TENDER DOCUMENT

for

Repair work of Boiler Feed Pump motor of following specifications:
- Type: Squirrel Cage Induction Motor
- Duty: S1, continuous
- Service: Outdoor
- Rotation: unidirectional
- Voltage: 11 KV
- KW Rating: 9500 KW
- R.P.M.: 1495
- Full Load Current: 596 A
- No load Current: 62.5 A
- TYPE: FLOWPAK 2
- Frame: YKS1000-4
- P.F: 0.911 at full load
- Connection: Star
- Moment of Inertia GD^2 = 3120 Kg. m^2
- Make: Shanghai Electric Machinery, China

CHIEF ENGINEER
Rajiv Gandhi Thermal Power Plant
Khedhar, Hisar
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## ONLINE NOTICE INVITING TENDER

<table>
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<tr>
<th>Tender Enquiry No.</th>
<th>NIT No. 04 /RGTPP/EMD-II/2017-18/276, Dated:- 25.09.2017</th>
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### Description of Work

Repair work of Boiler Feed Pump motor of following specifications:
- **Type:** Squirrel Cage Induction Motor,
- **Duty:** S1, continuous
- **Service:** Outdoor
- **Rotation:** unidirectional
- **Voltage:** 11 KV
- **KW Rating:** 9500KW
- **R.P.M.:** 1495
- **Full Load Current:** 596A
- **No load Current:** 62.5A
- **TYPE:** FLOWPAK 2
- **Frame:** YKS1000-4
- **P.F:** 0.911 at full load
- **Connection:** Star
- **Moment of Inertia GD² = 3120 Kg. m²**
- **Make:** Shanghai Electric Machinery China

### Start date and time of tender uploading

26.09.2017 From 09:00 Hrs to 20:00 Hrs

### Last date for submission of tender

26.10.2017 at 17:00 Hrs

### Technical Opening (Part-I)

27.10.2017 at 11:00 Hrs

### Tender Fee (Non–refundable)

Rs.1180/-

### e-service Fees (Non–refundable)

Rs.1000/-

### Earnest Money

Rs.20000/-

### Instructions to the bidder for e-tender

As per Annexure-I

### General Instructions to bidder

As per Annexure-II

### General terms & conditions

As per Annexure-III

### Scope of work

As per Annexure-IV

### Statements of bidders

As per Annexure-V

### Acceptance certificate

As per Annexure-VI
NOTICE INVITING TENDER (E-TENDER)

Chief Engineer/RGTPP, HPGCL, Khedra, Hisar invites tenders in two parts from the reputed, registered and experienced firms for repair work of 11KV, 9500KW Three phase Boiler feed pump squirrel cage Induction motor as per scope of work (Annexure-IV).

<table>
<thead>
<tr>
<th>NIT No.</th>
<th>Description</th>
<th>Tender Fee (Rs.) (Non – refundable)</th>
<th>EMD (Rs.)</th>
<th>e-service Fees (Rs.)</th>
<th>Last date of submission of Bids online</th>
</tr>
</thead>
</table>

Information Regarding Online Payment of Tender Document, eService & EMD Fee.

The Bidders can download the tender documents from the Portal: https://haryanaeprocurement.gov.in. The Bidders shall have to pay for the Tender documents, EMD Fees & eService Fee online by using the service of secure electronic payment gateway. The secure electronic payments gateway is an online interface between contractors and online payment authorization networks. The Payment for Tender Document Fee and eService Fee can be made by eligible bidders/ contractors online directly through Debit Cards & Internet Banking Accounts and the Payment for EMD can be made online directly through RTGS / NEFT.

NOTE: If the tenders are cancelled or recalled on any grounds, the tender document fees & e-service fee will not be refunded to the firm.

NOTE: Those agency who are exempted from EMD, should submit proof of related documents at least 10 days before end date of “Downloading of Tender Documents & Bid Preparation stage” to publisher of the tender i.e. concerned Executive Engineer of that maintenance division. The following are exempted from depositing the earnest money:-

i) Public Sector Undertakings of the Central / Haryana State Government.

ii) Firms borne on D.G.S. & D/DS&D Haryana rate contracts.

iii) Firms registered with the Director of Industries, Haryana or registered with National Small scale Industries Corporation, Govt. of India.

iv) Firms borne on the HPGCLs approved list of suppliers which may have made a permanent
earnest money deposit of Rs.10.00 Lacs at the respective Project/office of HPGCL, if they quote the Registration number given by the respective project/office of HPGCL in their tender papers. The Tenderers can submit their tender documents (Online) as per the dates mentioned in the key dates:-

**Key Dates:-**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Department Stage</th>
<th>Tenderer’s stage</th>
<th>Start date and time</th>
<th>Expiry date and time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tender Authorization &amp; Publishing</td>
<td>-</td>
<td>25.09.2017 09.00 Hours</td>
<td>25.09.2017 20.00 Hours</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
<td>Downloading of Tender Documents, Bid Preparation &amp; Bid submission</td>
<td>26.09.2017 10.00 Hours</td>
<td>26.10.2017 17.00 Hours</td>
</tr>
<tr>
<td>3</td>
<td>Technical Opening (Part-I)</td>
<td>-</td>
<td>27.10.2017 11.00 Hours</td>
<td>---</td>
</tr>
<tr>
<td>4</td>
<td>Short listing of Technical bids &amp; Opening of Financial Bid</td>
<td></td>
<td>Will be intimated to the firms on their E-mail</td>
<td></td>
</tr>
</tbody>
</table>

For Executive Engineer/EMD-II, Chief Engineer/RGTPP Khedar, Hisar
Instructions to Bidder on Electronic Tendering System

1. Registration of bidders on e-Procurement Portal:

All the bidders intending to participate in the tenders processed online are required to get registered on the centralized e-Procurement Portal i.e. https://haryanaeprocurement.gov.in. Please visit the website for more details.

2. Obtaining a Digital Certificate:

2.1 The Bids submitted online should be encrypted and signed electronically with a Digital Certificate to establish the identity of the bidder bidding online. These Digital Certificates are issued by an Approved Certifying Authority, by the Controller of Certifying Authorities, Government of India.

2.2 A Digital Certificate is issued upon receipt of mandatory identity (i.e. Applicant’s PAN Card) and Address proofs and verification form duly attested by the Bank Manager/Post Master/Gazetted Officer. Only upon the receipt of the required documents, a digital certificate can be issued. For more details please visit the website – https://haryanaeprocurement.gov.in.

2.3 The bidders may obtain Class-II or III digital signature certificate from any Certifying Authority or Sub-certifying Authority authorized by the Controller of Certifying Authorities or may obtain information and application format and documents required for the issue of digital certificate from:

M/s Nextenders (India) Pvt. Ltd. O/o. DS&D Haryana,
SCO –09, 1Ind Floor, Sector –16, Panchkula –134108
E-mail: Chandigarh@nextenders.com
Help Desk: 1800-180-2097 (Toll Free Number)

2.4 Bid for a particular tender must be submitted online using the digital certificate (Encryption & Signing), which is used to encrypt the data and sign the hash during the stage of bid preparation & hash submission. In case, during the process of a particular tender, the user loses his digital certificate (due to virus attack, hardware problem, operating system or any other problem) he will not be able to submit the bid online. Hence, the users are advised to keep a backup of the certificate and also keep the copies at safe place under proper security (for its use in case of emergencies).

2.5 In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no-objection certificate/power of attorney/lawful authorization to that User. The firm has to authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000. Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the firm in the department tenders as per Information Technology Act 2000. The digital signature of this authorized user will be binding on the firm.

2.6 In case of any change in the authorization, it shall be the responsibility of management/partners of the firm to inform the certifying authority about the change and to obtain the digital signatures of the new person/user on behalf of the firm/company. The procedure for application of a digital certificate however will remain the same for the new user.

2.7 The same procedure holds true for the authorized users in a private/Public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.

3. Opening Of an Electronic Payment Account:- Tender Document can be downloaded online. Bidders are required to pay the tender documents fees online using the electronic payments gateway service. For
4 **Pre-requisites for online bidding:** In order to bid online on the portal [http://haryanaeprocurement.gov.in](http://haryanaeprocurement.gov.in), the user machine must be updated with the latest Java. The link for downloading latest java applet is available on the Home page of the e-tendering Portal.

5 **Online Viewing of Detailed Notice Inviting Tenders:** The bidders can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the single portal e-Procurement system on the Home Page at [http://haryanaeprocurement.gov.in](http://haryanaeprocurement.gov.in).

6 **Download of Tender Documents:** The tender documents can be downloaded free of cost from the e-Procurement portal [http://haryanaeprocurement.gov.in](http://haryanaeprocurement.gov.in).

7 **Key Dates:** The bidders are strictly advised to follow dates and times as indicated in the online Notice Inviting Tenders. The date and time shall be binding on all bidders. All online activities are time tracked and the system enforces time locks that ensure that no activity or transaction can take place outside the start and end dates and the time of the stage as defined in the online Notice Inviting Tenders.

8 **Bid Preparation (Technical & Financial) Online Payment of Tender Document Fee, eService fee, EMD fees and Submission of Bid Seal of online Bids:**

8.1 The online payment for Tender document fee, eService Fee & EMD can be done using the secure electronic payment gateway. The Payment for Tender Document Fee and eService Fee can be made by eligible bidders/ contractors online directly through Debit Cards & Internet Banking Accounts and the Payment for EMD can be made online directly through RTGS / NEFT. The secure electronic payments gateway is an online interface between contractors and Debit card / online payment authorization networks.

8.2 The bidders shall upload their technical offer containing documents, qualifying criteria, technical specification and all other terms and conditions except the rates (price bid). The bidders shall quote the prices in price bid format.

8.3 Submission of bids will be completed by submission of the digitally signed & sealed bid as stated in the time schedule (Key Dates) of the Tender.

9 **Tender Closing:** After the submission of bid by the bidders, the bidding round will be closed. Once the online tender is closed, no new Vendor can bid in the tender.

**NOTE:**

(A) If bidder fails to complete the Online Bid Submission stage on the stipulated date and time, his/hers bid will be considered as bid not submitted, and hence not appear during tender opening stage.

(B) From the starting date of Tender downloading to final date of submission of bid, the bidder can rework on his bid number of times he wants. If bidder submits the revised bid including price bid, original bid will automatically deleted and this revised bid will become original bid. No revised bid will be submitted after Part-I (Technical Bid) is opened.

(C) Bidders participating in online tenders shall check the validity of his/her Digital Signature Certificate before participating in the online Tenders at the portal [http://haryanaeprocurement.gov.in](http://haryanaeprocurement.gov.in).
(D) For help manual please refer to the-Procurement Home web site Page "at
https://haryanaeprocurement.gov.in, and click on the available link “How to…” download the file.

Executive Engineer/EMD-II,
For Chief Engineer/RGTPP
Khedar, Hisar
NIT No. 04 /RGTPP/EMD-II/2017-18/276,  
Dated:- 25.09.2017

Annexure-II

GENERAL INSTRUCTIONS TO THE BIDDERS

1. Pre Qualifying Requirements (PQRs) / Eligibility Conditions for the tenderers:

a. The bidder must have experience of having successfully executed Work Order(s) pertaining to manufacturing or rewinding of Stators/rotors of HT motors/ HT generators/HT alternators of voltage rating 6.6 KV or above and dynamic balancing of rotor etc in HPGCL/NTPC/any PSUs /any Corporations /Central Govt./State Govt. or in any Thermal/ Hydel plant during last five years ending on date 31.08.2017 and minimum order value of executed Work order(s) must be as under :-
   • For Single order of value not less than Rs 8.0 Lacs.
   • Two orders of value not less than Rs. 5.0 lacs
   • Three orders of the value not less than Rs. 4 lacs.

   The bidder shall submit at least one attested copies of above work order(s) executed by him along with completion certificate/repeat orders during last 5 years in support of their claim.

b. The bidders must have average annual turnover in last three consecutive financial years ending on dated 31.03.2017 of value not less than Rs 12.0 Lacs. Other income shall not be considered for arriving at annual turnover. In support of claim, firm shall submit copies of audited financial statements for last three years ending 31.03. 2017. In case audited financial statements for last preceding financial year annual turnover are not available for determining the average annual turnover, certification of financial statements from a practicing chartered accountant shall be considered acceptable.

c. The firm must have following manufacturing and testing facilities.
   • VPI technology for impregnation of complete stator of motor of rating 10MW or above.
   • EOT crane having capacity 45 tons or above.
   • Dynamic balancing machine having capacity 10Tons or above.
   • No load trial run up to 10MW of motor at rated voltage i.e. 11KV.
   • Thermal imaging camera for thermal imaging of stator core.
   • Blocked rotor current test.

d. The firm should fill statement of bidders as per Annexure-V of General Terms & Conditions and submit authentic supporting documents for proving its credential. Original documents may be asked for verification at the time of finalizing the tender.

e. A certificate to the effect that the tenderer is not black listed from any State Electricity Board/ any Corporation / State or Central Public Sector undertaking.

f. The bidder will submit acceptance certificate (Annexure-VI).

Note:- Decision of the HPGCL regarding fulfillment of pre qualification requirement shall be final and binding upon the bidders.

2. Disqualification of the Bidder:-

i) Even though the bidders meet the above Qualifying Criteria they are subject to be disqualified, if they have made misleading or false representations in the forms, statements and attachments submitted in the proof of the qualification requirements.

ii) The Bidders shall supply partnership deed in case of partnership firm / Memorandum of Association and Article of Association in case of a company.

iii) Not withstanding anything stated above Haryana Power Generation Corporation Ltd. reserves the right to assess the tenderer’s capacity to perform the contract should be circumstances warrant such
assessment in the overall interest of the Haryana Power Generation Corporation Ltd. In this regard the decision of corporation will be final.

3. Conditions of the contract and other information can be had from the office of Executive Engineer/EMD-II, RGTPP, HPGCL, Khedar, Hisar (Email ID: singh.yashpal@hpcl.org.in), on any working day prior to last date of Downloading of Tender Documents & Bid Preparation.

4. The Tender Document can also be seen on HPGCL website www.hpgcl.org.in.

5. Before submitting tenders the instructions may be read carefully regarding submission of tender. If any bidder finds discrepancies or omissions in the tender documents or is in doubt to the true meaning of any part, he shall clarify same from tender issuing office in writing before the due date and time of submission of the bid.

6. The tenderer shall only be submitted on the centralized e-Procurement Portal i.e. https://haryanaeprocurement.gov.in.

7. The tenderers will quote their rates strictly as per details of price quoting sheet.

8. Tenders through Fax / E-mail / telegraphic tenders shall not be considered. Incomplete, obscure or irregular tender is liable for rejection. If the tenderer deliberately gives wrong information in his tender, HPGCL reserves the right to reject such tender at any stage.

9. All tenders received against open tender enquiry irrespective of whether they are from the approved Firms on the registered list or others, shall be considered, provided they are on the prescribed e-tendering process mentioned above.

10. The validity of the tender/ quotation should be at least for 180 days from the date of opening of price bid.

11. The rate negotiations could be held up to L3 bidder, if the difference between the L1 quoted rates and those quoted by L2 and L3 is within 5% of the L1 quoted rates. In case where the L1 bidder refuses to further reduce his offered price and the L2 or L3 bidders come forward to offer a price which is better than the price offered by L1 bidder, the bidder whose price is accepted becomes L1 bidder. However, in such a situation, the original L1 bidder shall be given one more opportunity to match the discounted price. In case of acceptance, he would be treated as L1 bidder.

12. The repair work of motor against this tender shall be awarded to a single firm whose total overall quoted prices / rates(For scope of main work a, b, c and option al work D as per annexure-V) will be lowest (L1 Bidder).

13. No deviation from the terms & conditions of tender shall be accepted. Once bidder submits the tender online, it is presumed that all the terms & conditions are accepted including payment terms.

14. The bidders / suppliers / contractors shall observe the highest standard of ethics during the submission of tender, procurement and execution of the contract. In case of evidence of cartel formation by the bidder(s), EMD is liable to be forfeited.

15. The bidder shall bear all costs associated with the preparation and submission of his bid, and the purchaser will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

16. Opening of Tender:- The tenders will be opened in the office of Executive Engineer/EMD-II, RGTPP, HPGCL, Khedar, Hisar in the presence of authorized representative of the tenderers, if they so desire, at the time and date set for opening of tenders or in case any extension was given thereof on the extended tender opening date and time. Tenderer’s (up to two persons) authorized may attend the opening of tender.

The Price Bid (Part-II of the tender) shall be opened after Part-I of the tenders have been scrutinized and evaluated. The tenderers whose Part I have been approved, will be allowed to participate in opening of Price Bid (Part-II). The due date and time for opening of Price Bid (Part- II) shall be informed later on.

17. Chief Engineer, RGTPP, HPGCL, Khedar, Hisar reserves the right to amend/ cancel the NIT or to change qualifying requirement or to reject any or all the tenders so received without assigning any reason.

18. All the fields of Price bid shall be filled by the bidder

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Executive Engineer/EMD-II,  
For Chief Engineer  
Khedar, Hisar
GENERAL TERMS AND CONDITIONS OF CONTRACT

1. CONTRACT AGREEMENT: The contractor will furnish a contract agreement (in duplicate) on NJSP of Rs.15/- on the standard Performa of HPGCL to be supplied by HPGCL for faithful execution of work as a token of agreement to all the terms & conditions of work order within 07 days from the date of issue of work order. If contractor fails to furnish contract agreement within stipulated period, no payment of work done shall be released till contract agreement duly signed is received by HPGCL.

2. RATE/CONTRACT PRICE: Rate shall be quoted by the bidder, strictly as per rate quoting sheet. The applicable GST shall be paid extra.

Note:- The agreed contract price shall remain firm during the currency of the contract.

3. EARNEST MONEY AND SECURITY DEPOSIT:
   (i) Every tenderer, while submitting his tender, shall deposit the earnest money specified in the NIT i.e Rs 20000/- which can only be made online through secure electronic payment gateway.
   (ii) The earnest money furnished by the successful tenderer on whom the work order is placed shall be converted into security deposits as a guarantee for faithful and satisfactory execution of the work order.
   (iii) The EMD of the unqualified bidders will be returned without any interest, as promptly as possible, within 15 days of the award of the contract with the selected bidder).

4. SECURITY DEPOSIT:
   i) The firm will deposit security/PBG of nationalized bank (valid up to one month after completion of warranty period unless otherwise agreed) amounting 10% of contract value towards faithful execution of work after the award of rate contract. The earnest money can be converted in to security for successful bidder.
   ii) The final Security deposit/ performance bank guarantee shall be released after successful completion of Guarantee/warranty period of motor. No interest shall be paid on EMD / Security Deposit for the period it remains deposited with HPGCL.

5. FOREFEITURE OF EARNEST MONEY & SECURITY DEPOSIT:
   The earnest money /security deposit shall be forfeited in part or in full under the following circumstances:-
   I. If the tenderer withdraws his tender at any stage during the currency of validity period.
   II. If the W.O. has been issued but the contractor refuses to comply with it irrespective of the fact that HPGCL sustains any loss on account of such default or not.
   III. In the event of a breach of contract in any manner.
   IV. In case of evidence of cartel formation by the bidder(s).
   V. If the contractor fails or neglects to observe or perform any of his obligations under the contract, it shall be lawful for the HPGCL to forfeit either in whole or in part, in its absolute discretion, the EMD/security deposit furnished by the contractor.
   VI. The forfeiture of EMD/security deposit/PBG shall be without prejudice to the right of HPGCL to recover any further amount or any liquidated and/or other damages as admissible under the law, under payments or over payments made to the contractor under this contract or any other contract as well as to take such administrative action against the contractor as blacklisting etc.

6. PAYMENT TERMS 100% payment of the contract value shall be released after 21 days against appropriate bill of contractor and after satisfactory completion of the work by deducting statutory deductions.

7. MODE OF PAYMENT Payment will be made by the Sr. Accounts Officer/Accounts Officer, RGTPP, Hisar through RTGS/NEFT. For payment through RTGS/NEFT, the contractor will intimate the complete bank details viz. Name of Bank/Branch, Account Number, Type of Account, IFSC Code etc, to Engineer-Incharge or Sr. Accounts Officer/Accounts Officer.
8. **TRANSPORTATION COST** To and Fro transportation cost from RGTPP/Hisar to firm’s works and back shall be borne by firm. In case fault develops in repaired motor within warranty period, the transportation cost for re-attending/repairing the motor will also be borne by contractor/ Firm.

9. **TRANSIT INSURANCE** Transit insurance of damaged motor from RGTPP/Hisar to firm’s works and back shall be arranged and borne by firm.

10. **COMPLETION PERIOD** The completion period of the work as specified below shall be the essence of the contract. The work shall be completed by the firm within **50 days (Bar to Bar)** either from date of supply of material at Firm’s premise by M/s SEC, China or from date of issue of LOI / Work Order whichever is later. The firm shall ensure rewinding of stator within thirty days after receipt of stator coils. No extra time shall be given for mobilization.

11. **RISK AND COST**:- In case the contractor fails to fulfill the contractual obligation, the work shall be got done from some other agency at the risk and cost of the contractor. It shall be without prejudice to the right of HPGCL to recover any further amount or any liquidated and/or other damages.

12. **PENALITY FOR DELAY**:- Time is the essence of the contract. The contractor shall ensure timely completion of the job as per stipulated completion period. In case of delay in completing the work/job, the penalty for delay will be imposed @ 1% of the total contract value per week or part thereof subject to maximum of 10% of the contract value.

   **Note**:- Contract value means basic value of contract exclusive of taxes and duties, if charged separately.

13. **SUBMISSION OF TECHNICAL DATA AND REPORTS**:-

   **Stator Winding Details**:-

   ➢ Removal of old winding from stator and check the size of conductors. No. of turns and note down the winding data and connection diagram.

<table>
<thead>
<tr>
<th>Sr.no</th>
<th>Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>No. of slots.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>No. of coils.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Length of stator Core.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Inner diameter of stator core.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Inner diameter of rotor core.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Length of overhang portion non connection side.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Weight of each removed copper coil with moulding.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Weight of each removed copper coil without moulding.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Coil/winding pitch</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Size of conductor of removed coil.</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>No. of layers of insulation found over the coil in slot portion.</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>No. of layers of insulation found over the coil on overhang portion</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Type of insulation material used.</td>
<td></td>
</tr>
</tbody>
</table>
Closed loop Flux test on stator Core (AFTER REMOVING STATOR COILS):

<table>
<thead>
<tr>
<th>S.no</th>
<th>Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Applied voltage</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Duration of test</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Max. temp. reached at core</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Temp. rise</td>
<td></td>
</tr>
</tbody>
</table>

14. **INSTRUCTION & TESTING OF MOTOR** The firm shall not dispatch/deliver the equipment without inspection/witnessing of following tests by representative of HPGCL. The firm shall give Ten days advance intimation for inspection.

**Initial inspection:-**
- Insulation Resistance measurement of all stator coils with 5KV megger.
- Resistance measurement of all stator coils with micro ohm meter.
- Inductance measurement of all stator coils with LCR meter.
- Closed loop flux test of stator core.
- HV test of all stator coils before placing in the slots.
  (a) Applied Voltage: 23KV AC or equivalent DC for one minute.
  (b) Leakage current.
- Surge compression test of all coils at 5.0KV for inter turn insulation before placing coils in the slots.
- Tan delta and capacitance test 8 nos. randomly selected newly formed F class or above insulated stator Coils at 20%, 40%, 60%, 80% and 100% of rated voltage.

**Final Inspection:-**
- Measurement of IR values and polarization index of completer wound stator at 5KV before and after and HV test.
- HV test of stator winding at 23KV AC or equivalent DC for one minute.
- Measurement of inductance of winding.
- Impedance balance test.
- Resistance measurement for each phase and phase to phase.
- Inductance measurement for each phase and phase to phase.
- Measurement of insulation resistance of RTD’s and space heater.
- Measurement of resistance of RTD’s and space heater.
- Polarity test.
- Surge compression test of stator winding.
- Dynamic balancing of rotor with fan.
❖ No load current test of motor at rated voltage i.e. 11KV for one hour.
❖ Locked rotor current test.
❖ Measurement of vibration during no load test run.

Note: a) Firm shall assemble the motor only after its final inspection is being done by HPGCL and / or M/s SEC, China Engineer.

b) HPGCL reserves the right to inspect the motor during the period of repair from time to time.

15. WARRANTY

I. The contractor/ firm shall provide warranty certificate for the workmanship of the work done for a period 12 month from date of commissioning of motor / 18 month from the date of delivery of motor at RGTPPP, Khedar, Hisar whichever is earlier.

II. During this period if motor, which has been repaired by the contractor, is found to be defective, the same will have to be attended again without any additional charges to HPGCL. In such cases, warranty period shall start from the date of such repair/rectification. In case the contractor fails to respond within a reasonable time, the job will be got done from any other agency at the risk and cost of the contractor.

16. FORCE MAJEURE The delay in the completion of the work may be treated as force majeure to the contractor only if:

a. The delay is resulted from any causes arising out of compliance with regulations, orders or instructions of the Central or State Governments, acts of God, acts of Civil & Military authority, fires, floods, strikes, lock-outs, freight embargoes, war-risk riots and civil commotion. and

b. The contractor’s request for extension of the delivery period along with all necessary evidence comes, before the expiry of the schedule date(s) of delivery.

17. NEGLIGENCE In case the delay is not covered under the force majeure reasons then

a. In case the delayed completion of work is accepted, the damages for delay will be recovered from the firm as per above clause no:- 10.

b. In case the firm delays completion of work, HPGCL reserves the right to get the work done from any other source at the risk and cost of the firm after serving notice of seven days on the firm, without prejudice to other terms and conditions of the work order.

To cancel the work order/contract and forfeit the security. In the event of action being taken under clause (b) above, the firm shall be liable for any loss that the HPGCL sustains on this account. The firm shall not be entitled to raise any objection on the manner and method accepted to get the work carried out from any other source.

18. STATUTORY DEDUCTIONS:- Statutory deduction on account of Income Tax and Work contract Tax (WCT) etc. including surcharge shall be made at source from the bills of the contractor at the prevailing rates.

19. ARBITRATION:- All matters, questions, disputes, differences and / or claims arising out of and / or concerning, and /or in connection with, and/or in consequence of, and/or relating to the contract whether or not obligations of either of both the firm and the Corporation under that contract be subsisting at the time of such dispute and whether or not the contract has been terminated or purported to be terminated or completed, shall be referred to the sole arbitration of Chief Engineer/RGTPPP, Hisar or an officer appointed by the Chief Engineer/RGTPPP, Hisar as his nominee. The award of the Arbitrator shall be final and binding on both the parties to the contract.

20. Court Jurisdiction:- The contractor shall be governed by the law of India P.C. for the time in force and shall be subject to the jurisdiction of the court at Hisar

21. SET OFF:- Any sum of money due and payable to the supplier under the contract (including security-deposit returnable to the supplier) may be appropriated by the HPGCL and set-off against any claim of the Corporation for the payment of a sum of money arising out of under that or any other contract entered into by the supplier with the HPGCL.
22. **SUBLETTING and ASSIGNMENT**  The Supplier shall not, sublet, transfer or assign the contract or any part thereof or interest therein or advantage thereof in any part thereof in any manner whatsoever without prior consent of the HPGCL.

23. **Material and Consumables**: The stator coils, one no cooling fan and consumables such as filler strip, carve, polyester and argentum welding rod will be supplied by HPGCL through M/s SEC China. If any other consumable required for doing job, will be provided by the firm however sleeve bearings and oil (if required) shall be provided by M/s HPGCL for replacement in motor.

24. **Indemnity Bond**: The contractor/firm will ensure insurance coverage of motor for its appropriate value during the period of repair at firm’s works against fire, theft and other risks. **An indemnity bond for an amount equal to Rs 1.5 Crore** to this effect shall be executed by the firm on NJSP of Rs.10/-.

25. **Scrap Material**: Entire scrap material including copper scrap shall be returned by the firm to M/s SEC, China/HPGCL.

Executive Engineer/EMD-II,  
For Chief Engineer/RGTPP  
HPGCL, Khedar, Hisar
Annexure-IV
Date: 25.09.2017

Scope of work for Repair/Rewinding of 9500KW, 1495 RPM 11KV Boiler Feed Pump Motor Make of M/s Shanghai Electric Machinery, China

A.) Stator:-

i.) Removal of upper and lower halves of end covers and sleeve bearings from both sides of motor.

ii.) Removal of one no damaged and one no. healthy internal cooling fan of motor.

iii.) Threading out of rotor.

iv.) Debrazing of series joints of coils, removal of slot wedges, cutting the tying and lacing of overhang portion of all the coils. Taking out all the coils from the stator slots.

v.) Cleaning of stator slots after removing old defective coils.

vi.) Testing of stator core assembly with flux loop test. The firm shall submit thermal imaging of stator to RGTPP, HPGCL.

vii.) Removal of stator core from yoke/body.

viii.) Complete rewinding of stator with 72 nos coils (coils will be supplied by M/s SEC, China).

ix.) The fixing of spacers, packers, cleats, slot wedges fabricated from Epoxy Glass tying and lacing of overhang portions of all the coils on both ends of stator winding with Glass Cord/sleeve.

x.) The fixing of 12 nos RTD PT100, 3 wire simplex at equal distance between two layers of coils in stator slot.

xi.) Fixing of leads made of single core flexible copper cable with annealed tinned strands, of original size, up to the terminal box (if required). These leads should be having Butyl insulation or other better grade, weather proof, rubber insulation with cotton/glass braiding suitable for 11 KV AC.

xii.) Making & silver brazing of all the series and end connections. Providing suitable insulation on these joints.

xiii.) Impregnating complete winding and core packet with Global VPI process (resin poor system) followed by baking of the same in the oven.

xiv.) Insertion of complete winding and core packet in yoke/body with proper fitment.

xv.) Application of Dr. Beck make epoxy GEL coat on winding.

xvi.) Testing of complete stator winding after VPI and before final assembly of the motor.

B.) Rotor:-

i.) Thorough Cleaning of complete rotor surface to remove carbon, dirt, rust etc.

ii.) Complete Drying out of rotor.

iii.) Checking the rotor core for hot spots.
iv) Checking the rotor for electrical and mechanical defects. Rectification of the petty defects, if any.

v) Checking run out of motor and rectifying the same if required.

vi) Dynamic balancing of rotor without cooling fan.

vii) Replacement of one no damaged cooling fan involves following work (Cooling fan will be provide by M/s SEC, China)

➢ Removal of sheared bolts from cooling fan mounting structure.
➢ Filling the holes and machining of same to smoothen the surface.
➢ Making of new holes at centralized position and threading of same.

viii) Tack welding edges of the bolts with the fan taking care (i) local earthing for the welding (ii) the tacks should be as small as uniform as possible.

ix) Ultrasonic and Dye penetrant (DP) testing of shaft and welded joints.

x) Dynamic balancing of rotor with both cooling fans mounted on rotor.

xi) Complete varnishing of rotor with suitable varnish

xii) Inspection of sleeve bearings of motor and replacement of sleeve bearing if required.

xiii) Final assembly of motor.

C.) GENERAL:

i.) Copper scrap shall be returned by the firm to M/s SEC, China.

ii.) Replacement of heat proof leads/wires for space heaters.

iii.) All gasket will be replaced with new one.

iv.) Painting of motor body with enamel paint of smoke grey shade of any reputed make.

v.) Any other petty work which is not covered above and essential for assembly of motor will be carried out by the firm without extra charges.

D.) OPTIONAL WORK:

i) Re-staggering of stator core.

NOTE: 1) The firm should quote lump sum rate for the scope of work A, B & C.

2) The firm should quote scope of work ‘D’ i.e. optional work.

3) The firm is advised to visit the RGTPP, Khedar, Hisar before quoting their rates so as to exactly understand quantum of work involved.
STATEMENTS OF BIDDERS

1. Name of Bidder

2. Address of Head Office

3. Correspondence Address

4. Legal status

5. PAN & TIN Number of the Bidder (attached self attested photocopies)
   PAN ______________________  TIN ______________________
   CST No. ______________________

6. Bank Details (attached signed cancelled cheque)
   i) Bank Name & Address
   ii) Bank Account Number
   iii) Bank Branch Code
   iv) IFSC Code of Branch
   v) Nature of account (current/saving/OD/CC)

7. Main lines of Business
   i. ______________________ since________________
   ii. ______________________ since________________
   iii. ______________________ since________________

8. Annual Turnover of past three year
   i. ______________________
   ii. ______________________
   iii. ______________________

9. Past Experience:-

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<th>Order Value contract wise</th>
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10. Any other information

Signature and Stamp of Bidder
Acceptance Certificate

I ___________________________ Designation ___________________________

of (Name of the Company) ___________________________

________________________________________________________________________

________________________________________________________________________

hereby accept the all the terms and conditions given on pages of the tender document.

For M/s ___________________________