



JODHPUR VIDYUT VITRAN NIGAM LIMITED
OFFICE OF THE SUPERINTENDING ENGINEER (MM&C)
NEW POWER HOUSE INDUSTRIAL AREA, JODHPUR.
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Bid Documents for purchase of Supply of 11 KV CT-PT SETs of ratio 200/5A under Specification No. JdVVNL/SE/MM&C/TN-1381.

11 KV CTPT METERING SETS OF 200/5 Amp

Last date for receipt of tenders	03.01.2018 upto 12:00PM
Date & time of tender opening	03.01.2018 at 3:00 PM
Bid security to be deposited	i) General Bidder : Rs 13,47,456.00 ii) Sick Unit : Rs 6,73,728.00 iii) SSI unit of Rajasthan : Rs3,36,864.00*
Cost of the specification	Rs 2,950.00 (non-refundable)
Tender processing Fee	Rs 1,000.00 (non-refundable)
Validity	120 Days after the date of opening of Techno – Commercial Bid

***In case SSI unit of Rajasthan quotes the less than the tendered quantity , then they are required to furnish Bid security @ 0.5% of the value of the quantity offered by them, failing which bid shall be considered non-responsive.**

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

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Note: The bidders, in their own interest are requested to read very carefully Section-I (Instruction to Bidders), Section-II (General Condition of Contract) & Section-III (Technical Specification) before filling the bid. The Bid documents can be downloaded from website of Jodhpur Discom www.jdvvn.com, www.sppp.rajasthan.gov.in & <http://eproc.rajasthan.gov.in> & can be uploaded on the website <http://eproc.rajasthan.gov.in>. No hard copy of the bidding documents will be provided to the bidders through this office. In case of any discrepancy found in the bidding documents downloaded from the website and appended with the bid (as a bid document) and the original copy of such document available in the office of Superintending Engineer (MM&C), Jodhpur Discom, Jodhpur then the copy available with Superintending Engineer (MM&C), Jodhpur Discom, Jodhpur will be considered as final document for all purposes. The cost of Bid document as published in NIT shall be furnished along with downloaded bid document in the manner prescribed in bid document.

SCHEDULE-III**TECHNICAL SPECIFICATION OF 11 KV CTPT METERING SETS
AGAINST TN-1381****3.01 SCOPE:**

This specification covers the design, manufacture, assembly, testing and delivery of three phase four wire 11 KV/ 110V oil cooled outdoor type combined CT-PT unit for feeder metering purpose having 1 No. Three phase potential transformer and 3 Nos. single phase paper impregnated oil emersed current transformers for different phases in common tank equipped with weather proof bushing for outdoor use as per technical data incorporated in this specification.

3.02 APPLICABLE STANDARDS:

Unless otherwise modified in this specification, 11 KV CTPT Metering Sets shall comply with the following Indian Standard Specification (latest version):

IS:2705-1992	Specification for current transformers.
IS:3156-1992	Specification for voltage transformers.
IS:5621-1980	Specification for Insulators/Bushing
IS:2099-1986	Specification for insulators/ bushing
IS:3347-1986	Specification for Insulators/bushing
IS:335-1983	Specification for new insulating oil
IS : 5561	Specification for terminal connectors.

Equipments conforming to any other international standard(s) which ensure(s) equal or better quality than the standard(s) mentioned above will also be acceptable and in such case(s) the copy of standards (English version) adopted should be provided.

3.03 CLIMATIC CONDITIONS:

The equipment shall be suitable for operation under climatic conditions as mentioned in Clause No.16 of General Conditions of Contract Section 2 of this specification.

3.04 11 KV CTPT Metering Sets:

A) 11 KV Single Phase Current Transformer (3 Nos. for R Y & B phases).

The 11 KV current Transformer shall be paper impregnate oil immersed type, single phase 50 HZ confirming to IS:2705/1992 with latest amendment in all respect except where ever modified in this specification.

The 11 KV current Transformer shall have the following technical characteristics/ parameters.

Sr.No	Particulars	Parameters
i)	Normal system voltage (KV rms)	11
ii)	Highest system voltage (KV rms)	12
iii)	Frequency	50 Hz
iv)	Impulse withstand voltage	95 KV (Peak)
v)	i) One minute power frequency dry withstand voltage (on assembled CT-PT set) a) primary (KV r.m.s.) b) secondary (KV r.m.s.) ii) One minute frequency wet withstand voltage (KV Peak) (On assembled CT-PT)	28 3 Root 2x28 Rms
vi)	Transformation ratio (CT Ratio) (For Feeder Metering)	200/5 A
vii)	Rated output (VA burden)	10 VA
viii)	Class of accuracy	0.5S
ix)	Rated continuous thermal current	1.2 times of rated primary current
x)	Short time thermal current rating	18 KA for 3 seconds for CT ratio 200/5 A
xi)	Rated dynamic current	2.5 times of short time thermal current rating.
xii)	Number of cores	One
xii)	Instrument security factor	Not exceeding 5
xiii)	Max. ratio error	As per IS:2705/1992
xiv)	Max. phase angle error	As per IS:2705/1992
xv)	Max. temp. rise over max. ambient temp. of 50 deg. C at rated continuous thermal current at rated frequency and with rated burden.	As per IS:2705/1992

B) 11 KV Voltage Transformer:

11 KV voltage Transformer will be used along with CTs of description stated above. This shall be paper impregnate oil immersed type conforming in all respect to the Indian Standards specification IS:3156/1992 with latest amendment except where modified in this specification.

The 11 KV voltage transformer shall have the following ratings/ technical parameters:

Sr.No	Particulars	Parameters
i)	Nominal system voltage (KV rms)	11
ii)	Highest system voltage (KV rms)	12
iii)	Nos. of phases	Three
iv)	Impulse withstand voltage (KVP) (on assembled CTPT set)	95
v)	a) One minute power frequency dry withstand voltage (on assembled CT-PT set) i) primary (KV r.m.s.) ii) secondary (KV r.m.s.) b) One minute frequency wet withstand voltage (KV Peak) (On assembled CT-PT set)	28 3 Root 2x28 rms
vi)	Frequency	50 Hz
vii)	Transformation ratio (PT Ratio)	11 KV/ 110V
viii)	Rated output (VA burden)	30 VA per phase
ix)	Class of accuracy	0.5 (As per IS:3156/1992)
x)	Winding connection	Star/Star with HT neutral earthed.
xi)	Rated voltage factor and time	1.2 continuous and 1.9 for 30 seconds.
xii)	Temp. rise over max. ambient temp.	Within limits of IS:3156/1992
xiii)	Max. Phase angle error	Within limits of IS:3156/1992
xiv)	Ratio error (Max.)	Within limits of IS:3156/1992

3.05 GENERAL TECHNICAL DESCRIPTION OF 11 KV CT-PT METERING SETS:

- i) The CT PT Metering set shall comply to the latest standards mentioned in the specification and guaranteed technical particulars.
- ii) High voltage winding of 11 KV instrument transformers shall have paper insulation impregnated with oil under vacuum. The paper used for insulation shall be of high insulation grade. The process of impregnation shall be detailed out in the tender.
- iii) The core material of CT-PT sets shall be of high grade, non-ageing, electrical silicon steel having low hysteresis loss and high permeability to ensure accuracy at both normal and over current/ voltage.

- iv) The instrument transformers shall be contained in a fully weather proof, outdoor type, platform mounting and also suitable for pole mounting type tank with 6 Nos. of 12 KV class weather proof bushing for incoming and outgoing connections.
- v) The thickness of MS sheet used for fabrication of tank shall be minimum 3.15 MM for sides and bottom and 5 MM for top cover.
- vi) The 11 KV CT-PT set should have compact construction and the general arrangement Dimensional drawing, mounting arrangement shall be got approved before commencement of supplies.
- vii) The external surfaces of tanks of CT-PT sets shall be painted with one coat of primer and two coats of synthetic enamel paint of shade No.631 of IS:5. The internal surfaces of the tank shall be painted with two coats of a suitable heat resistant oil insoluble paint.
- viii) The metering sets shall be supplied with first filling of insulating oil conforming to IS:335 (with latest amendment).
- ix) The bushings used in the CT-PT sets shall conform to IS:2099, IS:5621 and IS:3347 (latest amendments). These shall be suitable for operation in heavily polluted atmosphere with creepage distance of 25 MM/KV.
- x) The minimum clearance between phases and phase to earth as specified in the relevant ISS should be maintained.
- xi) The paper impregnated oil immersed type instrument transformers shall be complete with all fittings and accessories mentioned at Clause No. 3.06 of this specification.
- xii) The 11 KV CT-PT sets shall be hermetically sealed type (should not communicate with atmospheric air) in construction without any oil conservator. The quality and work-man-ship shall be of high standard.
- xiii) For load shedding single phasing is adopted in the 11 KV system. The offered 11 KV CT-PT set shall be suitable for working under such abnormal operation condition.
- xiv) CT-PT sets shall be used for 3 phase 4 wire KWH metering. As such 11 KV CT PT sets shall have 3 Nos. CTs.
- xv) The 11 KV CT PT sets shall have one No. of Three Phase Potential Transformer. The primary winding of single phase PT shall be connected in star formation in the tank with common external neutral.
- xvi) The neutral of primary PT winding shall be floating. The neutral of PT Secondary winding shall be earthed.**

- xvii) The secondary winding neutral of PT and secondary terminals of CTs and PTs shall be brought out in one single secondary terminal box through 3 KV bushings. The terminals shall be marked as per ISS and supporting marking plate with earth terminal shall be provided. The secondary terminal box compartment shall be divided in two portions - One portion containing secondary of all CTs and the other portion shall contain all secondary PT connections with neutral and one body earthed. The whole compartment shall be covered by one bolted cover with sealing arrangement. At least two bolts at diagonally opposite corners of secondary terminal box shall be suitable for sealing arrangement. All other bolted covers and inspection windows covers, where provided shall also have sealing bolts for sealing purpose. Suitably shorting links shall be provided for individual CT shorting and PT secondary neutral.
- xviii) The secondary terminal box shall have cable gland/ flange suitable to receive two Nos. control cable of size 6 core X 4 sq.mm. and 4 core x 2.5 sq. mm at the bottom of the secondary box for metering connections to secondary winding of 11 KV CT-PT circuits respectively.
- xix) The 11 KV CT PT Set shall have 3 Nos. incoming and 3 Nos. outgoing outdoor type bushing. The 11 KV CT-PT Sets shall have 6 Nos. Bimetallic terminal connectors suitable for Dog conductors for 200/5 Amp. These should be type tested from CPRI/ NABL accredited Labs. These test reports should not be older than 5 years for Short Circuit Test. The dimension & drawing shall be furnished along with tender duly signed and sealed by testing authority. Inspecting officer shall verify the original type test reports at the time of inspection for terminal connectors & bushings.
- xx) No oil drain plug at the bottom of the CT-PT Sets be provided.
- xxi) Embossing/ punching with minimum height of 10mm of Sr. No., ratio & TN No. be done on the tank of the CT-PT Sets.
Apart from above two additional identification plates of size 4"x4" duly welded on both sides smaller vertical faces of the tank of CT-PT set with the following details engraved may be provided:
(i) Sr.No. (ii) Ratio (iii) Make (iv) TN. No.
- xxii) Manufacturer's name in short should be embossed/ punched.
- xxiii) CT Ratio should be painted on tank body so that it should be visible clearly.
- xxiv) The under base of CT-PT Sets of 11 KV shall be provided with 2 Nos. 75x40x6mm channels as shown in the figures detailed in Annexure –I to make them suitable for fixing to a plate form or plinth. These channels shall be provided through continuous welding with tank of the CT-PT Sets.

- xxv) For feeder metering CT-PT sets i.e. rating of 200/5 A Amp. HV Metal parts (Primary terminal) shall be of 20 mm dia and made of copper. The primary terminal shall be along the entire length of bushing.
- xxvi) The equipment shall be suitable to withstand for loading conditions when supply for one phase is disconnected from primary side.
- xxvii) Bushing rod of 20 mm dia made of copper shall be used for 11KV CT-PT Sets for feeder metering.
- xxviii) 2 Nos., 5/8" dia, 3" length earthing bolts with 2 nuts, 2 flat & 2 Nos. Spring washers shall be provided with each CT-PT Set.
- xxix) Spring loaded pressure release device shall be provided on each 11KV CT-PT Set for releasing of accumulated gases.
- xxx) The CT-PT Set (for outdoor installation) top shall be taper / slanting with minimum slant of 10 mm.
- xxxi) The following sealing arrangement for providing seals on each 33 KV CT-PT set shall be made by the manufacturer.
 - i) 4 Nos. holes of 2.5 mm dia on each bushing clamp bolts of 6 nos. HT bushings for providing two polycarbonate seals at diagonally opposite bolts of each bushing clamp in M&P lab after successful testing as required.
 - ii) 4 Nos. holes of 2.5 mm dia on the bolts provided at four corners of top cover for providing two polycarbonate seals at diagonally opposite corner of CT-PT set by the inspecting officer after successful testing and providing polycarbonate seals in M&P lab after successful testing as required.
 - iii) 4 nos. sealing holes on the name plate (R&D plate so that our inspecting officer may provide numbered seal on one side of the plate covering top & bottom holes whereas on the remaining two holes of other side, the one numbered seal will be provided by MT Lab after successful testing.

3.06 FITTING AND ACCESSORIES:

The outdoor platform/ pole mounting type metering equipments shall be complete with tank, fittings and accessories as detailed below:

1 No. Electrically welded sheet steel tank/ enclosure for accommodating above instrument transformers with suitable bolted cover.

6 Nos. Outdoor single terminal porcelain bushing of reputed make without arcing horns. 3 Nos. for incoming and 3 Nos. for outgoing.

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1 No. Secondary terminal box. The terminal box opening door/cover shall have suitable sealing arrangement. The necessary gland/ socket shall be in the scope of supply.

1 No. Oil filling hole with cap/plug.

1 No. Toughened prismatic oil level indicator with min. oil level marking.

2 No. Lifting lugs for lifting the complete CT-PT unit.

2 Nos. Earthing terminals.

1 Set Under base channels with suitable fixing holes for mounting on plat-form/poles.

1 Set Detachable collar assembly.

1 No. Rating and diagram plate.

3.07 BUSHING:

The bushing shall conform to IS:5621-1980 and IS:2099-1986 and its subsequent amendment, if any, the bushing shall be of standard make. The make and catalogue No. of bushing shall be clearly stated in the guaranteed technical particulars. The type tests certificates of bushings not older than five years shall also be furnished along with tenders. The bushing rods and nuts shall be made of material as per cl.3.05 (xxv).The dimensions of 12 KV class bushings and their related parts shall conform to the relevant Indian Standards as detailed below:

Voltage class	Indian Standard	
12 KV bushing	For porcelain parts IS:3347 (Part-III) Sec.I-1972 or the latest version thereof	For metal parts IS:3347 (Part-III) Sec.II-1967).

The minimum electrical clearance of 255 mm between phases shall be obtained with the bushings mounted and phase to earth clearance should be maintained as specified in relevant IS/ Indian Electricity rules.

On the bushings clamp bolt of CT-PT Sets two holes on two bolts of size 2.5mm (total 12 holes on 12 bolts) at diagonally opposite sides be provided to enable metering wing to seal these bolts after successful testing in Meter Labs.

3.08 GUARANTEED TECHNICAL PARTICULARS, DRAWINGS AND QUALITY ASSURANCE PLAN:

Guaranteed Technical Particulars in the proforma enclosed with this specification shall be furnished along with the detailed general arrangement dimensional drawings mounting arrangements, connection diagrams and quality

assurance plan etc. with the tender. Particulars which are subject to guarantee shall be clearly marked in GTP appended at Schedule-V (A).

3.09 INSTRUCTION MANUALS:

The successful tenders shall have to supply required number of operation and maintenance instruction manuals along with the requisite sets of approved drawings of the equipments covered under this specification. One set of above manuals and drawings shall also be sent along with the delivery of 11 KV CT PT unit to the consignee.

3.10 STAGE INSPECTION:

Each equipment shall comply with and shall be subjected to all routine tests prescribed in the relevant Indian Standard Specification besides routine tests, stage inspection at firm's works during manufacture shall also be carried out if desired by purchaser with out any extra charges. Production schedule in advance by 15 days shall have to be given to arrange stage inspection.

3.11 INSPECTION, TESTING AND CHECKING:

- 3.11.1 In the event of order, the supplier shall have to get type tests conducted as per requirement of relevant standards/ specification on one sample of 200/5 Amp CT-PT Sets out of first offered lot for inspection comprising of minimum 25% of ordered quantity in presence of JdVVNL inspecting officer without any extra cost. However the supplier who are already having valid type test conducted in the last 5 years for similar CT-PT sets having similar specification shall be exempted from conducting type test from first lot. The Impulse test shall be carried out on all the three phases and short circuit test on any one phase selected by the witnessing officer. For this supplier shall make arrangement for type testing to be got conducted from any NABL accredited laboratory and arrange transportation of sample selected from first offered lot for inspection to testing lab & from testing lab to supplier's works. The supplier shall offer the type tested CT-PT set after its re-assembling in subsequent lot. The supplies shall only be accepted & payment against supplies shall be released only after receipt of successful type testing for all type tests on sample.
- 3.11.2 Routine tests as per relevant standard along with accuracy test of CT as per IS:2705 (Pt-II)-1992 and that of PT IS:3156 (Pt.II)-1992 shall be carried out on each equipment covered by this specification in the presence of purchaser's representative. All test reports shall be submitted and got approved from the purchaser before despatch of the equipment.
- 3.11.3 The supplier shall simulate single phase condition in their laboratory for testing one 11 KV CT-PT set from each lot offered for inspection under such condition for 24 hours. The errors of PT shall be measured before and after application of single phasing condition for at least 24 hours and results shall be within

permissible limits of specified accuracy class. This test shall be done as acceptance test.

- 3.11.4 One CT-PT set in each offered lot should be subjected to temperature rise test .The test shall be carried out simultaneously application of rated current (1.2 lb) and rated voltage (12 KV) and also ISF test, at firm's works free of cost.
- 3.11.5 During routine/ acceptance test, errors for CTs shall be conducted at 1 %, 5%, 20%, 100% and 120% of rated current and in case of PT at 80%, 100% and 120% of rated voltage.
- 3.11.6 Algebraic summation of errors of standard CTs/PTs to the errors observed on CTs/PTs under test should be made to get final errors on specified percentage current/ voltage/ burden. If class of accuracy of standard CT-PT is less than 10 times of the accuracy of CT-PT set under test.
- 3.11.7 Leak test :- One CT-PT set in each offered lot should be subjected to 'Leak Test' through Nitrogen gas for a pressure of 10 PSI (Pound sq. inch) for half an hour and pressure shall not drop more than 2 PSI. There should be no leakage observed at any part of CT-PT set.
- 3.11.8 One CT-PT set in each offered lot shall be opened for verifying the diameter and cross sectional area of primary coil conductors including verification of GTP.

The verification of diameter & cross sectional area of primary coil conductor of the CT-PT Set shall be verified at stores also. If CT-PT set fails in above verification at stores, entire lot shall be rejected and the supplier shall lift the rejected lot. In case it founds within specific limits, the supplier at his own cost shall reassemble/replace the physically opened CT-PT set at works/stores.

- 3.11.9 One sample of oil shall be selected and shall be tested for a) Break down voltage b) Tan delta at 90 Deg.C.

The oil supplied with CT PT set shall be of EHV grade Transformer oil suitable for insulation and cooling of the electric transformers of extra high voltage and shall conform to IS 335 (with latest amendments)

If CT-PT set fails in any of the above tests/verification at works, entire lot shall be rejected.

- 3.11.10 during the inspection at firm's works, inspecting officer / agency shall provide polycarbonate seals on each CT-PT set as under -

- i) One polycarbonate seal on one side of the plate covering top & bottom holes.
- ii) Two polycarbonate seal at diagonally opposite corner of top cover of CT-PT set.

3.12 **TYPE TEST:**

3.12.1 Certified copies of all type tests as per IS-2705-1992, IS:3156-1992 with latest amendments listed below obtained from any accredited CPRI/NABL accredited test laboratory on similar equipments included in this specification shall be furnished alongwith tenders-

- i) Short Time Current Test.
- ii) Lightening Impulse voltage withstand Test.
- iii) Temperature Rise Test.
- iv) Wet Power Frequency Voltage Withstand Test.
- v) Determination of Errors according to the requirement of the appropriate Accuracy Class.
- vi) Instrument Security Factor Test.

Participating firms may furnish BG/DD/pay order of Rs. 5 lac (Rs.1.25 lac for Rajasthan based units) in absence of furnishing any type test report alongwith their bid.

3.12.2 The bidder shall submit all Type Test reports of offered CTPT sets along with tender

3.12.3 Bidder shall furnish the calculations of short time thermal current of offered CT PT sets, on the basis of cross-sectional area of primary conductor of Type tested CT PT set.

3.12.4 The purchaser shall have right to get conducted type test during currency of the contract on the sets received in the Stores at purchaser's cost. In case of failure in type tests, following provisions shall be applicable: -

Failure in type tests

In the event of failure/ unsatisfactory results of the CT-PT Set(s) in Impulse/Short Circuit test, the supplier shall have to replace the supplies already made and no further CT-PT Sets shall be accepted. The purchaser, however, at his option, may accept the CT-PT Sets already supplied with the following conditions:-

- i) Guarantee Period of the supplied CT-PT Sets issued to the failed shall be increased by double the normal guarantee period.
- ii) Bank Guarantee shall be extended to cover the additional guarantee period.
- iii) For failure in any of the type tests, i.e. Impulse Withstand test and Short Circuit Test, no further supplies shall be accepted. The type test charges in this case shall be borne by the supplier.

- iv) The CT-PT Sets lying in the stores shall be replaced as per Sub-para (v) below.
- v) The bidder shall, however, be allowed to check the reasons of failure and if need be, to improve/ modify the design. Further supplies, including replacement against supplies already made, shall be accepted only after successful type test(s) are arranged on the fresh CT-PT set selected by the purchaser. All the type tests shall be arranged in case there is change in design, otherwise, type test shall be repeated only for the tests in which failure has occurred. Charges for such test(s) shall be borne by the supplier. However, in the event of failure of CT-PT Sets, in the repeat type test, the Company (JdVVNL) may take following actions:-
 - a) Cancel pending orders of the rating in which failure(s) has occurred, and
 - b) Not place any order of CT-PT Sets on the firm for one year.

Further, it shall be ensured that all meters and instruments used during inspection/ testing are calibrated from NABL approved test house and date of calibration should not be older than one year at the date of presenting the same to the inspecting officer.

3.12 COMPLETENESS OF EQUIPMENT:

Any fittings, accessories or apparatus which may not have been specifically mentioned in the specification for 11 KV CT-PT metering sets covered under the scope of this enquiry-, but which are usual or necessary in the equipment of similar type shall be deemed to be included in the contract and shall be supplied by the contractor without extra charges. All plants and equipment shall be complete in all respect whether such details are mentioned in the specification or not.

3.13 NAME PLATE AND MARKING:

- a) The equipment shall have a non detachable type name plate which should be clearly visible and effectively secured against removal having markings as per requirement of IS. In addition, Sr.No., Ratio and date of despatch shall have to be engraved on bushing side of tank with letters of suitable depth & 25 mm height filled with red colour.
- b) The main and load are to be stencilled on top cover on main and load side respectively.
- c) Apart from above two additional identification plates of size 4"x4" duly welded on both sides smaller vertical faces of the tank of CT-PT set with the following details engraved may be provided:

- (i) Sr.No.
- (ii) Ratio
- (iii) Make
- (iv) TN. No.

3.14 MAINTENANCE AND GUARANTEE:

Performance guarantee of the equipment shall be for the period of 36 months from the date of receipt in stores. The month & year of expiry of guarantee period shall be marked on the name plate. Equipment failed within such guarantee period shall have to be replaced /repaired free of cost within 45 days of intimation. Bidder shall furnish successful routine test reports of the equipment. If purchaser desires inspection prior to despatch, an inspecting officer shall be nominated for verification for the test reports. Failed equipment (s) shall only be lifted after receipt of replacement for the same. Transportation for lifting of defective material & delivery of replaced material shall be borne by the supplier.

3.15 PRICE VARIATION

The prices of 11 KV CT-PT sets are on 'VARIABLE' basis as per prevailing New IEEMA formula w.e.f. 1.6.2005 (mentioned as Schedule- II) with base date 01.12.2017. Rates quoted with 'FIRM' prices are likely to be ignored.

3.16 DELIVERY SCHEDULE

The bidder is required to quote monthly delivery. The delivery of quoted quantity should be completed in 8 months period including commencement period of 30 days. In case ordered quantity is different than quoted quantity then monthly delivery shall be adjusted proportionately. Tenders in which monthly delivery schedule is not indicated shall be ignored.

3.17 SCHEDULE OF REQUIREMENT

The requirement for 11 KV CT PT metering sets of 200/5 ratios is: -

S.NO.	RATIO	REQUIREMENT IN NOS.
1.	200/5 A	2455
	TOTAL	2455

Note: The quantities mentioned above are tentative & may be increased or decreased to any extent.

3.18 Bidder shall furnish relevant documents as per qualification requirement annexed at schedule –III-A

3.19 ADDITIONAL ORDER

Repeat order for additional quantities upto 50% of original ordered quantities , may be placed by the nigram on the same rates ,terms and conditions given in the contract.

Schedule-I**PURCHASE OF 11 KV CT-PT SETS OF 200/5 RATIO AGAINST TN-1381****SCHEDULE OF REQUIREMENT**

S.No	Description of the equipment required	Quantity (Nos.)
11 KV CT-PT Sets of class 0.5S having ratio.		
1.	200/5A	2455

Note: The quantity as mentioned in the schedule of requirements are tentative and may increase/ decrease as per the requirement of the Nigam.

Schedule-II

VARIABLE PRICE FORMULA: PRICES AND BASIS OF EVALUATION: -

As per the specification the prices are to be variable without any ceiling as per following New IEEMA formula (with effect from 1.6.2005), with base date 01.12.2017.

$$P = P_o / 100 (18 + 18C / C_o + 20E_s / E_{s_o} + 10I_s / I_{s_o} + 12ER / ER_o + 9TB / TB_o + 13W / W_o)$$

WHEREIN:

P = Price payable as adjusted in accordance with the above formula.

P_o = Price quoted/ confirmed.

C_o = Average LME settlement price of copper wire bars (refer notes)

This price is as applicable for the month, two month prior to the date of tendering.

E_{s_o} = C&F price of CRGO Electrical Steel Sheets (refer notes)

This price is as applicable on the 1st working day of the month, one month prior to the date of tendering.

I_{s_o} = Wholesale price index number for `Iron & steel (Base:1993-94=100)` (refer notes)

This index number is as applicable for the week ending 1st Saturday of the month three months prior to the date of tendering.

ER_o = Price of Epoxy Resin (refer notes)

This price is as applicable on the 1st working day of the month one month prior to the date of tendering.

TB_o = Price of Transformers Oil Base Stock (refer notes)

This price is as applicable on the 1st working day of the month two month prior to the date of tendering.

W_o = All India average consumer price index number for industrial workers as published by the Labour Bureau, Ministry of Labour, Government of India. (Base 1982 = 100)

This index number is as applicable on the first working day of the month three months prior to the date of tendering.

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For example , if date of tendering falls in October 2005 , the applicable prices of Copper Wire Bars (C_o) and Transformer Oil Base Stock (TB_o) should be for the month August 2005, where as the applicable price of CRGO Electrical Steel Sheet (ES_o) and Epoxy Resin (ER_o) should be as on 1st September 2005 and Wholesale price index number for 'Iron & Steel' (IS_o) should be for the week ending first Saturday of July 2005 and all India average consumer price index number (W_o) Should be for the month of July 2005.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA (PVC)/ CTPT / / prevailing as on first working day of the monthi.e., one month prior to the date of tending.

C = Average LME settlement price of copper wire bars (refer notes)

This price is as applicable for the month two months prior to the date of delivery.

ES = C&F price of CRGO Electrical Steel Sheets (refer note) This price is as applicable on the 1st working day for the month, one month prior to the date of delivery.

IS = Wholesale price index number for 'Iron & steel' (Base:1993-94=100)` (refer notes)

This index number is as applicable for the week ending 1st Saturday of the month, three months prior to the date of delivery.

ER = Price of Epoxy Resin (refer notes)

This price is as applicable on the 1st working day of the month, one month prior to the date of delivery.

TB = Price of Transformers Oil Base Stock (refer notes)

This price is as applicable on the 1st working day of the month, two months prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Government of India. (Base 1982 = 100)

This index number is as applicable on the first working day of the month, three months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2005, the applicable prices of Copper Wire Bars (C) and Transformer Oil Bass Stock (TB) should be for the month October 2005; Whereas applicable prices of CRGO Electrical Steel Sheets (ES) and Epoxy Resin (ER) should be on 1st November 2005 and Wholesale price index number for 'Iron & Steel' (IS) should be for week ending first Saturday of September 2005 and all India average consumer price index number (W) should be for the month of September 2005.

The date of delivery is the date on which the instrument transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the

contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes: (a) All prices of raw materials are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes; octroi etc. Instrument transformers import major raw materials like Copper, CRGO Electrical Steel Sheets and TOBS etc. The landed cost of these imported raw materials includes applicable custom duty but exclusive of modvatable CVD.

(b) All prices are as on first working day of the month.

(c) The details of prices are as under:

1) The LME price of copper Wire bars (in Rs./MT) is the LME average settlement price of copper wire Bars for one month prior to the month of the circular converted into Indian Rupees with applicable exchange rates prevailing as on 1st working day of the subsequent month. The price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

2) The price of CRGO Electrical Steel Sheets (in Rs./MT) is the average CIF price in US \$ Per MT convert into Indian Rupees with applicable exchange rate prevailing as on 1st working day of the month, as quoted by primary producers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

3) The wholesale price index number for 'Iron & Steel' is as published by the Office of Economic Adviser, Ministry of Industry, Govt. of India, New Delhi with base 1993-94=100.

This wholesale price index number is being published weekly on provisional basis. However, the same gets finalized after eight weeks and is normally available after two months. Therefore, we are considering in our calculation this final index for the first Saturday of the months two months prior to the date of which the prices of other raw materials such as Al, IM are published for the corresponding month.

4) The price of Epoxy resin is price quoted by resin manufacturer for their grade CT 5900 or its nearest equivalent.

5) The price of TOBS is C&F price (in Rs./K.Ltr) for Group II grade 70 Base Oil as published in ICIS-LOR bulletin for the 1st week of the previous month. This price is normally published in US \$ per US Gallon, which is converted in Rs./K.Ltr. with applicable exchange rate prevailing on 1st working day of the subsequent month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

-----XXX-----

Schedule – III

JODHPUR VIDYUT VITRAN NIGAM LIMITED
A Govt. of Rajasthan Undertaking
Prescribed technical specification for supply of
 (Name of Material/Equipment/Machinery/T&P etc.)

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

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

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

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

PRE QUALIFICATION REQUIREMENT

TN- 1381

ITEM:-11KV CT-PT SETS OF RATIO 200/5 A

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

- I) The bidder should be a Manufacturer.
- II) The bidder is required to quote for minimum 10% of tendered quantity, failing which the offer may be considered Non-Responsive.
- III) The bidder should have designed, manufactured / fabricated, tested and supplied to utility / Discoms / Govt. Departments at least 2XQQ (QQ being the quoted quantity) of 11KV CT-PT Sets of ratios 200/5 A in last three financial years from the date of opening of technical-commercial bid. In support of fulfilment of the past supply criteria, the bidder shall furnish documentary evidence in the form of certificate from Chartered Accountant in the following manner:-

- 1. The C.A. Certificate should be furnished by the firm duly notarized by the notary public along with the signature of CA.
- 2. The C.A. Certificate should be furnished on the letter head of CA and information should be in prescribed format of QR.
- 3. The C.A. Certificate should have the membership no. with name & address of the CA.
- 4. The C.A. Certificate clearly indicate the quantity supplied, type of material supplied, voltage, current and accuracy class etc. of the material year wise.
- 5. The C.A. Certificate should be signed by concerning firm/ supplier along with seal.

Any deviation to format or information diverted format, will not be considered and rejected.

Note:- The material supplied and accepted for same or better rating for Turnkey project to a licensed power utility/Gov. shall be considered for the purpose of evaluation criteria. The certificate given by C.A shall indicate above quantity **separately**.

- IV) The bidder shall furnish valid and authenticated type test certificates from a Govt. approved / a Govt. recognized / NABL Accredited laboratory / ILAC i.e. International Laboratory Accreditation Cooperation (in case of foreign laboratory) of lowest ratio and design of offered material / equipment. Such

type test certificates should not be older than 5 years as on the date of bid opening. For this purpose date of conducting type test will be considered.

The type test certificate by in house laboratory of bidding firm even if it is a Govt. approved / Govt. recognized / NABL accredited laboratory / ILAC accredited, shall not be accepted, in case of their own tender. This will not apply if tendering firm is Govt. company / public Sector undertaking.

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

The type test certificates shall be furnished either in original or copy duly attested by notary.

A new Rajasthan based units who does not possess valid type test reports be considered responsive subject to furnishing of Bank Guarantee in lieu of type test reports and technically competent.

The Rajasthan & outside Rajasthan firm who do not possess valid type test reports may be considered responsive, if type test reports of higher ratings are furnished alongwith the Bank Guarantees as per existing provisions. The B.G. or D.D. / Pay Order shall be amounting to Rs.5 Lac. The initial validity of Bank Guarantee shall be 9 months with claim period of three months in addition.

- V) The bidder should possess adequate testing facilities for carrying out routine & acceptance test of items as per relevant standard at their works. The bidder shall furnish documentary evidence in support for conducting routine & acceptance test.
- VI) The bidder shall clearly indicate the deviations such as Technical Deviation & Commercial Deviations in the prescribed proforma only. The deviations indicated elsewhere in the bid shall not be accepted.
- VII) The bidder must clearly fill up each and every particular of Guaranteed Technical Particulars annexed with Technical Specification otherwise he will be responsible for Technical Non-Responsiveness.
- VIII) a) If a bidder has supplied up to 50% of ordered quantity in previous tender up to date of opening of subsequent tender and scheduled delivery period expired, the bid of such bidder will not be opened in the Discom for that item.
b) However, if the supplies have been completed for a quantity more than 50% but not completed up to date of opening of subsequent tender and scheduled delivery period expired, the quantity equal to the quantity pending in previous tender for that item shall be reduced from the subsequent tender quantity to be allocated to the bidder.

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- IX) The bidder who have been black listed in any of the state Discom or with whom business relations have been severed or debarred in Jodhpur Discom shall not be considered.
- X) All documents required in the prescribed format are to be furnished along with the bid itself only except an attested copy of BIS license (wherever it is required), failing which the bid will be summarily rejected.

Note : i) Rajasthan based firms not meeting minimum quantity supplied criterion but having manufacturing and adequate testing facility and technical know how shall be considered as new firms and would be eligible for trial order only.

ii) Requirement of quantity manufactured, minimum quantity to be offered and amount of Bank Guarantee to be furnished shall be reduced to 25% for Rajasthan based units.

Schedule – III B

BANK GUARANTEE IN LIEU OF NON FURNISHING OF TYPE TEST CERTIFICATE

(On Rajasthan Non-Judicial Stamp Paper worth Rs. 0.25% of BG value)

To
The Superintending Engineer (MM & C),
Jodhpur Vidyut Vitran Nigam Limited,
New Power House Premises, Industrial Area,
Jodhpur.

Dear Sir,

Whereas Jodhpur Vidyut Vitran Nigam Limited, Jodhpur, (here-in-after called the Purchaser) has issued a tender enquiry under TN.....for procurement of(name of material).

Whereas M/s., (here-in-after called the bidder) has furnished a bid for supply of to the Superintending Engineer(MM), Jodhpur Vidyut Vitran Nigam Limited, Jodhpur, or his nominated officer(s).

Whereas in accordance with the provision of the specification of the aforesaid TN....., the bidder can deposit a bank guarantee in lieu of the requirement of furnishing the type test certificate as per specification.

Whereas M/s., (the bidder) have requested us (Name of the Bank) to furnish the bank guarantee, in lieu of the type test certificate, for an amount equivalent to Rs.(in words also) only.

Under this Bank Guarantee, we (Name of the Bank) hereby undertake unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to the purchaser on his first demand without whatsoever right to objection on our part and without his first claim to the bidder, in the amount not exceeding (amount of guarantee in figures and words).

Payment pursuant to this undertaking will be demanded by the Purchaser from the Bank and will be met by the Bank without question in the case in which the bidder, on receipt of the order and / or after the acceptance of this tender, makes default in furnishing the required type test certificate. As to whether the occasion or ground has arisen for such demand the decision of the Superintending Engineer (MM&C), Jodhpur Vidyut Vitran Nigam Limited, Jodhpur shall be final.

The liability of the Bank shall not at any time exceed Rs.(Rupees).

The undertaking will be determined on but will not withstanding such determination, continue to be in force till the expiry of 9 months from that date.

No indulgence or grant of time by the purchaser to the bidder without acknowledgment of the Bank will discharge the liabilities of the Bank under this guarantee.

The guarantee herein contained shall not be affected by any change in the constitution of the bidder.

All disputes arising under the said guarantee between the Bank and the bidder or between the bidder and the purchaser pertaining to the guarantee shall be subject to the jurisdiction of Courts only at JODHPUR in Rajasthan.

The Bank further undertake not to revoke this guarantee during its currency except with the previous consent of the Superintending Engineer (MM&C), Jodhpur Vidyut Vitran Nigam Limited, Jodhpur.

Notwithstanding, anything contained herein before, the Bank's liability under this bank guarantee i.e. restricted to Rs..... (Rupees) and the guarantee shall remain in force upto Unless demand or claim in writing is presented on the Bank within nine months from that date, the Bank shall be released and discharged from all liabilities there-under. However, the validity of the Bank guarantee shall be extended as and when required by the purchaser.

IN WITNESS WHEREOF the Bank has executed these presents the day..... month..... and year

Yours faithfully,

(Bankers)
Executant

Witnesses:

1.

2.

TN-1381**ITEM : 11 KV CT-PT SETS.****Must be filled-in by the tenderer and attach with technical bid (Part-I)**

To,
The Superintending Engineer (MM&C),
Jodhpur Vidyut Vitran Nigam Limited,
Jodhpur.

Dear Sir,

With reference to your invitation to tender against specification No. JDVVNL/SE/MM&C/TN-1381, we agree to supply the following quantity:-

S. N O	Particulars of item	Tendered Quantity (In Nos.)	Qty. Offered (In Nos.)	Justification of quantity offered as per Qualifying Requirement.	Status of Type Test Certificates.
1	2	3	4	5	6
11 KV CT-PT Sets of class 0.5S having ratio.					
1.	200/5A	2455			

- The offer is valid for a period of 120 days from the date of opening of this tender.
- It is noted that the quantities as mentioned in the specification are approximate and we agree to supply any quantity as per your requirement.
- The delivery shall strictly be in accordance with our delivery clause as given in Schedule-VIII of this specification. In case we fail to deliver the material as indicated in the clause No. 1.23, we are liable to pay recovery for delay in delivery as per clause No. 1.24 of this Schedule-II of this specification.
The material shall conform to your specification No. JDVVNL/SE/MM&C/TN-1381 and as per relevant ISS in all respect.
- We confirm that we agree to all the terms & conditions as well as the technical stipulations of your specification No. JDVVNL/SE/MM&C/TN-1381 and there are no deviations other than as specified in the Schedule VI (A&B).

Yours faithfully,

Signature of bidder with stamp
Dated:

Schedule – V



JODHPUR VIDYUT VITRAN NIGAM LIMITED

A Govt. of Rajasthan Undertaking

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

S.No. Particulars of technical & other performance data guaranteed.

Certified that we agree to all the aforesaid technical particulars and other performance data except following:-

S.No.	Particulars of technical & other Performance data	Reasons for deviations/departure.
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(Signature)

Name & Designation
with seal of the bidder.

Schedule – V (A)**GUARANTEED AND OTHER TECHNICAL PARTICULARS FOR
11KV CT-PT SETS (TN-1381)****(I) FOR 11 KV SINGLE PHASE CURRENT TRANSFORMERS**

PARTICULARS	
NAME & WORK ADDRESS OF MANUFACTURER.	
GST NUMBER	
MANUFACTURER'S TYPE & DESIGNATION.	
NOMINAL SYSTEM VOLTAGE (KV rms)	
HIGHEST SYSTEM VOLTAGE (KV rms)	
INSULATION LEVEL :	
a) IMPULSE WITHSTAND VOLTAGE(KV PEAK)	
b) ONE MINUTE POWER FREQUENCY DRY WITHSTAND VOLTAGE (KV r.m.s)	
(i) PRIMARY(KV rms)	
(ii) SECONDARY (KV rms)	
c) ONE MINUTE POWER FREQUENCY WET WITHSTAND VOLTAGE (KV Peak)	
RATED FREQUENCY (Hz)	
TRANSFORMATION RATIO.	
RATED OUTPUT (VA BUDEN)	
CLASS OF ACCURACY.	
SHORT TIME THERMAL CURRENT FOR THREE SECOND.(KA rms)	
RATED DYNAMIC CURRENT (KA PEAK)	
RATED CONT. THERMAL CURRENT (KA rms)	
MAX. INSTRUMENT SECURITY FACTOR.	
DETAIL OF WINDINGS.	

PARTICULARS	CT RATIO	No. of Turns	Cross sectional Area of each Turn in Sq.mm (Aprox.)	Total weight of winding in Kg. per Unit
i) PRIMARY	200/5 A			
ii) SECONDARY	200/5 A			
GURANTEED RATIO ERROR (MAX.)				
GURANTEED PHASE ANGLE ERROR (MAX.)				
MAX. TEMP. RISE OF THE WINDING OVER AN AMBIENT TEMP. OF 50 DEG. C AT RATED CONTINUOUS THERMAL CURRENT, AT RATED FREQUENCY & WITH RATED BURDEN.				
i) INSULATION CLASS				
ii) INSULATION MATERIAL USED.				
CORE DETAILS:				
i) MATERIAL				
ii) WEIGHT OF CORE				
TYPE OF INSULTING OIL WHETHER AS PER IS-335 AND LATEST AMENDMENT.				
WHETHER SHORT CIRCULATING ARRANGMENT FOR CTs.				
BUSHING DETAIL				
a) MAKE				
b) CATALOGUE NO.				
c) TOTAL CREEPAGE DISTANCE (mm)				
d) IS TO WHICH BUSHING CONFORMS.				
e) ARCING DISTANCE (mm)				
f) MAX. CREEPAGE FACTOR.				
WHETHER CURRENT TRANSFORMER USED ARE OF RESIN CAST OIL IMMERSED TYPE OR OTHERWISE.				
IS TO WHICH CT CONFORMS.				
MAKE OF TERMINAL CONNECTOR				
(II) FOR SINGLE PHASE POTENTIAL TRANSFORMERS				
NAME & ADDRESS OF MANUFACTURER.				
MANUFACTURER'S TYPE & DESIGNATION.				
NOMINAL SYSTEM VOLTAGE (KV rms)				
HIGHEST SYSTEM VOLTAGE (KV rms)				

INSULATION LEVEL :			
a) IMPULSE WITHSTAND VOLTAGE(KV PEAK)			
b) ONE MINUTE POWER FREQUENCY WITHSTAND VOLTAGE (KV PEAK)			
RATED FREQUENCY (Hz)			
RATED TRANSFORMATION RATIO.			
RATED OUTPUT (VA BUDEN PER PHASE)			
CLASS OF ACCURACY.			
RATED VOLTAGE FACTOR AND TIME.			
WINDING CONNECTIONS			
a) PRIMARY			
b) SECONDARY			
DETAIL OF WINDINGS.			
PARTICULARS PT RATIO	NO.OF TURNS (approx.)	Cross sectional Area of each Turn in Sq.mm (Aprox.)	Total weight of winding in Kg. per Unit
i) PRIMARY WINDING (COPPER) 11 KV			
ii) SECONDARY WINDING (COPPER) 110 V			
GURANTEED RATIO ERROR (MAX.)			
GURANTEED PHASE ANGLE ERROR (MAX.)			
GURANTEED MAX. TEMP. RISE OF THE WINDING OVER AN AMBIENT TEMP. OF 50 DEG. C AT RATED CONTINOUS THERMAL CURRENT,AT RATED FREQUENCY & WITH RATED BURDEN.			
BUSHING DETAIL			
a) MAKE			
b) CATALOGUE NO.			
c) TOTAL CREEPAGE DISTANCE (mm)			

d) IS TO WHICH BUSHING CONFORMS.	
e) ARCING DISTANCE (mm)	
f) MAX. CREEPAGE FACTOR.	
i) INSULATION CLASS	
ii) INSULATION MATERIAL USED.	
CORE DETAILS:	
i) MATERIAL	
ii) WEIGHT OF CORE	
WHETHER ANY FUSE HAVE BEEN PROVIDED IN SECONDARY SIDE OF PT ?	
WHETHER NEUTRAL OF PT FOR HT SIDE IS ISOLATED/FLOATED ?	

III OTHER PARTICULARS FOR 11 KV COMPLETELY ASSEMBLED CT-PT SETS.

PARTICULARS	
OVERALL DIMENSIONS OF CT-PT SET.	
MOUNTING DETAILS.	
i) TOTAL MASS OF COMPLETELY ASSEMBLED CT-PT SET WITH OIL.	
ii) MASS OF IST FILLING INSULATION OIL.	
iii) VOLUME OF OIL (LITRES)	
i) MATERIAL OF TANK/ENCLUSURE SHEET.	
ii) THICKNESS OF THE TANK SHEET.(mm)	
a) BOTTOM.	
b) TOP COVER	
c) SIDES	
MAKE/MANUFACTURER'S NAME FOR INSULATING OIL TO BE USED IN CT-PT SETS.	
WHETHER ALL THE FITTINGS AND ACCESSORIES AS PER CLAUSE 3.06 OF SPECIFICATION PROVIDED ?	
WHETHER CT-PT SETS ARE SUITABLE FOR SATISFACTORY OPERATION OUNDER ABNORMAL SYSTEM CONDITION VIZ., SINGLE PHASING SUPPLY ARRANGEMENT BY LOOPING SUPPLY PHASE WITH OTHER LINE PHASE ?	
MIN. ELECTRICAL CLEARANCE BETWEEN PHASES. WITH BUSHINGS MOUNTED (MM)	
MIN. ELECTRICAL CLEARANCE BETWEEN PHASES. TO EARTH WITH BUSHING MOUNTED (MM) ?	

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WHETHER OIL CONSERVATOR PROVIDED ON CT-PT SET ?	
ARRANGEMENT PROVIDED TO TAKE CARE OF EXPANSION AND CONTRACTION IN OIL.	
WHETHER PRESSURE RELIEF DEVICE PROVIDED ?	
TEST RESULTS OF OIL AS PER IS : 335	
BREAK DOWN VOLTAGE	
TAN DELTA AT 90 DEG. C	
COLOUR OF OIL (SHALL BE COLOURLESS)	

Schedule – VI (A)



JODHPUR VIDYUT VITRAN NIGAM LIMITED

A Govt. of Rajasthan Undertaking

DEPARTURE/DEVIATION FROM TECHNICAL SPECIFICATION

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

S.No.	Main Deviations from Technical Specification.
-------	---

Certified that we agree to all the technical specification of the NIT except for the deviation to the extent indicated above.

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

Schedule – VI (B)



JODHPUR VIDYUT VITRAN NIGAM LIMITED

A Govt. of Rajasthan Undertaking

DEPARTURE FROM COMMERCIAL TERMS & CONDITIONS OF THE SPECIFICATION

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

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

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

Schedule – VII**JODHPUR VIDYUT VITRAN NIGAM LIMITED****A Govt. of Rajasthan Undertaking****LIST OF PAST SUPPLIES**

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

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

If executed partially to be mentioned (Qty. in Nos.)	whether still to be executed	Delivery stipulated in order	Remarks
7	8	9	10

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

(Signature)

Name & Designation
with seal of the bidder.

Schedule VII-A
TN-1381

TO WHOM SO EVER IT MAY CONCERN

This is to certify that M/s. _____
(complete with address) have manufactured and supplied the goods / equipments / material during the following financial year(s) to the utilities / Government Department / Discoms / SEBs as detailed out below :

FOR THE LAST THREE FINANCIAL YEAR FROM DATE OF OPENING OF TECHNO-COMMERCIAL BID.

S. No.	Financial Year in which material supplied	Detailed particulars of item(s) supplied	Name & particulars of Purchasing Authority	Order No. & date against which item(s) supplied.	Unit	Ordered		Actual supplied upto		Remarks
						Qty.	Value (Rs.)	Qty.	Value (Rs.)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.

Signature
Name & Designation
With Seal of the Tenderer
Date _____
Place _____

Signature & Seal of C.A.
Name :
Address :
Membership No.

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

CA Firm(_____)

Note: The CA certificate must be signed by the bidder and C.A. firm on the letter head of C.A. The details i.e. address of C.A. & membership No. shall clearly be mentioned on CA certificate. In case CA certificate is not signed by the bidder/ furnished without membership no. & address of C.A. then same may not be considered for which responsibility rests with the bidder.

Schedule – VIII

JODHPUR VIDYUT VITRAN NIGAM LIMITED
A Govt. of Rajasthan Undertaking

DELIVERY SCHEDULE
PART-A

The delivery schedule of the material by the Purchase Officer is as mentioned hereunder:-

S.No.	Particulars of Material	Commencement period per Month.	Rate of supply per Month	Period for completion of delivery of entire material
-------	-------------------------	--------------------------------	--------------------------	--

The delivery schedule shall be completion within 8 months from the date of receipt of purchase order including commencement period of 30 days at equal monthly rate.

PART-B

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

S.No.	Particulars of Material	Commencement period per Month.	Rate of supply per Month	Period for completion of delivery of material
-------	-------------------------	--------------------------------	--------------------------	---

- Note:**
1. During the commencement period the process of model assembly and submission of B.O.M. for approval shall be got completed.
 2. During the commencement period the contractual formalities shall be got completed.

(Signature)

Name & Designation
with seal of the bidder



JODHPUR VIDYUT VITRAN NIGAM LIMITED
A Govt. of Rajasthan Undertaking

Schedule – IX

List of Equipments and Technical Hands Available with the Firm
 (To be filled in by the bidders & enclosed with the bid)

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

1.	Name and Address of Manufacturer (With phone, mobile, fax & official E-mail ID)	
2.	Whether firm is proprietorship/ partnership/ Limited (Please give details & also enclose copy of memorandum of constitution of firm along with name of directions/ partners/ proprietor & their address.)	
3.	Place where works exist (indicate the name of the only one works from where you want to supply the offered material)	
4.	Details of machinery particularly with B.H.P. of each item installed	
5.	Details of staff employed in the works	
6.	Date when started the manufacturing of item under reference	
7.	List of items manufactured	
8.	Literature and drawings of items manufactured showing their description, size, design and other important technical particulars	
9.	Details of order so far, executed along with the names of organization to whom supplied	
10.	Manufacturing capacity	
11.	Is the workshop open for inspection by the representative of the board, if required?	
12.	Statement of financial resources and Banking Reference along with Balance-Sheet for previous two years	
13.	Testing facilities available for the manufactured articles in the testing laboratory of works	
14.	Whether the Firm is a small/medium/large scale industry	
15.	Registration No. with :-	
	i. Small Scale, National/State.	
	ii. DGTD	
	iii. State Industries Department.	

(Signature)

Name & Designation
with seal of the bidder.

GENERAL PARTICULARS ABOUT THE TENDER IN BRIEF

**JODHPUR VIDYUT VITRAN NIGAM LIMITED
OFFICE OF THE SUPERINTENDING ENGINEER (MM)
NEW POWER HOUSE INDUSTRIAL AREA, JODHPUR
TELEPHONE: 0291-2742223 / FAX: - 0291-2746539**

SPECIFICATION FOR SUPPLY OF 11KV CT PT 200/5 SET UNDER SPECIFICATION NO. JDVVNL/SE/MM&C/TN-1381

Last date for receipt of tenders	03.01.2018 upto 12:00PM
Date & time of tender opening	03.01.2018 at 3:00 PM
Bid security to be deposited	i) General Bidder : Rs 13,47,456.00 ii) Sick Unit : Rs 6,73,728.00 iii) SSI unit of Rajasthan : Rs3,36,864.00*
Cost of the specification	Rs 2,950.00 (non-refundable)
Tender processing Fee	Rs 1,000.00 (non-refundable)
Validity	120 Days after the date of opening of Techno – Commercial Bid

***In case SSI unit of Rajasthan quotes the less than the tendered quantity , then they are required to furnish Bid security @ 0.5% of the value of the quantity offered by them, failing which bid shall be considered non-responsive.**

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

VERY VERY IMPORTANT

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

1. Capacity, capability and competency proofing documents.
 - a. Capacity /orders of similar and higher rating of tendered equipment booked as on date of bidding with type and rating and construction details of equipment for which order received be indicated.
 - b. Copy of purchase orders of Erstwhile RSEB /SEB`S / Electric Utilities /Govt.

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2. Departments / Discom for similar or higher rating equipment latest executed.
3. Year wise past experience for last 5 years of similar or higher rating of tendered equipment.
4. The details of testing facilities available at the works and copies of latest type test certificates, carried out on similar ITEM.
5. Quality assurance plan.
6. Complete guaranteed technical particulars, out lines and general arrangement drawings along with Bill of Material.
7. Bids without Section-I, II, III & Schedules (I to X) shall be rejected.
8. Bids shall be furnished **through online**.
9. JdVVNL has the right to reject any offer on the basis of track record of poor performance in execution of previous order / equipment supplied /after sales service while evaluating the Techno-Commercial bid.
10. JdVVNL reserves the right to accept minor deviations in standard terms and conditions and also in technical and constructional features as specified in the technical specification **(Schedule-III)**.
11. Deviation of any kind shall not be quoted in price bid, if found quoted, the same shall be ignored.
12. The following facilities are to be provided by the supplier at his own cost to the inspecting officer of Nigam (JdVVNL):-
 - i. Suitable accommodation.
 - ii. Local conveyance between arrival point, place of stay, works and departure point.
 - iii. The supplier shall assist in arranging return ticket and reservation on the request of the inspecting officer for which the payment shall be made by the inspecting officer. In case of joint inspection, single or shared double room accommodation shall be provided.

GENERAL
Amendments in GCC & ITB

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

BID SECURITY

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

In case SSI unit of Rajasthan quotes the less than the tendered quantity, then they are required to furnish Bid Security @ 0.5% of the value of the quantity offered by them, failing which bid shall be considered non-responsive.

The Bid Security amount (as applicable) to be paid by Demand Draft/Banker's Cheque in favour of SR. AO (CASH & CPC), JDVVNL, Jodhpur (payable at Jodhpur) 342003 upto 4.00 p.m. upto one WORKING day prior to schedule date of opening of respective bid or Bank Guarantee, in specified format, of a scheduled bank in favour of Superintending Engineer (MM&C), JDVVNL, Jodhpur, be deposited to the Sr.Accounts Officer (MM&C), JDVVNL, New Power House, Industrial Area, Jodhpur-342003 upto 4.00 p.m. upto three WORKING days prior to schedule date of opening of respective bid. The Bank Guarantee against Bid Security be issued by Nationalized / Scheduled Bank. The same may be accepted after confirmation by issuing Bank. If any Bid Security Bank Guarantee not is proper format / not confirmed by the issuing Bank the same would not be accepted and the bidder would be immediately shorted out from bid process.

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

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

PERFORMANCE SECURITY

- (i) Performance security shall be solicited from all successful bidders except the department's of the State Government and undertakings, corporations, autonomous bodies, registered societies, co-operative societies which are owned or controlled or managed by the State Government and undertakings of the Central Government. However, a performance security declaration shall be taken from them. The State

Government may relax the provision of performance security in particular procurement or any class of procurement.

(ii) The amount of performance security shall be **five percent** of the amount of supply order in case of procurement of goods and services and **ten percent** of the amount of work order in case of procurement of works. In case of Small Scale Industries of Rajasthan it shall be **one percent** of the amount of quantity ordered for supply of goods and in case of sick industries, other than Small Scale Industries, whose cases are pending before the Board of Industrial and Financial Reconstruction (BIFR), it shall be **two percent** of the amount of supply order.

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

3) VENDOR REGISTRATION

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

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

APPENDIX-A

Bank Guarantee No. _____.
Security Amount : _____.
Issued on dated : _____.
Valid upto : _____.
Claim upto / Grace period: _____.

PERFORMA OF BANK GUARANTEE FOR BID SECURITY

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

To,

The Superintending Engineer (MM&C),
Jodhpur Vidyut Vitaran Nigam Limited,
Jodhpur.

1. Whereas _____ (name of the Bidder) (hereinafter called “the Bidder”) has submitted its bid dated _____ (date of submission of bid) for _____ (name of contract/ name of the material with Bid no. / TN No. _____) (hereinafter called ‘the Bid”).
2. KNOW ALL PEOPLE by these presents that WE _____ (name and address of branch of Bank) of _____ (name of country), having our registered office at _____ (addresses of bank) (hereinafter called ‘the Bank”), are bound unto _____ (name of Purchaser) (hereinafter called “the Purchaser”) in the sum of Rs. * _____ for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents sealed with the Common Seal of the said Bank this _____ day of _____ 20____.
3. THE CONDITIONS of this obligation are :
 - i. If the bidder withdraws its Bid during the period of bid validity specified by the Bidder in the Bid Form; or
 - ii. If the bidder refuses to accept the correction of error in his Bid; or
 - iii. If the bidder, having been notified of the acceptance of its Bid by the purchaser during the period of bid validity:
 - a. Fails or refuses to execute the Contract Agreement within the time specified in purchase / work order, if required, or
 - b. Fails or refuses to furnish the performance security within the time specified in purchase / work order in accordance with the GCC, or
 - c. Fails to commence supply of goods or services or execute work as per purchase / work order within time specified.
 - iv. If the bidder breaches any provision of the Code of integrity specified in the RTPP Act and Chapter VI of the RTPP Rules.
4. We undertake unconditionally and irrevocably to guarantee as primary obligator and not as surety merely to pay to the purchaser a sum of Rs. _____ (in words Rs. _____) upon receipt of its first written demand, without the purchaser having to substantiate its demand, provided

that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or all of the three conditions specifying the occurred condition or conditions.

5. The decision of the Superintending Engineer (MM&C), Jodhpur Vidyut Vitaran Nigam Limited, Jodhpur shall be final whether breach has been committed on the right to demand the amount of guarantee from us which has accrued to the purchaser.
6. This guarantee shall not cease or determine, if the purchaser grants time or indulgence or vary the terms of the contract with the Contractor or without our consent or knowledge.
7. The guarantee herein contained shall not be affected by any change in the constitution of the Contractor.
8. We _____ further undertake not to revoke this guarantee during its currency except with the previous consent of the Superintending Engineer (MM&C), Jodhpur Vidyut Vitaran Nigam Limited, Jodhpur.
9. All disputes arising under the said guarantee between the Bank and the Nigam or between the Contractor and the Nigam pertaining to the guarantee, shall be subject to the jurisdiction of the Courts in Jodhpur, Rajasthan alone.
10. This guarantee will remain in force up to and including one hundred eighty (180) days after the date of the opening of bids, i.e. upto _____, with a further grace period of Ninety (90) days and any demand in respect thereof should reach the Bank not later than the above date.

Yours faithfully,
Bankers (EXECUTANT)

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

Witness :

1. _____.
2. _____.

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

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