/LV/Signals), Clamps & Licensed latest version of testing and analyzing software with CDs/DVDs to make Instrument fully functional to measure desired parameters. Software should have provision of Automatic Report Generation, fast trending and storing of test results.
- xi) **Minimum** lead length to be supplied for HV, LV and Earth/Ground leads of 20 meter(approx.) each mains supply leads of 5-7 meters (approx.) and safety hand switch lead of approx.10meter.
- xii) HV **leads** shall be double shielded and measuring leads shall be suitably shielded as per design requirement.
- xiii) Calibration certificates traceable to National and International standards shall be supplied along with the system without any additional charges to purchaser.
- xiv) A zero start protection shall be built into the system which will not allow the system to be switched on until and unless the system is set at zero kV output.
- xv) **Auto** discharge to the earth for any residual voltage of the set or specimen after the system is switched off and in case of tripping of set shall be provided.

- xvi) **Temperature probe shall be included in scope of supply.**
- xvii) Rugged **Transport Case** alongwith **Transport trolley/cart** shall be included in Scope of supply.
- xviii) Laptop shall be provided with built-in Modem, Battery Chargers/Adapter and carrying case.
- xix) Laptop shall be preloaded with MS Window based operating system latest version with license and media compatible with testing software.
- xx) Testing & Analyzing software and operating system software shall be supplied on HDD backup or in external media CD/DVD.

7.0 PACKING & TRANSPORT

The equipment shall be securely packed and protected for transport. The packing should be suitable for transport over long distances without any damage in transit under normal conditions. Transport limitations en-route from manufacturer/supplier's works to the destination railway station/site should be ascertained and considered by the tenderer. The packing material used should be environment friendly & disposable in such a manner, which does not cause any environmental degradation. Adequate care should be taken during handling and transportation for prevention of pollution.

8.0 LITERATURE AND MANUAL

- Operating & User Manual in English- Two sets
- Maintenance manual in English – Two sets

9.0 DEMONSTRATION AND INSPECTION

Successful bidder shall arrange demonstration and inspection of offered test set to check functionality/suitability of system in accordance with specification at 400/220/132kV switchyard without any additional cost to purchaser. The despatch instructions/acceptance shall be conveyed after receiving successful inspection/demonstration report from O/O The Chief Engineer/CRITL, Ranchi. **The equipment which fails during demonstration will be liable to be rejected.**

The bidder will demonstrate the performance of his instrument for noise rejection/immunity in high interference zone i.e. live yard of 400kV to prove repeatability, this will also form criterion of bid analysis during part-I evaluation of the bid. The bid of the bidder whose performance during demonstration is not found satisfactory, will not be considered for opening the part-II of bid.

The **successful bidder** shall offer Test sets for inspection and demonstration at JUSNL site(s). The despatch instructions/acceptance shall be conveyed after receiving successful inspection & demonstration report from end user(s) i.e. CE/CRITL, Ranchi.

10.0 Training: Supplier shall arrange exhaustive Classroom training at least for two days with theory and practical session on the usage of the instrument by the technical expert of the Principal Company in our premises without extra cost to JUSNL.

11.0 Warranty: Supplier shall give **Two year warranty** to the entire test setup (Hardware & software) from the date of successful commissioning at JUSNL.

12.0 Calibration: The instrument shall be supplied with proper calibration certificate. Calibration certificate traceable to National/International standards from an International accredited Laboratory with uncertainty calculations shall be provided. It is the responsibility of the supplier to provide the calibration services to the instrument after the calibration interval is over.

12.0 SCHEDULE OF REQUIREMENTS & PRICES

12.1 PRICE

The tenderer shall quote **FIRM price only**.

13.0

The **Schedule Of Requirements & Prices** is given in **ANNEXURE**. It shall be the responsibility of the tenderer to ensure that the equipment offered is complete in all respects for satisfactory functioning & operation. The purchaser reserves the right to increase or decrease the quantity at the time of placing order. The complete information of prices as per **ANNEXURE – D, DII** shall be supplied by the tenderer positively, without creating any ambiguity. Without this information, the tenderer shall be liable for the rejection.

14.0 SCHEDULE OF GUARANTEED TECHNICAL PARTICULARS(GTP)

2.24.1 The Guaranteed Technical Particulars (GTPs) of the offered equipment shall be furnished by the tenderer as per **Annexure-E**, failing which the tender is liable to be rejected. GTPs shall be supported with printed catalogue/specification of that test set. The tenderer shall furnish all guaranteed technical particulars as called for in the prescribed format of this specification, particulars which are subject to guarantee shall be clearly marked. Tenders lacking information in this respect will not be considered.

15.0 DEPARTURE FROM SPECIFICATION

Should the tenderer wish to depart from the provision of the specification either on account of manufacturing practice or for any other reasons, he shall draw attention to the proposed points of departure in his tender and submit such full information/drawings and specifications so that the merits of his proposal may be fully understood as per tabular specimen on **Annexure –F**. This specification shall be held binding unless the departures have been fully recorded as required above. All deviations from this specification shall be separately listed in the given schedule of this specification, in the absence of which, it will be presumed that the provision of the specification are complied with by the tenderer

16.0 COMPLETENESS OF THE EQUIPMENT

All accessories & apparatus whether specially mentioned in the specification or not, but which are actually necessary for the completeness of the Test system shall be deemed to have been included in the specification contract without any extra cost. All equipment shall therefore be complete in all respects/details whether such details are specified or not. The tenderer shall give a detailed bill of material, model, make, type, rating etc. of offered test sets.

17.0 PAST PERFORMANCE

The tenderers shall clearly state their or their experience in the field of **Automatic Variable frequency Capacitance and tan delta Test Kit for measurement of Capacitance & Tan delta** of the offered type and shall also supply a list of purchase orders of similar nature executed by them in India during the last **Five years** giving the name of purchaser and place of supply as per **Annexure-1**. Copy of the performance reports (**Minimum- 2nos**) of the offered equipment or its immediate earlier version from various State Electricity Boards/Govt. Deptts./Power utilities/ reputed IPPs) to whom supplies were made during **last five years** must also be furnished along with the tender.

ANNEXURE -1

LIST OF PAST SUPPLIES
(To be enclosed with the Tender)

S. No.	Type & brief Description of equipment/ material supplied	Order No. & Date	Name of Purchaser with Complete Address & Tel./Fax No.	Qty.	Value of the order	Date since the equipment supplied is in service	Remarks
1.	2.	3.	4.	5.	6.	7.	8.

Note:-

Copies of the Performance Reports of the offered equipment/ its immediate earlier version from at least two different end users (State Elec. Boards/Power-Utilities/PSUs/PPPs) to whom supplies made during last five years shall be supplied separately.

Signature of the Bidder

Designation _____

Seal of Company _____

Date_____

Place_____

JHARKHAND URJA SANCHARAN NIGAM LTD

CIN –U40108JH2013-SGC001704

Engineering Building, Dhurwa, Ranchi 8340024

email. cecritl.jusnl@rediffmail.com

Annexure – ‘C’

Tender Proforma for Part – I (Technical & Commercial)

NIT No. 05/JUSNL/PR/15-16

Due Date of opening of part-I 18.05.2015

<u>Sl.no.</u>	<u>Parameters</u>	<u>Bidders particulars</u>	<u>Page no.-</u>
1.	Name & Full address of the tenderer	:	of tender documents
	With Tele.no..... fax no.....		
2.	Name of Materials	:	
3.	Name of Manufacturer	:	
4.	Quantity offered	:	
5.	Whether the F.O.R. destination price has been quoted giving freight element	:	
6.	Whether quoted price is FIRM	:	
7.	Delivery period	:	
8.	Validity of the offer (it should not be less than 180 days)	:	
9.	Acceptance of the terms of payment	:	
10.	Acceptance of terms of security deposit	:	
11.	Details of deviation from the tender Specification, if any	:	
12.	Acceptance of the technical specification of the materials for which offer is	:	
13.	Guaranteed performance particulars (copies of performance & Purchase order certificates should be attached)	:	
14.	Guarantee	:	
15.	Acceptance of penalty clause	:	
16.	Particulars of payment made for Purchase of BOQ and specification (Money receipt No. & date should be quoted)	:	
17.	Amount of earnest money paid with money receipt No. & Date	:	
18.	Whether the firm is registered SSI unit of	:	

Jharkhand or registered with NSIC/ DGS & D
(give details of Registration etc. along with
photo State copy of certificate.)

19. Name of place where the materials will be :
manufactured and will be available for
inspection by the NIGAM's representative
20. Whether Sales Tax : Yes / No
clearance certificate submitted
21. Sales Tax Registration No. :
22. Whether proof of financial capability : Yes / No
Submitted
23. Details of past performance
i) Whether list of past POs executed : Yes / No
submitted
ii) Whether copies of past Pos : Yes / No
submitted
iii) Whether copies of : Yes / No
performance certificate enclosed
24. Annual Turnover as on **31.03.2015** :
25. Whether type-test report submitted : Type –test report no.
(CPRI / ERDA / National Test
House Govt. of India, only)
b) Lightning Impulse # & date
c) Mechanical Endurance Test Report # (for
10,000 #) & date.....
26. Whether bidder is ready to supply :
list of spares as mentioned in clause
3.7 of technical specification Yes
(annex-'B') of NIT, free of cost.
27. Whether bidder is accepting clause No. 32 :
(Extension order) of General Terms and
conditions of NIT
28. Re-inspection charges supplied : Yes/No
29. Remarks :

Signature of tenderer with full name

Designation:.....

Seal:.....

Note: Must be filled in NIGAM's proforma only,
Otherwise offer may be liable for rejection.

JHARKHAND URJA SANCHARAN NIGAM LTD

CIN -U40108JH2013-SGC001704

Engineering Building, Dhurwa, Ranchi 8340024

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Annexure – ‘D-I’

TENDER PERFORMA FOR PART – II (PRICE BID)

NIT No. 05/JUSNL/PR/15-16 Due Date of opening of part-I 18.05.2015

1. Name & Full address of the tenderer :
2. Name of Manufacturer :
3. Name of Materials :
4. Tender notice no. with due date :
5. Quantity offered :
6. Whether quoted price is **FIRM** : YES
7. Unit Landed price Breakup :
 - a-i) Ex-factory price
Ex-works price shall be quoted after considering benefit under MODVAT or any other scheme to be retained by the supplier
 - b) Excise duty
 - c) VAT / CST
 - d) Freight
(including loading, unloading at stores, packing forwarding etc.)
 - e) Other charges, if any :
 - f) Entry tax, if applicable :
 - g) Insurance – will be arrangement by the NIGAM
8. Discount, if any
(Conditional discount will not be accepted)
9. Total landed price
10. **Remarks:** Must be filled in NIGAM's proforma only,
Failing which offer may be liable for rejection.

Signature of tenderer with full name

Designation:.....

Seal:.....

Annexure – ‘D-II’

NIT No. 05 /JUSNL/PR/15-16

Due Date of opening of part-I 18.05.2015

Schedule of prices for Automatic frequency Variable Tan Delta Measurement Test Kit to be filed by bidder

Sl. No.	Description	Tender qty in (set)	Offered quantity in set	Ex-factory price /set in Rs.	Excise duty leviable at present Rs.	Sales tax /VAT leviable at present Rs.	Unit Freight charges Rs.	Other charges if any	Entry tax	Discount if any (conditional discount will not be accepted)	Landed unit rate, inclusive of excise duty, CST/VAT, freight, entry tax etc in Rs.
		1	2	3	4	5	6	7	8	9	10
1	Fully Automatic Variable frequency capacitance and tandelta Test Kit system and testing & analyzing software for measurement of Capacitance, Tan delta alongwith Laptop computer system as per foregoing technical specification . :	01 set									
	Total										

Place
Signature & seal of tenderer
Date

SCHEDULE OF THE GUARANTEED TECHNICAL PARTICULARS FOR Automatic Variable frequency Capacitance and tan delta Test Kit for measurement of Capacitance & Tan delta system for measurement of capacitance, Tan Delta etc. on Transformer Bushings & Other Insulation Systems .

(TO BE FILLED UP BY THE BIDDER)

Annexure- 'E'

NIT No. 05 /JUSNL/PR/15-16

Due Date of opening of part-I 18.05.2015

MAIN INSTRUMENT (HV SUPPLY+CONTROL UNIT)			
Sr. No.	Description	Required Technical Part	Offered Technical Part (To be filled by the bidder)
1.	Name of manufacturer		
2.	Type & Model		
3.	Measuring range		
	i) <u>Capacitance</u> (without resonating inductor) @ 50 Hz.		
	Range	1pF- 3000nF (UST, GST & GSTg) at 12KV	
	Accuracy	±(0.05% of reading + 0.1pF)	
	Resolution	6 digits	
	ii) <u>Dissipation factor</u> (Tan delta)		
	Range	0 -10000%	
	Accuracy	Range 0....10% 0.1%reading+0.005%	
		Range 0....10000%, 0.5% reading+0.020%	
	Resolution	5 digits	
	iii) <u>Test Voltage</u>		
	Range	0-12 kV	
	Accuracy	1% Of reading ± 1 Volts	
	Resolution	1 V without extender; 10V with extender	
	iv) <u>Output Current at 10kV</u>		
	i) Continuous	100mA (minimum)	
	ii) Intermittent	300 mA > 2 minutes	
	v) <u>Test Frequency without loss of output power</u>	15-400Hz.	
	vi) <u>Category for transient safety</u>	CAT – IV	
	vii) <u>Noise Rejection</u>	Shall be demonstrated in live yard of 400kV S/Stn. as per cl. 6.0.	
4.	Operating Temperature	0°C to 50 °C	

5.	Relative Humidity		5% to 90% of RH	
6.	Type of Display		LCD/TFT/LED built in or external Lap top screen	
7.	Protection Classes & Safety classes		As per International Standards (Please specify)	
8.	Input Supply available at station		230 Volts \pm 10%AC, 50 \pm 5%Hz	
9.	Interface		USB/Ethernet/RS232, with Laptop.	
10	a)	Weight of Test set (HV Supply + Control Unit) alone without resonating Inductor, leads and trolley. Please specify.	Please specify. Dimensions and weight are subject to scrutiny by purchaser w.r.t. portability in transport-vehicles available..	
	b)	Dimensions of test set (HV supply + Control Unit)		
11	Whether Test set meets the shock and vibration requirement of the ASTM D999.75 standard or equivalent? Please Specify. (YES/NO)		Yes	
12	Whether the test kit has automatic EHV electrostatic and electromagnetic interference suppression by line frequency modulation and not by polarity reversal method or by injection of opposite interference signal and thereby making it capable of working in switchyard upto 400kV? (YES/NO)		Yes	
13.	Whether the kit has solid state protection against HV surges, Over current and specimen failure grounding interlock to ensure proper grounding of the kit and hand held HV-ON interlock safety switch for dual hand operation to ensure the safety of user? (YES/NO)		Yes	
14.	Whether the offered equipment includes all essential accessories required to make instrument fully functional to measure desired parameters? (YES/NO)		Yes	
15	Whether software has provision of Testing, Automatic Report Generation, fast trending and storing of test results, specify the maximum limit of storage of results? (YES/NO)		Yes	
16.	Whether Instrument has output Power independent of main Fluctuations, Distortions and Harmonics? (YES/NO)		Yes	
17.	Whether test set is capable to measure capacitance and tan delta at UST, GST, GSTg modes, Current, Power and test voltage simultaneously? (YES/NO)		Yes	
18.	Whether lead length to be supplied for HV, LV and Earth/Ground leads are of 20 meter each and mains leads of 5-7 meters approx? (YES/NO)		Yes	
19.	Whether calibration certificates traceable to National and International standards are being		Yes	

	supplied along with test set? (YES/NO)		
20.	Whether safety features like zero start protection and auto discharge to earth provided? (YES/NO)	Yes	
Laptop Computer System			
1.	Make	HP/DELL/Toshiba/IBM	
2.	Model	Please Specify	
3	Processor	Intel Core <i>i5,2.66 GHZ</i>	
4.	Hard Disk Drive	320GB	
5.	Memory	3GB DDR3	
6.	Display	14" LED/TFT/LCD	
7.	Battery Back-up	2 Hours (min)	
8.	Ports	Two USB & one Ethernet port	
9.	Card Reader	Three in One	
Note: Any Configuration better than above is also acceptable, but please specify.			
10.	Whether built-in modem is provided? (YES/NO)	Yes	
11	Whether Battery Charger/Adaptor is provided? (YES/NO)	Yes	
12	Whether carrying case is provided? (YES/NO)	Yes	
13	Whether any other port which is required to connect the laptop with testing equipment is supplied? (YES/NO)	Yes	
14	Whether laptop is pre-loaded with MS-WINDOW based operating system (latest version) with license and media compatible with testing software? (YES/NO)	Yes	
15	Whether installation CDs/DVDs for operating system is provided? (YES/NO)	Yes	
16	Whether operating system and Testing & Analyzing software shall be supplied on HDD backup or in external media CD/DVD? Please Specify (YES/NO)	Yes	
17	Whether Norton/McAfee valid for minimum one year is provided? (YES/NO)	Yes	
18	Whether offered laptop has all suitable facilities in order to cater to the requirements of testing set? (YES/NO)	Yes	

(Signature of the Bidder).

Designation _____

Seal of Company _____

Date _____

Place _____

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Annexure – ‘F’

SCHEDULE OF DEVIATIONS FROM SPECIFICATIONS

NIT No...05 /JUSNL/PR/15-16

Due Date of opening of part-I 18.05.2015

Sl. No.	SPECIFICATION / CLAUSE	DEVIATION FROM SPECIFICATION (commercial & Technical)	JUSTIFICATION FOR DEVIATION

Place:

Signature of tenderer

Date:

Stamp

NOTE:- Incase of not mentioning deviations in this deviation sheet & mentioning it elsewhere in the offer except in the tender proforma for part-1 (techno commercial), will be treated as no Deviations.

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Annexure – ‘G’

DETAILS OF TESTING FACILITIES

NIT No. 05 /JUSNL/PR/15-16

Due Date of opening of part-I 18.05.2015

<u>Name of Test</u>	<u>Details of testing facilities available</u>	<u>Remarks</u>
1. Test on Raw Material		
i.		
ii.		
iii.		
iv.	_____	

2. Routine Tests		
i.		
ii.		
iii.		
iv.	_____	

3. Acceptance Tests		
i.		
ii.		
iii.		
iv.	_____	

4. Type-tests		
i.		
ii.		
iii.		
iv.	_____	

NOTE:- In case testing facilities are not available for certain tests, indicate in the remarks columns from which testing House (S) / Institution (S) these tests will be got carried out.

Signature & Seal of Tenderer

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Annexure – ‘H’

PROFORMA FOR SCHEDULE OF REQUIREMENT & SPECIFIED DELIVERIES FOR supply of AUTOMATIC VARIABLE FREQUENCY CAPACITANCE AND TAN DELTA MEASUREMENT TEST KIT

NIT No...05 /JUSNL/PR/15-16 Due Date of opening of part-I Date18.05.2015

DELIVERY SCHEDLUE

Offered qty.							
Monthly delivery schedule for tender quantity							

- NOTE:** -
1. Priorities of despatches will be as notified by the Purchaser at the time of pre-despatch inspection.
 2. Commencement of delivery period shall be reckoned from the date of notification of Purchase Order of the purchaser.
 3. Bidder who have offered quantity or more but less than full tender quantity then monthly delivery shall proportionally be changed accordingly.
 4. The delivery schedule shall be proportionally changed (by the purchaser) as per ordered quantity also.

Signature of tenderer :

Name :

Address :

SELF DECLARATION CERTIFICATE on Indian Non-Judicial

Stamp of Rs. 50/- or more

Sri.....of M/s..... with head office..... being their authorized signatory, do hereby solemnly affirm and declare that M/s..... has not been Black listed/ Debarred by any Organization in India/State/Central Govt. or any of its agencies for the tendered item.

If this declaration is found wrong at any subsequent time and further I understand to compensate the JBVNL, for the consequences arising out of wrong declaration.

Date:

Name & Signature of the
Tenderer & Seal

SELF DECLARATION CERTIFICATE

It is to undertake that M/s will supply additional quantity, if required by NIGAM on same rate, terms and conditions, if extension order is placed within 12 month from the date of acceptance/ placement of order.

Date:

Name & Signature of the
Tenderer & Seal

DECLARATION CERTIFICATE

It is hereby declared that none of the persons employed in the NIGAM or his/her close family member/blood relations / proxies are related to M/s directly or in directly.

Date:

Name & Signature of the
Tenderer & Seal

SELF DECLARATION CERTIFICATE

It is hereby declared that payment of Income Tax and Sale Tax of M/s
.....is update & nothing is due with Income Tax and Sale Tax
Department.

Date:

Name & Signature of the
Tenderer & Seal