

BOKARO POWER SUPPLY CO. (P) LTD.

**HALL NO:- M-01, OLD ADMINISTRATIVE BUILDING,
ISPAT BHAVAN, BOKARO STEEL CITY – 827001**

**Reg. Office : Ispat Bhawan, Lodhi Road, New Delhi – 110 003
CIN:U40300DL2001PTC112074**

**TENDER NOTICE NO. BPSCL/P&C/18-19/PUR-089/NIT-756/4151
Dated 23.08.2018**



TENDER DOCUMENT

**SUBJECT: Supply, Erection, Testing & Commissioning of
Nitrogen Injection Fire Protection System for
10 Nos. of Transformer, as a complete package.**

**COST: Rs. 3,540/-
(Rupees Three Thousand Five Hundred Forty Only)**

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Bokaro Power Supply Co. (P) Ltd.

(A Joint Venture of SAIL & DVC)

Hall No: - M-01, Old Administrative Building,
Ispat Bhavan, Bokaro Steel City – 827001

Reg. Office : Ispat Bhawan, Lodhi Road, New Delhi – 110 003

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NOTICE INVITING TENDER

NIT No.: BPSCL/P&C/18-19/PUR-089/NIT-756/4151

Date: 23.08.2018

For and on behalf of BOKARO POWER SUPPLY COMPANY (P) LTD, sealed tenders in two parts, **Part - A** : Cost of Tender document & EMD, **Part- B** : Technical & Commercial Offer with copy of system generated acknowledgement-slip for online submission of sealed price are invited from the bidders meeting the qualification criteria stipulated in the bidding documents for supply of following items:

Item	Supply, Erection, Testing & Commissioning of Nitrogen Injection Fire Protection System for 10 Nos. of Transformer, as a complete package.
Cost of Tender Paper (non refundable)	Rs. 3,540.00 (Rupees Three Thousand Five Hundred Forty) Only including GST @ 18%.
Earnest Money (in Indian Rs.)	Rs. 1,00,000.00 (Rupees One Lakh) Only
Last date & time for submission of tender	24.09.2018 up to 12: 00 Hours
Bid Opening date & time	24.09.2018 at 12:15 PM

Qualifying Requirements: -

1. The bidder must have valid ISO 9001:2008 certification as on the date of bid opening.
2. The bidder should have minimum average annual turnover (MAT) of **Rs. 37.71 Lakhs only**.
 - Average annual turnover shall be determined taking into consideration turnover of preceding three (03) consecutive financial years. Other income shall not be considered for arriving at annual turnover.
 - Audited annual account along with auditor's report of the bidder should be furnished in support of the same. Where audited account is not mandatory as per the law, the bidder has to submit annual financial turnover during the consecutive last three (03) years ending 31st March of the previous financial year duly certified by CA.
3. The bidder shall have requisite experience of "**Manufacturing, supply, installation, testing and commissioning of Nitrogen Injection Fire Protection System for Power Transformers having capacity 10 MVA or more**" to any PSU / Government / Semi Government Organization or Joint Venture thereof / Company registered under Companies Act.
4. The bidder is required to submit self-attested photocopies of documents (Orders, Completion certificate etc.) in support of their eligibility and experience. In addition, bidder shall submit an affidavit in enclosed format at **Annexure – III**.
5. The bidder shall furnish latest **IT return** and **GSTIN**. The bidder is also required to submit **Annexure – IV** as instructed therein.

General Terms & Conditions:

- i) Offer shall be accompanied with Cost of the tender documents of **Rs. 3,540.00** (non-refundable) in the form of Demand Draft / Banker's Cheque drawn from any Nationalized / Scheduled Bank except Co-Operative Bank, in favor of **Bokaro Power Supply Company (P) Ltd.**, Payable at Bokaro Steel City.
- ii) Offer shall be accompanied with Earnest Money Deposit (EMD) of **Rs. 1,00,000.00 (Rupees One Lakh) Only** in the form of Demand Draft / Pay Orders / Bankers Cheque Payable at Bokaro Steel City / Bank Guarantee having validity for, *one (01) year*, from any Nationalized Bank / Scheduled Bank except Co-operative Bank drawn in favor of **Bokaro Power Supply Company (P) Ltd.** as per format available at our website: www.bpscl.com

In case of forfeiture of EMD by BPSCL the bidder is required to re-imburse the applicable GST to BPSCL.

- iii) However, Micro & small enterprises (MSEs) / PSU /Govt. Undertakings and Co-operative societies will be exempted from submission of cost of tender document & Earnest Money as per government policy. For MSEs the exemption from paying cost of tender document & Earnest Money will be granted only on submission of valid copy of certificate having a valid Entrepreneurs Memorandum (EM) number / Udyog Adhaar Memorandum (whichever applicable). SSI/NSIC certificate holders should also submit Entrepreneurs Memorandum / Udyog Adhaar Memorandum (whichever applicable). However unit claiming exemption is required to submit copy of registration certificate indicating clearly the item category for which they are registered.
- iv) **Offers not accompanied with Cost of Tender Document (as per clause i) or Earnest Money Deposit (EMD) (as per clause ii) or documents for exemption (as per clause iii) will be treated as INVALID.**
- v) **BPSCL reserves the right to :**
- Re-tender / extend the due date of submission of offer.
 - Accept or reject any offer / all offers in full or part at any time at any stage without assigning any reasons—and without any compensation thereof to the bidders.
 - Modify the tender documents at any stage before the due date of tender.

Note:

- Tender documents are to be downloaded from **Website: www.bpscl.com** only.
- Bidders are requested to visit above website regularly for any addendum / corrigendum / Extension till opening of the NIT. **Any such changes shall not be published through Press advt.**

For and on behalf of
Bokaro Power Supply Company (P) Limited

(V Agrawal)
DGM (P&C)
Tel : 8986874118
Email: purchase.bpscl@gmail.com

CONDITIONS & RULES TO BE OBSERVED IN SUBMITTING TENDERS

1.01 Manner of Submission of the Tender

The tender shall be divided into 02 parts as follows:-

- a) **Part A:** This part Comprises of Cost of Tender document & EMD.
- b) **Part B:** This part Comprises of Technical and Commercial details, consent on terms & conditions of NIT/ Signed Copy of Tender Document along with copy of **SYSTEM GENERATED ACKNOWLEDGEMENT-SLIP FOR ONLINE SUBMISSION OF SEALED PRICE*** bid etc.

Sealed Tenders *through Regd. Post/Speed Post/In-person/Courier Service* only, in an envelope containing 02 (Two) separate sealed envelopes as mentioned above with NIT No. & date of opening along with Sender's Name & Address printed on it, are to be sent to the below mentioned address:

DGM (P&C)
Bokaro Power Supply Co. (P) Ltd.
Hall No.M-01, Old ADM Building
Ispat Bhawan, Bokaro Steel City – 827001
Ph: 06452 240380, Tel: 8986874118

*** PROCESS FOR ONLINE SUBMISSION OF SEALED PRICE:**

1. Online sealed Price Bid (**Landed Cost Excluding GST**) through URL : <http://www.buyjunction.in>

The process of submission of Online Price bid is as detailed hereunder-

Step 1: Type <http://www.buyjunction.in> in the internet explorer.

Step 2: Click on Login (present on Top right side of the Page)

Step 3: Click on **View Live Auctions and Tenders**.

Step 4: In the right side open/ global tenders link will be displayed.

Step 5: Click on the link for the above mentioned tender link present under Open tenders

Step 6: Click on new user if you are not registered in buyjunction earlier. Click on Existing user in-case you have already registered in buyjunction earlier. Existing users can login with their user id and password.

Please note foreign bidders are required to select their bidding currency from the drop down menu available before proceeding further (where ever applicable).

New Users:

Steps to get your **User ID** and **Password**

1. Click on the required tender link under “**Open Tenders**”
2. Choose your Auction currency in-case any option is coming to select currency. Click on “**New User**”
3. Fill up the “**Registration Form**” and click on “**Submit**”. All fields marked with (*) are mandatory fields.
4. On submitting the filled-up registration form, an auto generated email will be sent to the email address you have mentioned in the registration form containing your User ID and Password.
5. Changing of password on first login is compulsory.
6. On receipt of the User ID and Password you become an **Existing User**. Now follow the steps of existing user to login to the auction site.

Existing Users

1. Click on the required tender link under “**Open Tender**”
2. Click on “**Existing User**”.
3. Log in with your existing user id and password for placing your bid.
4. Read through the “**Bidding Procedure**” to proceed further for bidding.

Bidding Procedure

After logging in with your user id and password you have to accept the “**Auction Terms**”.

Steps to accept the “Auction terms”:

1. Click on “**Auction Terms**”.
2. Then click on “**View term without DSC**”
3. Click on the relevant auction terms appearing under “**Term**” column.
4. Select the check box on the left-side of the relevant auction terms.
5. Click on the button besides “**Accept**”.
6. Then click on “**Submit**”.
7. A message will be displayed to you mentioning your acceptance to terms for auction.
8. It is mandatory to accept the terms of online bidding in order to proceed for submission of bid.

Steps to Submit Price Bid

1. Click on “**Bids.**”
2. Then click on “**Live Auction.**”
3. Put your login password as transaction password
4. Select the auction id and click on add to watch list.
5. Now the bidding screen is visible.

6a. For Template Bidding

1. Click on **Icon “T”** on left column of bidding screen (Which will appear separately **for each lot**).
2. A template form will open where you need to fill up the price & click on evaluate at the bottom
3. If you want to quote the evaluated price then click on “**confirm**”.
4. After clicking on the confirm button of the template window, your price will appear in the “**New Bid**” box.

6b. For Non-Template Bidding

1. Fill your Price in the “**New Bid Box**” visible on the bidding screen.
2. Select the check box at the extreme left of the bidding screen
3. Click on “**Submit**” button placed at the bottom left of the screen.
4. Bid once placed will have to be honoured.
5. You will see “**Bid Accepted**” in the “**Result**” column. This indicates that your bid is accepted and registered in the system.

Steps to take a print-out of the receipt

1. Once you have placed your bid, to download Bid Receipt, kindly click on “**Download**”.
2. Then click on “**Bid Receipt for Open Tender**”.
3. Select the auction to generate receipt.
4. Take print out of the same market-wise (Term List)/ item-wise (Auction list).

Note: For any clarification on the bidding process please contact

Mr. Anjan Buda- 9163348263- anjan.buda@mjunction.in

Mr. Manish Nandwana _ 9163348165_ manish.nandwana@mjunction.in

Ms. Monalisa Shaw _ 9163348297_ monalisa.shaw@mjunction.in

Mr. Anshu Verma – 8873002772 - anshu.verma@mjunction.in

Mr. Mukesh Kumar Singh- 8873002741 – mukesh.singh@mjunction

} **For Bokaro Office**

A copy of System generated **acknowledgement-slip** for Online submission of sealed price bid is to be submitted along with Techno-commercial Bid.

1.02 Tender Validity Period

Validity of the offer shall be **Five (05) months** from the bid opening date. In case of extension of "Bid submission Date", the validity will be counted from the extended bid opening date.

1.03 General Instructions:

- i) Tenderer shall clearly indicate that their prices are firm in all respect till execution of the order.
- ii) Specification, quantity, unit rate, freight, insurance, packaging, forwarding, taxes etc. should be mentioned separately and clearly.
- iii) **Any conditional offer or offer having deviations is liable to be rejected.**
- iv) Where agent commission is involved the same is to be indicated in percentage.

- v) You have to submit Tender Document bearing your signature and seal on all the pages along with Techno-commercial offer / Consent on NIT's Terms & Conditions otherwise, it will be presumed that you do not accept our terms and conditions and this may lead to rejection of your offer forfeiting your claims if any.
- Bidders are advised to mention page no. on each page of documents submitted by them. BPSCL shall not bear any responsibility in case of any reported loss of documents submitted by the bidder during tender opening or thereafter.
- vi) If the intending tenderer is a Firm or Company, then they shall, in the forwarding letter, mention the number and names of all the partners & shall sign before submitting the same, unless the Power of Attorney holder has specifically been authorized in this respect.
- vii) The tender rates shall be written in English, both in words and figures. In case of any discrepancy between the words & figures of the rates quoted, the rates expressed in words shall be taken as correct. In case of discrepancy in the Unit Rate and Amount, Unit Rate will govern.
- viii) Price or any indication of price shall **NOT** be mentioned in the Techno-Commercial Bid.
- ix) The sealed tenders received will be opened on scheduled opening date and time in the office of Purchase & Contract, in presence of such bidders who might choose to witness the same
- x) If name of the bidder is not mentioned on the envelope, it may be considered as unsolicited and processed as per P&WP in vogue.
- xi) In case the date of tender opening happens to be holiday, the tender will be opened on the next working day at the same time.
- xii) Communication regarding date of Opening of Price-Bid shall be displayed on the Notice board of Purchase & Contract and individual communication to the techno-commercially eligible bidders will be sent only to their e-mail address given in tender documents.
- xiii) Offers from two or more bidders shall summarily be rejected if they have any of the following parameters common:
- a) Same PAN
 - b) Same GST Number
 - c) Same Postal address
 - d) Same E-mail ID
 - e) Same Mobile number
 - f) Same person signing in more than one offer/representing more than one bidder.
- xiv) BPSCL reserves the right either to reject any/all the tenders without assigning any reason thereof.

2.00 GENERAL TERMS AND CONDITIONS

- 2.01 BPSCL reserves the right to call for original documents for verification at any time during tendering, evaluation and / or the execution of the contract. In case of any documents / information submitted by bidder is found to be false or containing any misrepresentation or having any fraudulent declaration in it or the bidder has suppressed documents/facts, then in such eventuality, EMD will be forfeited and legal action may be initiated for damages, criminal proceedings etc including cancellation of contract, banning of business dealing etc.
- 2.02 If any tenderer withdraws his bid after opening of bids without giving any satisfactory and acceptable explanation thereof, the tenderer shall be disqualified for making any tender of the BPSCL for a minimum period of six months and the Earnest Money will be forfeited.
- 2.03 Tenderers shall quote their firm rates and no negotiations will be held except with the lowest tenderer, if required.
- 2.04 **Handling of Earnest Money:**
- a) Earnest Money will be refunded to the un-successful tenderer after finalization of tender and no interest will be paid for the same. **Bidders are requested to submit their bank details for returning of EMD.**
 - b) The amount of Earnest money will be refunded against submission of Security Deposit in case of successful Tenderer.
- 2.05 **Packing :**
- a) **Responsibility for proper packing** – The Supplier shall be responsible for the materials being sufficiently and properly packed, for transport by rail/road/sea/air/ or any combination of above, so as to ensure their being free from loss or damage on arrival at the destination.
 - b) **Marking of Packages, Packing, etc.** - Each package delivered under the contract shall bear the following:-
 - Name of the Supplier
 - Contract/Order Number
 - Consignee's name and address
 - Description and quantity of contents
 - Gross weight, net weight,
 - Distinctive number or mark which is also to be shown, for the purpose of identification, on the Supplier's packing list.
- 2.06 **Delivery:** Timely delivery is the essence of the contract & must be completed as per the dates specified therein.
- 2.07 **Liquidated Damages:** In the event of supply not being effected within the contractual delivery schedule given in the order, liquidated damages @ ½ % of the value of delayed materials for each week of delay and part thereof, subject to a maximum of 05% of the total order value is recoverable from the supplier. The deduction of such damages shall not relieve the Supplier from the contractual obligations to complete the supply as stipulated in the Contract.
- 2.08 **Risk Purchase:** If the Supplier fails to deliver the material either in full or in part, within the prescribed delivery period, the Purchaser shall be entitled at his option to take alternate procurement action, at the risk & cost of the supplier for the unsupplied portion of the goods / items for which delivery has expired.
- 2.09 The bidder must mention applicable GST rate in their offer with compliance of following GST clauses:
- a) All bidders should strictly quote GST as extra. Offers with GST as inclusive will not be acceptable and will be liable for rejection.
 - b) Bidder would pass on the tax benefit/savings, if any, on account of output taxes to BPSCL.
 - c) Bidder shall agree to do all things not limited to providing GST invoices or other documentation as per GST Law relating to the above Services, payment of taxes, timely filing of valid statutory returns for the tax period on the Goods and Service Tax Portal etc. that may be necessary to match the invoice on GSTN common portal and enable BPSCL to claim input tax credit in relation to any GST payable under this agreement or in respect of any part under this agreement.
 - d) In case the Input Tax Credit of GST is denied or demand is recovered from BPSCL on account of any non-compliance by the Supplier/ Contractor, including non-payment of GST charged and recovered, the Supplier/ Contractor shall indemnify BPSCL in respect of all claims of tax, penalty and/or interest, loss, damage, costs,

expenses and liability that may arise due to such non-compliance. Further, in case of any differential tax liability on account of any wrong classification/valuation etc. by the vendor, BPSCL will not be liable to reimburse any part of such differential tax, interest, penalty etc. It will be the sole responsibility of the vendor to discharge appropriate taxes, as applicable.

e) Supplier/ Contractor shall maintain high GST compliance rating track record at any given point of time.

- 2.10 **Bank Details:** Bank details mentioning account number, bank name, city, branch name and branch code should be mentioned in the offer for NEFT / RTGS payment.
- 2.11 **Paying authority – In-charge (F&A),** BPSCL. Bill in triplicate duly receipted on the revenue stamp with a copy of TC, GC & Packing list etc. are to be submitted to **Consignee: In-Charge (Stores), Power Plant,** Bokaro Power Supply Company (P) Limited for processing of the same.
- 2.12 **Inspection:** Acceptance of material is subject to inspection. Inspection will be done at BPSCL Stores after receipt of material.
- 2.13 **FORCE MAJEURE:** Supplier shall not be considered in default if delay occurs due to reason beyond their control such as acts of God, Natural calamities, Civil wars, fire, Strike, Frost, Floods, Riot and Acts of unsurpassed power. Only those causes which have duration of more than seven days shall be considered in force majeure clause. In the event of delay due to such clause the delivery period will be extended for a length of time equal to the period of force majeure at the option of BPSCL. Order may be cancelled without any liability what so ever on the part of BPSCL.
- 2.14 **Banning of Business Dealings:** On arising any situation or occurrence of any event as mentioned in Clause 6 of the Guidelines on Banning of Business Dealings, the tenderer / bidder or supplier under the tendering process or contract with BPSCL, as the case may be, shall be liable for action under and in accordance with the aforementioned Guidelines. The “Guidelines on Banning of Business Dealings” shall form part of the Tender/Contract.
- 2.15 **Security Deposit:** The successful tenderer will have to deposit as security, **02%** of purchase order value, subject to a minimum of **Rs. 7,50,000.00**, for satisfactory execution of the order in the form of **Bank Guarantee** (as per BPSCL format available at www.bpscl.com) having validity up to guarantee period of the item to be supplied plus three (03) months of claim period. Bank Draft/ Bankers Cheque in favor of Bokaro Power Supply Company (P) Ltd. payable at Bokaro Steel City may also be submitted in place of Bank Guarantee.

The expression “satisfactory execution of the order,” shall mean fulfillment of all obligations arising out of and in connection with the purchase order / contract. In case of default in satisfactory execution of the order the security deposit shall be forfeited by BPSCL. Amount of penalty and/or Liquidated Damages imposed (if any) will be recovered from Security Deposit. If the amount of Security Deposit is not sufficient, the bidder will be required to pay the balance amount to BPSCL. If the bidder doesn't pay the balance amount, the same shall be deducted from any sum or sums which may be due or may become due to the successful tenderer from the BPSCL on any account whatsoever.

In case of forfeiture of Security Deposit, the bidder is required to re-imburse the applicable GST to BPSCL.

- 2.16 **RATE FINALIZATION:** BPSCL reserves the right to finalize the rate through either of the following modes:
1. a. Either through Online Sealed Price Bid obtained just before Reverse Auction
- OR**
- b. Opening of Online Price (*submitted on www.buyjunction.in*) submitted at the time of techno-commercial bid.
2. Through Reverse Auction to be conducted by our service provider **M/s. mjunction.**
 3. If RA is not concluded for any reason, RA may be re-launched or case may be determined on the basis of online price received along with the techno-commercial bid.
 4. Where it is decided not to conduct the RA, the techno-commercially accepted bidders shall be asked to submit physical sealed decrement. In this case – On line price bid and physical decrement, as decided by BPSCL, shall be opened together on same day and case be processed.

3.0 TECHNO-COMMERCIAL TERMS & CONDITION:**3.1 Description of Material:**

Sl. No.	ITEM DESCRIPTION	QUANTITY
A. SUPPLY OF GOODS:		
1.	Cat. No. - 73181000361 Nitrogen Injection Fire Protection System consisting of FE cubicle, control box, signal box, transformer conservator isolation valve and oil drain pipe for 10 MVA transformers, <i>as per detail technical specification of transformers (Annexure - I) & technical specification of NIFPS (Annexure – II).</i>	06 Sets
2.	Cat. No. - 73181000261 Nitrogen Injection Fire Protection System consisting of FE cubicle, control box, signal box, transformer conservator isolation valve and oil drain pipe for 15 MVA transformers, <i>as per detail technical specification of transformers (Annexure - I) & technical specification of NIFPS (Annexure – II).</i>	01 Set
3.	Cat. No. - 73181000761 Nitrogen Injection Fire Protection System consisting of FE cubicle, control box, signal box, transformer conservator isolation valve and oil drain pipe for 80 MVA transformers, <i>as per detail technical specification of transformers (Annexure – I) & technical specification of NIFPS (Annexure – II).</i>	03 Sets
4.	Cat. No. - 73181000564 Electrical Resistance Welded (ERW) pipes with support & fitting as per standard norms for connection between transformers & FE cubicle.	As per requirement (for 10 Sets of NIFPS)
5.	Cat. No. - 73181000565 Electrical resistance welded (ERW) GI pipes & fittings as per standard norms for oil connection between FE cubicle and oil pit.	As per requirement (for 10 Sets of NIFPS)
6.	Cat. No. - 73181000562 FRLS Armored Cable, Size: 12C X 1.5 sq. mm.	3000 Meters
7.	Cat. No. - 73181000563 FRLS Armored Cable, Size: 4C X 1.5 sq. mm.	1000 Meters
B. SUPPLY OF SERVICES:		
1.	Erection, testing, commissioning (<i>including all civil (Plinth of FEC & Oil Pit), structural work, electrical, mechanical, instrumentation jobs</i>) of Nitrogen Injection Fire Protection systems as per detail technical specification of Transformers (Annexure - I), Tech. Specifications of NIFPS (Annexure – II) and Special terms & conditions given below.	10 NIFP System

3.2 Special Terms and Conditions:

1. The bidder should design, manufacture, supply, install, test & commission all the ten nos. of Nitrogen Injection Fire Protection System as a complete package. The equipment shall be connected with the GI earthing strips with the existing earth grid for the earthing of the equipment.
2. Properly authenticated test & guarantee certificates are to be provided by the successful bidder.
3. **Guarantee:** The successful bidder shall give guarantee for performance of individual equipment for a period of 12 months from date of commissioning.

During guarantee period, elimination of defects in design, manufacture, material quality, workmanship, erection and replacement of defective parts shall be done by them at no extra cost and to the satisfaction of the purchaser. (*Cost of dismantling, transport, re-erection, if any, during elimination of the defects/replacement of defective items shall be borne by the successful bidder.*)

4. **Performance Test:** The successful bidder shall arrange for performance test of the complete system at site which will be witnessed by the representative of BPSCL. These tests shall include simulation and verification of the response of complete system without injection of Nitrogen.
5. **Factory Test:** Following tests shall be carried out at supplier's workshop in presence of BPSCL's representative.
 - a) Cubicle showing oil drain and nitrogen injection.
 - b) Operation of conservator isolation valve
 - c) Operation of control box.
 - d) Fire extinguishing performance test on total system.
6. Commissioning of the systems is to be done by the successful bidder at the site within the existing space & other restrictions imposed by the actual conditions.
7. The successful bidder has to visit the site to make himself fully conversant with the site condition and nature of proposed work.
8. The Successful bidder has to clear his doubt about the technical parameters and drawings and obtain necessary clarifications from the BPSCL, if required.
9. Plant and equipment supplied should be of latest technology. All materials and equipment should comply with latest codes and standards, applicable nationally / internationally. A consolidated list of all codes and standards followed or adopted for design, manufacturing and testing shall be submitted. Preferably, all equipment and accessories shall confirm to the latest Indian Standards wherever applicable.

All electrical equipment supplied shall be designed, manufactured, tested & erected as per the latest revision of Indian Electricity Rules, Statutory requirements of the Govt. of India, Govt. of State. In the event of requirement of Technical Specification exceeding the requirement of corresponding standards, regulations & safety codes, the specification provided in the Technical Specification shall govern. In the event of conflict between standard regulation & Technical Specification, the most stringent shall be applied.

10. All equipment as may be necessary shall conform to the provision of statutory and other regulations in force such as Indian explosives Act, Indian Factories Act, Indian Boiler Regulation, State Factories Act, Central Pollution Control Board, Indian Weights & Measures Act, etc. The successful bidder shall take necessary steps to get all the installations within his scope of supply approved by the concerned legal authorities.
11. Execution of entire work shall be carried out in such a manner that normal working of the existing plant shall not get interrupted. Shut downs, for mutually agreed periods shall be arranged by BPSCL for interconnections / modifications / extensions of existing facilities.
12. The scope of work for Erection & laying of cables shall also include supply, fabrication, installation, testing and commissioning of cable laying accessories like flexible conduits, GI pipes, clamps, cable No. Tags, ferrules, glands, copper lugs, jointing kits, Termination kits, nuts & bolts and sundry items etc.
13. After erection, all equipment, pipes, structures, etc., shall be thoroughly cleaned and painted with one coat of primer and two coats of approved color paints as per standard norms.

Fire proof paints shall be of good quality. Painting in damp or foggy weather shall not be resorted to. Painting specification and procedure shall be subject to the BPSCL's approval.
14. All technical details, specifications, diagrams, certificates or any other related documents are to be submitted in original along with sufficient numbers of copies to the EIC for approval, and handed over to BPSCL later after commissioning.
15. All the manufacturing / fabrication works shall be carried out only on the basis of approved drawings and schemes or as directed by the BPSCL. It is solely responsibility of the successful bidder to ensure that all working drawings prepared by him shall be approved by BPSCL prior to start of work.

16. **Safety**

- a) All the statutory & safety rules are to be strictly followed by the successful bidder and by the personnel deployed by them during the installation, testing and commissioning of the systems.
- b) Prior to commencing any work at site, the successful bidder shall obtain clearance from BPSCL's Engineer/Safety Department and shall abide by all the safety rules and regulations of the plant.
- c) All safety appliances / kits required for the personnel during testing and commissioning shall be arranged by the successful bidder.
- d) The safety precautions shall conform to norms set by BPSCL Safety Department and relevant Indian Codes.
- e) The successful bidder will be solely responsible for any unsafe, illegal, unworthy, or, untoward incident which may occur during the whole job.

17. All statutory licenses & requirements of all items (like license for gas filling & storing in pressurized N₂ Gas Cylinders), are to be arranged & relevant certificates to be submitted in original by the successful bidder.
18. Any unforeseen problem(s) which may arise while installing, testing & commissioning the systems, is (are) to be solved by the successful bidder free of cost.
19. The installation, testing & commissioning of the subject systems will be deemed complete only when a job completion certificate will be issued by the EIC of BPSCL, whose decision will be final in this regard.
20. All the resources including manpower, tools & tackles, etc. will have to be provided by the successful bidder.
21. BPSCL will only provide space, LT Power supply & illumination.
22. The successful bidder may appoint sub-contractor for installation, testing & commissioning of the system, subject to prior approval of the EIC, BPSCL. They will have to ensure presence of well experienced engineers and technical staff as per requirement for erection, testing and commissioning of equipment.
23. **Inspection:** Before supply, the items will be inspected by the Representative of BPSCL at the works of the successful bidder (*intimation to be given for inspection at least in four (04) weeks advance*). Items are to be dispatched only after the dispatch clearance duly given by BPSCL.
24. **Training:** The successful bidder must arrange for training of operation and maintenance of NIFPS, at their works / training center, for at least two (02) Engineers of BPSCL, other than site training during commissioning. Training lectures & associated literature should be provided at no extra cost.

3.3. The Commercial Bid should Confirm/indicate the following:

1.	Price	To confirm 'Firm price for the duration of the Contract'.
2.	Delivery Term	FOR BPSCL Stores, BS City
3.	Packing & Forwarding Charges	Extra/Inclusive (Applicable amount to be mentioned in percentage or amount)
4.	Freight Charges	Extra/Inclusive (Applicable amount to be mentioned in percentage or amount)
5.	Transit Insurance	To be arranged and borne by Supplier
6.	GST Registration	To indicate GST Registration Number
7.	GST	Extra- Applicable rate to be mentioned HSN/ SAC- to be mentioned
8.	Payment Term	A) Supply of Goods: - i) 80% of order value for goods against GRN (after inspection at site) ii) 10% of order value for goods will be released after successful installation, testing, commissioning at site. iii) Balance 10% of order value for goods will be kept as retention money and will be released after completion of Guarantee period. B) Supply of Services:- i) 90% of order value for services will be paid after successful Installation, testing, commissioning of NIFPS. ii) Balance 10% of order value for services will be kept as retention money and will be released after completion of guarantee period.
9.	Delivery Period	i) Party has to submit GA drawings, Technical Data Sheets, etc. of NIFPS and get them approved by BPSCL, within one (01) month from the date of issue of purchase order. ii) Delivery of the NIFPS should be within five (05) months from the date of approval of drawings & data sheets. iii) Installation, testing & commissioning of the systems will be done within four (04) months from the date of delivery of material.
10.	Security Deposit	To Confirm as per relevant Clause of NIT
11.	Guarantee /Warranty	To Confirm as per relevant Clause of NIT
12.	LD Clause	To Confirm as per relevant Clause of NIT
13.	Validity Period	To Confirm as per relevant Clause of NIT

4.0 PRICE BID / RA FORMAT:**Special Instruction –**

1. *In the event of a L1 Bidder backing out prior to placement of order, in addition to forfeiture of EMD the bidder should be suspended for a period of six months from the date of issue of suspension order*
2. *Breakup of quoted LC (Landed Cost) rate shall be submitted by the bidder. In case of refusal of bidder to submit price break up, EMD will be forfeited and the bidder shall be suspended for a period of six months from the date of issue of suspension order.*
3. **Price Basis – Rs. For complete package for 10 NIFPS on LC basis excluding GST (to be quoted through <http://www.buyjunction.in>).**

Sl. No.	Name of Job	Qty.	Amount (Rs.)
A*	Supply, Erection, Testing & Commissioning of Nitrogen Injection Fire Protection System for Transformers, as a complete package.	10 Sets	
B	Packing & Forwarding		
C	Freight		
D	Transit Insurance		
E	Any other tax or charges		
LANDED COST			

GST extra as applicable:

	GOODS	SERVICES
GSTIN		
HSN CODE / SAC		
I	CGST (in %)	
II	SGST / UTGST (in %)	
III	IGST (in %)	

Price Break Up Format For Sl. No. A*				
Sl. No.		Qty.	Rate / Unit (Rs.)	Amount (Rs.)
A.1	SUPPLY OF GOODS:			
1.	Cat. No. - 73181000361 Nitrogen Injection Fire Protection System consisting of FE cubicle, control box, signal box, transformer conservator isolation valve and oil drain pipe for 10 MVA transformers.	06 Sets		
2.	Cat. No. - 73181000261 Nitrogen Injection Fire Protection System consisting of FE cubicle, control box, signal box, transformer conservator isolation valve and oil drain pipe for 15 MVA transformers.	01 Set		
3.	Cat. No. - 73181000761	03 Sets		

	Nitrogen Injection Fire Protection System consisting of FE cubicle, control box, signal box, transformer conservator isolation valve and oil drain pipe for 80 MVA transformers.			
4.	Cat. No. - 73181000564 Electrical Resistance Welded (ERW) pipes with support & fitting as per standard norms for connection between transformers & FE cubicle.	As per requirement (for 10 Sets of NIFPS)		
5.	Cat. No. - 73181000565 Electrical resistance welded (ERW) GI pipes & fittings as per standard norms for oil connection between FE cubicle and oil pit.	As per requirement (for 10 Sets of NIFPS)		
6.	Cat. No. - 73181000562 FRLS Armored Cable, Size: 12C X 1.5 sq. mm.	3000 Meters		
7.	Cat. No. - 73181000563 FRLS Armored Cable, Size: 4C X 1.5 sq. mm.	1000 Meters		
A.2	SUPPLY OF SERVICES:			
	Erection, testing, commissioning (including all civil (Plinth of FEC & Oil Pit), structural work, electrical, mechanical, instrumentation jobs) of Nitrogen Injection Fire Protection systems.	10 NIFP System		
Total for Sl. No. A* = (A.1+A.2)				

Annexure - I

Specification of Transformers

SL. No.	Name of Transformer	Capacity (MVA)	Voltage Ratio (KV)	Total Quantity of Oil (Litres)
1.	21T	15	11.5/6.9	11645
2.	23T	10	11.5/6.9	6200
3.	GT#6	80	138/11.5	36000
4.	GT#7	80	138/11.5	35600
5.	GT#8	80	138/11.5	35600
6.	TU#6	10	11.5/6.9	7200
7.	TU#7	10	11.5/6.9	6800
8.	TU#8	10	11.5/6.9	6150
9.	TS#1	10	132/6.9	13400
10	TS#2	10	132/6.9	13500

Note: The Oil quantity given above is in the presently installed transformer may change slightly if the transformer replaced by another transformer having similar capacity and voltage ratio.

Technical Specification and Principles of NIFPS operation

1. Automatic NIFPS shall be provided for firefighting of 10 nos. of transformers (Technical Specification attach in Annexure - I) installed at Transformer Yard of BPSCL. This system extinguishes fire of oil filled transformers by injection of Nitrogen. The principles employed in the system are - Drain and Stir. The result of applying the principle is to extinguish the fire quickly. The system consists of automatic top oil drainage facilities and nitrogen injection system for stir and cooling of oil.

The pressurized nitrogen cylinder placed in a cabinet is connected to the transformer oil tank (near its bottom) with the help of pipes and valves. Cable connections are to be provided from the signal box placed on the transformer to the control box in the control room and from the control box to the cabinet.

Fire detecting system placed at the top of transformer is to be connected in parallel to the signal box. The signal box shall be connected to isolation valve, fitted between the conservator tank and buchholz relay, for blocking the oil flow from conservator tank, control box is also to be connected to the relay panel in the control room for system activation signals.

The system is automatically operated with the help of activating signals for immediate operation in the event of rise of oil temperature / fire. On receipt of all activating signals, the drain of a pre-determined quantity of oil commences thus removing high temperature top oil layer.

After a time depending on the scenario, the nitrogen is released from the cylinder to a pressure reducer / regulator and injected inside the tank at a pre-fixed rate, stirring the oil thus bringing the temperature of top oil layer down. Nitrogen occupies the space created by oil drained out and acts as an insulating layer between the tank oil & fire on top cover. The isolation valve for conservator blocks oil flow from conservator tank to isolate it and subsequently preventing aggravation of fire.

The system should operate auto as well as manual mode with remote and local position.

2. The work covers Design, Engineering, Documentation, Procurement, Manufacture/Fabrication, Assembly, Testing and Inspection at manufacturer's works, painting, packing, insurance, supply, transportation to site, unloading, storage, erection, testing, commissioning, final painting, stabilizing and performance guarantee test of the equipment and facilities for Nitrogen Injection System for 10 nos. Transformers (Capacity, Voltage ratio & Quantity of Oil mentioned in Annexure - I) at Transformer Yard of BPSCL on Turn-key basis. This shall be complete in all respects i.e., civil & structural work, electrical, mechanical, instrumentation, etc.
3. The system shall be required for automatic prevention, extinguishing of fire and avoid the explosion of the transformers. The system shall also be provided with the manual operation facilities (remote and local position). The Nitrogen Purging System provided under this package is given in the subsequent paragraphs.
 - 3.1. A steel framed cabinet to be kept on RCC foundation near each transformer to accommodate the following:
 - a. Nitrogen Cylinders of adequate capacity with pressure gauge and valve.
 - b. Solenoid / electrically operated magnetic valve, actuators / lifting magnet.
 - c. Electro-mechanical control equipment for oil drain (quick drain valve) with oil drain pipe
 - d. Electro-mechanical control equipment for nitrogen release.
 - e. Pre-determined regulated nitrogen flow arrangement to release the nitrogen
 - f. Flanges on top panel for connecting oil drain and nitrogen injection pipes for transformer.
 - g. Limit switches for sequential operation and monitoring of the system.
 - h. Panel lighting (LED Type).

- 3.2. Transformer conservator isolation valve to check & isolate abnormal oil flow from conservator tank to transformer.
 - 3.3. Pipes, valves, fittings and supports for nitrogen supply and oil drain facilities. The pipe routing shall be decided by the bidder. After erection of pipes, the erected pipes should not cause any problem for maintenance jobs of transformers.
 - 3.4. Oil drain and Nitrogen Injection pipes with gate valves on transformer tank at suitable locations. Gate valves on oil drain pipe & nitrogen injection pipe should be able to withstand full vacuum. A non-return valve shall also be fitted on Nitrogen Injection pipe between transformers gate valve & fire extinguishing cubicle valve.
 - 3.5. Fire detection system detectors including brackets on the top of transformers.
 - 3.6. The signaling box shall be fitted on the transformer. This shall be connected through cables to shutter transformer conservator isolation valve & fire detectors and for further connection to the control box through signal box.
 - 3.7. Control Box / Control Panel for monitoring system operation, logical operation including remote operation of the system.
4. **Operation of the System:** The system shall be provided with the facilities with auto, manual, remote, local operation. The sequential & logical operations are as follows:-
- 4.1. Prevention of Fire in Auto Mode:
 - a. Differential Relay Operation.
 - b. Buchholz Relay paralleled with Pressure Relief Valve of RPRR. (Rapid Pressure Release Relay).
 - c. Tripping of all connected breakers (Pre-requisite for initiation of system activation).
 - 4.2. Extinguishing of Fire in Auto Mode:
 - a. Fire sensing device.
 - b. Buchholz Relay paralleled with Pressure Relief Valve of RPRR.
 - c. Tripping of all connected breakers/ master relay (Pre-requisite for initiation of system activation).
 - 4.3. Operation in Remote / Manual Mode: The facility to start the system in remote from control panel and from local switches in manual mode shall be provided
 - a. Tripping of all connected breakers is a pre-requisite for initiation of system activation.
 - b. Manual mode switch put on position at control box.
 - c. Opening the depressurized valve and subsequently injecting of nitrogen after specified time-delay.
 - 4.4. In case of AC power failure oil drain and nitrogen injection shall be done by DC power.
 - 4.5. In case of power failure oil drain and nitrogen injection shall be done in manual mode.
5. **Civil & Structural:** The **RCC** foundations for the cabinet, pipe supports in the yard piping and fixing of control panel in the control room and transformer oil pits are to be considered in the scope on turnkey basis.
6. **Electrical**
- i. Scope of work for Electrics shall include Designing, Engineering, Manufacturing, Fabricating, Assembling, Packaging, Supplying, Unloading and Storing at site. Installation, Testing and Commissioning of all the electrics, electrical & instrumentation equipment related to NIFPS for all 10 nos. of transformers to be installed in transformer yard of BPSCL.
 - ii. The electrical system for NIFPS should no way disturb to the existing electric system of any equipment installed in BPSCL.
7. **Control Panel** : Control panel with necessary indications & operating switches etc. should be provided for the sequential and logical operation of the proposed NIFPS. Tapping of power from the existing board shall also include modification, if required, in the existing panel, protection setting etc. to make it suitable for connecting feeding cable to proposed control panel.
8. **AC / DC Power Supply:** The power shall be made available at 3 Ph. 50 Hz, and 415V AC at one point and 220 V DC at another point.

9. **Power & Control Cables**

All LT Power & Control cables for new installations and facilities including the following:

- i. FRLS LT Power & Control cables of suitable sizes, from existing switch board (DCDB & ACDB) to the proposed control panel.
- ii. FRLS LT Power cables from proposed control panel to individual light points/switches etc.
- iii. Fire detectors rated above flash point of transformer oil 141° C for detecting fire outside of the transformers shall be provided as per the requirement of system. The cables shall be suitable for 750° C for 3 hours ambient temperature.
- iv. FRLS cables shall be used for connection between transformer signal box / marshalling box to control panel and control panels to fire extinguishing cubicle.

10. **Power Cables:** The LT power cables shall be 1.1 KV grade, FRLS, multi-core, heavy duty electrical grade Copper conductors, extruded PVC insulated, PVC inner sheath and outer sheath, steel wire armoured as per IS: 1554-1987.

11. **Control Cables:** 1.1KV grade, multi-core, FRLS, armoured, annealed copper conductor, PVC insulated and suitable for operation at 70° C ambient and shall conform to IS: 1554 (part- I)-1976 and IS: 5831-1984. Minimum copper conductor size to be used 1.5 sq. mm. control cables shall have 25% or at least 1 no., whichever is higher, as spare cores.

ANNEXURE-IV

(To be submitted on Supplier's Letter Head)

Format for Acceptance of General Terms & Conditions, Commercial Terms and all other Terms of the Reverse Auction

We _____ (Supplier Name)

with PAN _____ having registered office at _____

_____ (Address)

agree to all the Commercial, General & other Terms & Conditions listed in the

NIT No. _____

dated _____

for procurement of _____ (item) through Reverse Auction.

We confirm that we are in a position to supply material as per the specification given in NIT. We agree to participate in the Reverse Auction and abide by the rules.

We nominate an executive, whose details are given below, to put the bids on our behalf.

The details of the person authorized to bid on our behalf is as follows.

Name & Designation :

E-mail ID :

Contact phone nos. :

Address :

(Signature & Seal)

Place :

Date :

Format for submitting last quoted prices

(To be submitted on Company Letter Head of the Bidder)

(To be sent within 30 mins of conclusion of the Reverse Auction)

To,
mjunction services limited
1st Floor, Tata Centre
43, Jawaharlal Nehru Road
Kolkata – 700 071

Fax: 033 – 2288 3279

Ref: Reverse Auction forfor Bokaro Power Supply Co. (P) Ltd. held on

Reference above, we hereby confirm our Market wise last quoted prices in the Reverse Auction held on forfor Bokaro Power Supply Co. (P) Ltd., Bokaro Steel City.

Market No.	Last Quoted Price

We also confirm that we will submit item wise price break-up, within two working days from the date of Reverse Auction.

Signature :
Name :
Designation :
Date :