



Bharat Heavy Electricals Limited
Industrial Valves Plant
Goindwal Sahib (Punjab)

Enquiry No.
2021-054E

Date:
08.12.2020

NOTICE INVITING TENDER (NIT)

Dear Sir / Madam,

BHEL Goindwal Sahib (Punjab) invites offers from interested bidders / suppliers for submission of their offer through e-procurement mode at <https://eprocurebhel.co.in/>. Offers in any other mode will not be accepted. In case of any difficulty faced while registering on BHEL's e-Procurement portal developed by NIC, queries may be addressed to 0120-4001002, 0120-4001005 and 0120-6277787; email: support-eproc@nic.in. These details are also available on 'Contact Us' page of the portal.

Tender Enquiry No.	2021-054E
Form of Contract	Supply
Tender / Item Description	Electrical Actuators (Non-Intrusive type with SIL Certification & Profibus compatibility)
Location(s) of Supply / Work	BHEL Goindwal Sahib (Punjab) / BHEL Trichy (Tamilnadu)
Earnest Money Deposit (EMD)	Not Applicable
Tender Download / Bid Submission Start Date	08.12.2020 (17:00 Hrs. IST)
Tender Download / Bid Submission End Date	19.12.2020 (12:00 Hrs. IST)
Tender / Bid Opening Date	19.12.2020 (15:30 Hrs. IST)
Quotation Parts	Two Part Bid
Integrity Pact (IP)	Applicable
Contact Person Details	Sh. Sumeet Bansal, Sr. Manager 01859-224 628, sbansal@bhel.in Sh. Achin Goyal, Sr. Engineer 01859-224 617, achingoyal@bhel.in Sh. Raghuvinder Kumar, Dy. Engineer 01859-224 683, raghuvinder@bhel.in



SPECIAL TERMS AND CONDITIONS

Tender enquiry no. 2021-054E Dated 08.12.2020 **Due date** 19.12.2020
Tender Description: Supply of Electrical Actuators (Non-Intrusive type with SIL Certification & Profibus compatibility)

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Tender / Bid Opening Date	19.12.2020 (15:30 Hrs. IST)
Quotation Parts	Two-part Bid
Tender evaluation	Item Wise
Item Description	Electrical Actuators (Non-Intrusive type with SIL Certification & Profibus compatibility)
Item Specification	As per attached documents
Delivery schedule	Within 22 weeks from date of techno-commercial clear Purchase order
Validity of offer (In days)	90 days

Documents required along with supply of material	
1. Test Certificate	<u>Required</u>
2. Guarantee certificate	<u>Required</u>
3. Third Party Inspection Report	<u>Required</u>

PRE-QUALIFICATION CRITERIA (PQC)

PQC1 Bidder should have valid SIL-2 certificate.

PQC2 Bidder should be primarily engaged in manufacturing & supply of **Multi Turn Electrical Actuators**. Bidder has to give undertaking that he is manufacturer of 'Multi Turn Electrical Actuators'.

PQC3 The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be Rs. 5,00,00,000 (Five Crore only). For MSEs, the average annual financial turnover value shall be Rs. 2,00,00,000 (Two Crore only). For Claiming MSE benefits, bidder have to give documentary evidence like NSIC, UAN, Udhyam Certificate etc.

For fulfilling the financial criteria, any one of the following documents may be considered as valid proof for meeting the criteria:

- Documentary evidence in the form of certified Audited Balance Sheets of relevant periods.
- OR**
- A certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. UDIN no. should be mentioned on CA certificate.



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PQC4 The bidder should have executed orders for supply of **Electrical Actuators**, having cumulative order value not less than Rs. 1,50,00,000 (Rupees One Crore and Fifty Lakh only), during any of the last three (03) years ending on 30.11.2020.

For **MSEs**, the required cumulative order value shall be Rs. 75,00,000 (Seventy Five Lakh only). For Claiming MSE benefits, bidder have to give documentary evidence like NSIC, UAN, Udhyam Certificate etc.

For fulfilling the experience criteria any one of the following documents may be considered as valid proof for meeting the criteria:

- Purchase Order copy. **OR**
- Execution certificate by client (Central / State Govt. Organization / PSU / Public Limited Company) with order value.

Start-ups shall be exempted from the above financial (PQC3) & experience criteria (PQC4) without any relaxation in PQC1 & PQC2 as per D.O. No. 5(4)/2016-BE-I dated 15.02.2017. For claiming Start-Up exemption, vendors have to submit DPIIT (Dept. of Promotion of Industry and Internal Trade)/DIPP (Department for Industrial Policy and Promotion) recognition certificates

SPECIAL TERMS

S1. SCOPE OF SUPPLY

In addition to the clause no. G5 in “General Contract Conditions of tender”, All the items are to be supplied as per below mentioned specifications:

Sl. No.	Material Code*	Description	Delivery destination	Quantity, nos.	BHEL specification no.
10	969991876500	ACTR-3KGM,IS,NON INTRUSIVE,SIL2+PROFIBUS	FOR BHEL Goindwal Sahib	18	SPEC: AC:NI1 Rev:00 dated 30.07.2020
20	969991878000	ACTR-6KGM,IS,NON INTRUSIV,SIL2+PROFIBUS		03	
30	969991876600	ACTR-10KGM,IS,NON INTRUSIV,SIL2+PROFIBUS		131	
40	969991877000	ACTR-10KGM,IS,CEPT,NON INTRUS,SIL2+PFBUS		01	
50	969991878100	ACTR-15KGM,IS,NON INTRUSIV,SIL2+PROFIBUS		12	
60	969991878200	ACTR-30KGM,IS,NON INTRUSIV,SIL2+PROFIBUS		24	
70	969991877100	ACTR-100KGM,IS,CEPT,NON INTRU,SIL2+PFBUS		01	
80	969991876500T	ACTR-3KGM,IS,NON INTRUSIVE,SIL2+PROFIBUS	FOR BHEL Trichy	04	
90	969991876900T	ACTR-3KGM,IS,CEPT,NON INTRUSI,SIL2+PFBUS		02	

* Material codes mentioned above are indicative only. Material codes specified in final purchase order shall be final.



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S2. DELIVERY DESTINATION

For enquiry item sl. no. 10 to 70, delivery destination is FOR BHEL, Goindwal Sahib (Punjab) and for enquiry item sl. nos. 80 & 90, delivery destination is FOR BHEL, Trichy (Tamil Nadu).

S3. DELIVERY SCHEDULE

Material shall be delivered within 22 weeks from date of techno-commercial clear Purchase Order i.e. delivery date will start from date of submission of approved documents to supplier.

S4. REGISTRAION OF BIDDERS WITH BHEL GOINDWAL

Unregistered bidders with BHEL Goindwal for 'Electrical Actuators' may quote for this tender. Offer of such bidders will be considered, provided they will register with BHEL Goindwal under permanent code in line with the provisions of SEARP, before price bid opening. Online link for submitting supplier registration form is <https://supplier.bhel.in/>.

S5. LOADING CRITERIA CUM COUNTER OFFER

No counter-offer will be given. Only MSE preference will be given as per below table:

Sl. No.	Material Code	Description	Delivery destination	Quantity, nos.	Proportion of quantity to be divided	
					L1	MSE
10	969991876500	ACTR-3KGM,IS,NON INTRUSIVE,SIL2+PROFIBUS	FOR BHEL Goindwal Sahib	18	14	04
20	969991878000	ACTR-6KGM,IS,NON INTRUSIV,SIL2+PROFIBUS		03	Counter offer not applicable	
30	969991876600	ACTR-10KGM,IS,NON INTRUSIV,SIL2+PROFIBUS		131	97	34
40	969991877000	ACTR-10KGM,IS,CEPT,NON INTRUS,SIL2+PFBUS		01	Counter offer not applicable	
50	969991878100	ACTR-15KGM,IS,NON INTRUSIV,SIL2+PROFIBUS		12	10	02
60	969991878200	ACTR-30KGM,IS,NON INTRUSIV,SIL2+PROFIBUS		24	18	06
70	969991877100	ACTR-100KGM,IS,CEPT,NON INTRU,SIL2+PFBUS		01	Counter offer not applicable for enq. sl. no. 70 to 90	
80	969991876500T	ACTR-3KGM,IS,NON INTRUSIVE,SIL2+PROFIBUS	FOR BHEL Trichy	04		
90	969991876900T	ACTR-3KGM,IS,CEPT,NON INTRUSI,SIL2+PFBUS		02		



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1. In case the L1 vendor is not a MSE, MSE benefit will be given subject to following conditions:
 - a. In tender, participating Micro and Small Enterprises quoting price within price band of L1+15 percent shall also be offered as per table-I at L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise. In case of more than one such Micro and Small Enterprise, the supply shall be shared equally. If there are more than one MSE in the price band of L1+ 15% to whom the counter-offer has been sent and some of them reject the offer, then the remaining quantity shall be distributed equally to the MSEs accepting L1 prices (limited to two MSEs based on their ranking in price comparative sheet).
 - b. In case any MSE vendor does not accept the counter offer, the above mentioned quantity from table-I shall be given to L1 vendor.
 - c. If there is no MSE in the Price band of L1+15% then above mentioned quantity from table-I shall be given to L1 vendor.
2. In case if the L1 vendor is MSE, then 100% quantity shall be provided to L1 vendor.

S6. REVERSE AUCTION

Reverse auction will not be conducted in this tender.

S7. INTEGRITY PACT (IP)

- a) IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. Following independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.

Sl. no.	IEM	Email ID
1	Shri Arun Chandra Verma, IPS (Retd.)	acverma1@gmail.com
2	Shri Virendra Bahadur Singh, IPS (Retd.)	vbsinghips@gmail.com

- b) **The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid** (Part-I, in case of two / three part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.
- c) Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEMs shall be done through email only.

Note:

No routine correspondence shall be addressed to the IEM (phone / post / email) regarding the clarifications, time extensions or any other administrative queries, etc. on the tender issued. All such clarification / issues shall be addressed directly to the tender issuing (procurement) department's official whose contact details are provided below:



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Details of contact person(s):

Name	Achin Goyal	Sumeet Bansal
Department	Material Management	Material Management
Address	433, Industrial Complex, IVP Goindwal, Dist. Tarn Taran Punjab 143422	
Phone: (Landline / Mobile)	01859-224617 / 9463697600	01859-224628 / 9878006105
Email	achingoyal@bhel.in	sbansal@bhel.in

S8. AFTER SALES SUPPORT

In case of actuator complaints from project sites, service person should be deputed to site within a time period of 72 HRS within guarantee / warranty period.

Non-adherence to these special conditions of enquiry and BHEL's general terms and conditions may lead to dis-qualification of offer.

These Special terms & conditions and GCC collectively are the part of tender terms and conditions.



General Contract Conditions (GCC) of MM Tenders

BHARAT HEAVY ELECTRICALS LIMITED

Industrial Valve Plant: 433, Industrial Complex,
Goindwal Sahib, Dist. Tarn Taran,
Punjab-143422 (INDIA)

TABLE OF CONTENTS

1. INSTRUCTION TO BIDDER.....	2
2. SCOPE OF SUPPLY	2
3. PRICE BASIS.....	3
4. DISCREPANCY IN WORDS AND FIGURES.....	3
5. EVALUATION IN CASE OF MORE THAN ONE L-1 BIDDER	3
6. REVERSE AUCTION.....	4
7. VALIDITY OF OFFERS.....	4
8. SUPPLIED MATERIAL ADJUSTMENT	4
9. DELIVERY SCHEDULE.....	4
10. LIQUIDATED DAMAGES (LD) FOR LATE DELIVERY	4
11. PAYMENT TERMS.....	5
12. TAXES & DUTIES	5
13. LIABILITY UNDER REVERSE CHARGE (RCM)	6
14. ACCESS TO MANUFACTURING PREMISES.....	6
15. INSPECTION	6
16. GUARANTEE / WARRANTEE AND CORRESPONDING REPAIR / REPLACEMENT OF GOODS	7
17. LOI (LETTER OF INTENT).....	7
18. SUB-CONTRACT.....	7
19. RISK PURCHASE	7
20. FORCE MAJEURE	7
21. CLARIFICATIONS.....	8
22. PREFERENCES FOR MICRO AND SMALL ENTERPRISES (MSEs)	8
23. PREFERENCE TO MAKE IN INDIA.....	9
24. DISPUTES.....	9
25. JURISDICTION	9
26. BANNED FIRMS.....	9
27. FRAUD PREVENTION POLICY	9
28. PREVENTIVE CHECKS TO ELIMINATE SUSPECTED CARTEL FORMATION .	10
29. SUSPENSION OF BUSINESS DEALINGS WITH DEFAULTERS	10
30. GENERAL.....	11



1. INSTRUCTION TO BIDDER

Quotations shall be submitted before due date and time. Late offers are liable to be rejected, so please ensure to submit bid well within due date and time. Techno-commercial part will be opened on due date.

Based on evaluation of techno-commercial offers, Price bids of bidders who qualify from techno-commercial evaluation shall be opened. BHEL may decide to open the Price bid same day at 1700 hrs. If not opened on the same day, all qualifying bidders shall be notified for date of opening of Price bids by email/fax/post/courier/E-procurement system generated email.

1.1 Instruction To Bidder (In case of Non-E-Procurement / Paper/ Manual/ Hard Copy based tenders)

Sealed Tenders can be dropped in the tender box labeled as 'Tender box for MM contracts'. This tender box is located at the entrance of Admin block BHEL Goindwal. Fax (01859-222061) / E-Mail (tendermm_ivp@bhel.in) offers received in time shall be considered only when such offers are complete in all respects. In case of bulky tenders, please handover quotation to Sh. Rakesh Kumar/ SDGM - Head-MM or Sh. Sumeet Bansal / Sr. Manager - MM [Contact: 01859 224 615 / 628]. Bid can be send to following address:

**BHEL, Industrial Valve Plant,
 #433, Industrial Complex,
 Goindwal Sahib, Distt. Tarn Taran,
 Punjab-143422.**

1.2 Instruction to bidder (In case of E-Procurement)

- Interested bidders / suppliers shall submit their offer through e-procurement mode at <https://eprocurebhel.co.in/>.
- Offers in any other mode will not be accepted.
- Procedure for Submission of Tender is available in the "Bidder Manual Kit" at E-tender portal <https://eprocurebhel.co.in/> only.
- In case of any difficulty faced while registering on BHEL's e-Procurement portal developed by NIC, queries may be addressed to 0120-4001002, 0120-4001005 and 0120-6277787; email: support-eproc@nic.in. These details are also available on 'Contact Us' page of the portal.
- Before uploading scanned documents if any, the bidders shall sign on all the statements, documents, certificates uploaded by him, owning responsibility for their correctness / authenticity.
- Disclaimer clause:** Neither the Organization (Bharat Heavy Electricals Ltd.) nor the service provider is responsible for any failure of submission of bids due to failure of internet or other connectivity problems or reasons thereof.

2. SCOPE OF SUPPLY

Material shall be supplied as per the applicable latest Technical Delivery Conditions (TDC)/ Material Standard requirements/BPS/Drawing and other requirement as given in the Tender Enquiry. National & International material Standards shall have to be arranged by vendors themselves. Latest applicable revisions of standards/procedures to be referred.

All required tests as called in referred material standard/BHEL/TDC/drawing etc. shall be carried out by vendor at no extra cost. Material Test Certificates (MTC), inspection reports and Compliance/Guarantee Certificate are to be provided along with the supplies.

3. PRICE BASIS

1. Order of enquiry item sl. no. shall be maintained in the quotation.
2. The rates quoted shall be firm and fixed. No price variation is proposed and allowed.
3. Rates quoted should be F.O.R. Goindwal basis. If bidder has quoted Ex-works, loading shall be done as per BHEL discretion for tender evaluation.

Variation in GST or any other statutory levies during contractual delivery period shall be to BHEL's account.

4. DISCREPANCY IN WORDS AND FIGURES

1. If, in the price structure quoted for the required goods/ services/ works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.
2. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
3. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.
4. If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.
5. Bids should be free from correction, overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else shall be liable for rejection.
6. All overwriting/cutting, etc will be numbered by bid opening officials and announced during bid opening.

5. EVALUATION IN CASE OF MORE THAN ONE L-1 BIDDER

In the course of evaluation, if more than one bidder happens to occupy L1 status, effective L1 will be decided by soliciting discounts from the respective L1 bidders.

In case more than one bidder happens to occupy the L1 status even after soliciting discounts, the L1 bidder shall be decided by a toss / draw of lots, in the presence of the respective L1 bidder(s) or their representative(s).

Ranking will be done accordingly. BHEL's decision in such situations shall be final and binding.

6. REVERSE AUCTION

BHEL will declare in NIT to go for Reverse Auction (RA) or not. If RA is applicable in NIT, then following is to be considered:

BHEL shall be resorting to Reverse Auction (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among all the techno-commercially qualified bidders.

Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered as initial bids of bidders in RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.

7. VALIDITY OF OFFERS

The offers shall be kept open for acceptance 'for number of days mentioned in special terms and conditions' from the date of opening of the tender. In case of tender extension, the bid validity shall be considered from the date of tender opening.

8. SUPPLIED MATERIAL ADJUSTMENT

Item/s pending in previous PO has to be billed in previous PO only. Otherwise, BHEL will be free to adjust the supplies in previous PO. Any implication of tax will be on supplier's account. For this it is desirable that vendor should reconcile the pending PO statement every month/frequently with BHEL. Vendor can also view these details at Portal (<https://trichy.bhel.com/mm/index.jsp>).

9. DELIVERY SCHEDULE

Supplies shall be affected and completed as per schedule mentioned in special terms and conditions. **Further, BHEL may release delivery schedule from time to time based upon our requirement with mutual understanding.** Vendor shall be required to complete the order as per the BHEL schedule requested. Commencement of delivery period shall be reckoned from the date of PO / LOI or any other agreed milestone.

10. LIQUIDATED DAMAGES (LD) FOR LATE DELIVERY

Time is the essence of the contract'. As such, delivery of goods specified in the Purchase Orders released under the scope of this contract shall be made within the time limit prescribed therein. Penalty for late delivery will be applicable @0.5% of the undelivered portion per week of the delay or part thereof subject to a maximum of 10% of the undelivered portion.

In case of Ex-works delivery terms for indigenous supplies, the document date (Invoice/Challan date) in Goods Receipt (GR) document shall be reckoned for LD deduction. In case of FOR Delivery terms for Indigenous supplies, the posting date in GR document shall be reckoned for LD deduction.

If any vendor does not accept LD ½% **of the supply for each week of delay subject to a maximum of 5%**, their offer is likely to be rejected by BHEL and the price bid shall not be opened. Bidders accepting for 10% LD shall not be loaded on account of LD. However, bidders who offer any other %

LD [between 5% to 10%] shall be loaded @ % deviation from 10% and their accepted %. e.g. If a bidder accepts for a max of 7% LD only, their offer would be loaded @ 3% (10 – 7 = 3).

BHEL reserves the right to receive or not receive the material after the due date of PO. Applicable GST shall also be recovered from suppliers/contractors on LD amount. For this Debit note will be issued by BHEL indicating the respective supply invoice number.

11. PAYMENT TERMS

- Due payment against supplies received shall be due after 30 days of receipt and acceptance of material and shall be paid within next 15 days' period. In case of any deviation from standard payment term mentioned, BHEL at its discretion may load on the item price at "Base rate of SBI (as applicable on the date of bid opening; Techno-commercial bid opening) + 6% shall be considered for loading for the period of relaxation sought by bidders.
- Documents to be submitted (if applicable)
 - Tax invoice (Invoice shall be GST compliant and should contains all the required information such as GST No, HSN code etc.)
 - Transporter copy along with material/consignment.
 - Material Test Certificates (MTC) and
 - Compliance Certificate.
- GST registration number is to be submitted by qualified vendor as per GST law.
- It is mandatory to mention proper material codes in the invoices and separate invoices to be raised for different POs.
- BHEL releases payment through EFT mode ONLY. Necessary details may please be submitted by filling required format before release of payment.**

12. TAXES & DUTIES

Payment of GST portion will be released to vendor only upon completion of statutory requirement and further subject to following:

- Vendor declaring such invoice in his GSTR-1 and
- Receipt of goods and Tax invoice by BHEL and
- Confirmation of payment of GST thereon by vendor on GSTN portal.
- Above is subject to receipt of goods/service and tax invoice thereof along with vendor declaring invoice in his return and paying GST within timeline prescribed for availing ITC by BHEL.

Following may please be noted for availing Input Tax Credit (ITC) by BHEL:

- Since ITC can be availed only when BHEL is in possession of GST Tax invoice and after receipt of goods. Thus, vendor to ensure timely dispatch of goods and Tax invoice. It may be noted that in case of any delay in receipt of Tax Invoice and/or receipt of goods, the ITC availment by BHEL will get delayed thus entailing additional cash outflow & may even get denied if ITC availment timelines are breached.
- Further ITC can be availed only when vendor has declared such invoice in his outward supply Return GSTR-1 and after GST thereon has been paid by him at the time of filing of monthly Return.

3. If GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount shall be recoverable from vendor along with interest levied/leviable on BHEL.
4. Further, in case vendor delays declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from vendor/contractor along with interest levied/leviable on BHEL.

13. LIABILITY UNDER REVERSE CHARGE (RCM)

Any GST liability arising on BHEL under Reverse Charge (RCM) before actual receipt of goods and/ or Invoice thereof would be subject to recovery of Interest leviable for the period between the date of such liability and actual date of eligibility of ITC based on receipt of goods, receipt of Invoices and other conditions specified in GST Law as applicable.

14. ACCESS TO MANUFACTURING PREMISES

While Purchase Orders placed on the vendor are under execution, authorized representatives of BHEL shall be allowed free access to the manufacturing facilities for the purpose of inspection or monitoring the progress of purchase orders. This access will also be extended to representatives of BHEL's customers accompanying the authorized representative/s of BHEL (which shall be intimated in advance), if our contractual requirements with our customers call for the same.

15. INSPECTION

1. The seller shall give adequate notice, of 1 week or as mutually agreed period, in writing to the Purchaser about the date and place at which the goods will be ready for inspection/ testing, as provided for in the contract.
2. Purchaser or his authorized representative shall be entitled to carry out inspection of material and workmanship/Surveillance Audit at Seller's premises or at his sub-contractor's premises at all reasonable times during execution of contract; Such inspection, examination and testing, if made, shall not absolve the Seller from his obligations under the contract. No additional charges shall be claimed for such inspections. Moreover, all required infrastructure (testing, tools etc) have to be arranged by supplier.
3. Any inspection carried out before supply by vendor/incoming stage at BHEL notwithstanding, if any defect/non-conformity is noted during processing, the same shall be attended/replaced by vendor at no extra cost.
4. BHEL representative from unit or CQ is authorized to carry out audits along with TPIA at vendor's works before clearing the items for dispatch.
5. Necessary tooling including thread gauges etc. have to be arranged by vendor. Only in exceptional cases, based on BHEL discretions item/nature, BHEL may consider request to provide gauges if available with BHEL. But in no case this shall be linked with delivery of material.

16. GUARANTEE / WARRANTEE AND CORRESPONDING REPAIR / REPLACEMENT OF GOODS

Goods shall comply with the specifications for material, workmanship and performance. Vendor shall give a guarantee / warrantee of 18 months from the date of dispatch or 12 months from date of receipt, against manufacturing defects, whichever is earlier. In case of non-acceptance of this term, bid will be rejected.

If the material is rejected due to defective workmanship during inspection or at the time of actual use, within the guarantee / warrantee period, the rejected material shall be replaced by the supplier. Corresponding quantity shall be treated as unsupplied against respective purchase order till replacement is received at BHEL. If the material is found defective and rejected during use for which payment has already been released the rejected quantity shall be supplied free of cost by the vendor within a month of intimation of the rejection by BHEL.

Lifting of rejected material is under Supplier's scope. BHEL will inform related invoice, quantity etc. to supplier. Supplier is expected to give the plan to lift and advance intimation when visiting to lift the material. Material should be lifted within one month from date of intimation. After one month BHEL will not be responsible for rejected material. BHEL may decide to send the rejected material on to Pay basis to supplier. Any leniency/ unresponsiveness/delay on part of supplier may lead to appropriate action by BHEL. Any request to postpone in written may be considered but replacement should not be linked with lifting of material.

17. LOI (LETTER OF INTENT)

BHEL may issue LOI prior to the PO for any reason whatsoever. The LOI in such cases is to be treated as PO for all practical purposes and all the Terms & Conditions of the tender shall be applicable from the date of issue of LOI.

18. SUB-CONTRACT

The purchase order or any part thereof shall not be sub-contracted, assigned or otherwise transferred without previously obtaining the BHEL's consent in writing.

19. RISK PURCHASE

BHEL shall be entitled to terminate the contract/pending POs at any stage and to purchase elsewhere at the risk and cost of the vendor, either the whole of the goods or any part thereof which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid. Vendor shall be liable for the losses, which BHEL may sustain by way of such risk purchase.

20. FORCE MAJEURE

If at any time during the continuance of the contract, the performance in which or in any part by either party of any obligations under the contract are prevented or delayed by reason of any war, hostilities, acts of public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine restrictions, or acts of God (hereinafter referred to "an events" then provided the

notice of happening of any such event is given by either party to the other within 21 days of the occurrence thereof, neither party shall by reason of such event be entitled to terminate the contract nor shall either party have any claim for damages against the other in respect of such non-performance and delay in performance and delivery under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist. If the performance in whole or part of any obligation under the contract is prevented or delayed by reason of any such event, claims of extension of time shall be granted for periods considered reasonable by BHEL subject to prior notification by the vendor to BHEL of the particulars of the event and supply to BHEL, if required, of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed a waiver of time in respect of remaining deliveries.

21. CLARIFICATIONS

The correspondence exchanged against the tender from both tenderer and BHEL through email/e-procurement are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business. Any transaction pertaining to the tender from both the parties of business done round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties. This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the parties to the business.

22. PREFERENCES FOR MICRO AND SMALL ENTERPRISES (MSEs)

Preferences as mentioned in “Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012” & “Public Procurement Policy for Micro and Small Enterprises (MSEs) Amendment Order, 2018”, or as per latest guidelines issued by government shall be given to Micro and Small enterprises.

Main points which are mentioned in the above orders are as follows:

- 25% Procurement of the tender value shall be made from MSE (Micro, Small Enterprises) firms.
- 25% of the 25% quantity (i.e. 6.25% of the tender quantity) offered to the MSE's shall be reserved for MSE's owned by SC/STs. Failure to participate by any MSE owned by SC/ST's; this 6.25% quantity shall be procured from other MSEs.
- 3% from within the 25% quantity offered to the MSE's shall be reserved for women owned MSE's. Failure to participate by any MSE owned by women; this 3% quantity shall be procured from other MSEs.
- EMD shall be exempted for MSE's. All these benefits are subject to production of all statutory documents
- In tender, participating Micro and Small Enterprises quoting price within price band of L1+15 per cent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise and such Micro and Small Enterprise shall be allowed to supply up to 25 per cent of total

tendered value. In case of more than one such Micro and Small Enterprise, the supply shall be shared proportionately (to tendered quantity).

MSE suppliers can avail the intended benefits only if they submit along with the offer Udyam Registration Certificate or UAM (Udyog Aadhaar Memorandum) or attested copies of EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format enclosed at Annexure-1, where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non-submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents is not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer. **Udyam Certificate / UAM need not required to be notarized or attested.**

23. PREFERENCE TO MAKE IN INDIA

For this procurement, the local content to categorize a supplier as a Class-I local supplier / Class-II local supplier / Non-local supplier and purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 04.06.2020 issued by DPIT. In case of subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT.

24. DISPUTES

In the event of any dispute and/or difference arising between the Vendor and BHEL as to interpretation and/or execution of the contract and/or the respective rights and liabilities of the parties, such disputes and/or differences shall be referred to the sole arbitrator nominated by BHEL. The provisions of the Indian Arbitration Act and the rules there under shall apply to such arbitration. The award passed by the arbitrator shall be final and conclusively binding on all the parties.

25. JURISDICTION

The court of the place from where the purchase order is issued during the contractual period shall alone have jurisdiction to decide any dispute arising out of or in connection with the purchase order.

26. BANNED FIRMS

The offers of the bidders who are on the banned list as also the offer of the bidders, who engage in the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL website www.bhel.com.

27. FRAUD PREVENTION POLICY

The Bidder along with its associate / collaborators / sub-contractors / sub-vendors / consultants / service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website

<http://www.bhel.com> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.

28. PREVENTIVE CHECKS TO ELIMINATE SUSPECTED CARTEL FORMATION

The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/ guidelines.

29. SUSPENSION OF BUSINESS DEALINGS WITH DEFAULTERS

The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.

1.0 Integrity commitment, performance of the contract and punitive action thereof:

1.1. Commitment by BHEL:

BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity.

1.2. Commitment by Bidder/ Supplier/ Contractor:

1.2.1. The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.

1.2.2. The bidder/ supplier/ contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.

1.2.3. The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL.

If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on www.bhel.com and/or under applicable legal provisions

30. GENERAL

1. BHEL will not be bound by any power of attorney granted by the vendors or by changes in the composition of the firm made subsequent to the execution of the contract. They may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the vendor concerned.
2. BHEL reserves the right to extend the due date of opening, which shall be informed. Validity of offer shall be deemed to be revised accordingly.
3. BHEL reserves the right to accept or reject any part or whole of the tender of a bidder by assigning a valid reason thereof. BHEL reserves the right to cancel the tender without assigning any reason thereof and without any obligation before any commitment.
4. Acceptance of all terms and conditions, in the form of signed copy of T&C or confirmation separately written, shall be submitted along with quotation. If nothing is mentioned, it shall be concluded that terms and conditions are acceptable.
5. BHEL may increase/decrease item/s based on BHEL requirement before price bid opening. Suitable price implication may be asked from suppliers.
6. BHEL may drop item/items from tender at any stage of tender before placing PO. BHEL may also delete PO with consent with supplier within delivery date of PO.
7. After releasing PO, it is assumed that supplier has accepted PO if we do not receive acknowledgement from supplier within 5 days of date of PO.
8. In case of unscheduled holiday on opening day of tender, the next working day will be treated as scheduled prescribed day of opening of tender.
9. On the due date of tender opening, only technical bids will be opened. The opened technical bids will be evaluated by us and clarifications required, if any, will be called for from the bidders on technical and commercial points. If no reply is received from the vendor for the clarification raised by BHEL with in the final cut-off date, those vendors offer will be processed with the documents available / submitted against this tender. Offers not meeting the required specification and technical condition will be summarily rejected. The price bids of technically suitable bidders will be opened on a later date with prior intimation to techno-commercially suitable bidders.
10. Ranking L-1, L-2 etc. shall be done for individual item for the techno-commercially acceptable offers on landed cost to BHEL, IVP Goindwal basis and BHEL reserves the right to place order for individual items with different vendors.
11. BHEL reserves the right to negotiate with L1 vendor or re-float the tender for items where, L1 price is not the lowest acceptable price; BHEL reserves the right to increase or decrease the tender quantity.
12. If supplier is mentioning delivery destination within state/ outside state depending upon his location of factory, Free on Road etc. these are assumed as on FOR Goindwal. If supplier is wishing to give delivery on Ex works basis, then he has to clearly mention about it.
13. The bidder has to keep track of any changes by viewing the addendum / Corrigendum's issued by the Purchaser on time-to- time basis in the E-Procurement platform. The Company calling for tenders shall not be responsible for any claims/problems arising out of this.
14. Any term in special tender terms and conditions will supersede the GCC.

Certificate by Chartered Accountant on letter head

This is to Certify that M/S,
(hereinafter referred to as 'company') having its registered office at
..... is registered under MSMED Act 2006, (Entrepreneur
Memorandum No (Part-11) dtd:.....,
Category:..... (Micro/Small)). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as per the
latest audited financial year as per MSMED Act 2006 is as follows:

1. **For Manufacturing Enterprises:** Investment in plant and machinery (i.e. original cost
excluding land and building and the items specified by the Ministry of Small Scale Industries vide its
notification No.S.O.1722(E) dated October 5, 2006 :
Rs.....Lacs
2. **For Service Enterprises:** Investment in equipment (original cost excluding land and building and
furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED
Act, 2006:
Rs.....Lacs

(Strike off whichever is not applicable)

The above investment of Rs.....Lacs is within permissible limit of
Rs.....Lacs forMicro / Small (Strike off which is not applicable)
Category under MSMED Act 2006.

Or

The company has been graduated from its original category {Micro/ Small} (Strike off which is not
applicable) and the date of graduation of such enterprise from its original category is
(dd/mm/yyyy) which is within the period of 3 years from the date of graduation of such
enterprise from its original category as notified vide S.O. No. 3322(E) dated 01.11.2013 published
in the gazette notification dated 04.11.2013 by Ministry of MSME.

Date:

(Signature)

Name-

Membership number-

Seal of Chartered Accountant



365-147/B
31.08.16

BHEL – Tiruchirappalli – 620014,
India

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **1** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Revision Record:

Rev. No	Date	Details of Revision
00	30 July 2020	INITIAL RELEASE

IMPORTANT INSTRUCTIONS:

- Vendor shall furnish point-to-point confirmation / deviation to each clause of this specification explicitly.*
- The offer shall be submitted along with all the documents required in this specification. Offer without all supporting documents requested in this specification will not be considered.*

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
G.1.0	GENERAL	
G.1.1	The offered Actuator shall be brand new with state of the art technology having a proven field track record. No prototype equipment shall be offered.	
G.1.2	Vendor shall ensure availability of spare parts and maintenance support services for the offered equipment for at least 10 years from the date of supply.	
G.1.3	Vendor shall give a notice of at least one year to the end user of equipment before phasing out the product/ spares to enable the end user to place order for spares and services.	
G.1.4	The vendor shall be responsible for design, engineering and manufacturing of the complete actuator to fully meet the intent and requirements of this specification.	
G.2.0	ENCLOSURE:	
G.2.1	Actuators of Non-Intrusive type with SIL 2 certification & Profibus compatibility shall be offered. All actuator settings including torque, limit shall be possible without opening the actuator cover and LCD indication shall be available integral to actuator body. Actuators shall be designed for valve operation to ensure proper function in accordance with specifications given below and complying to EN15714-2 or equivalent. Offered actuator shall meet IEC 61508 and IEC 61511 the standard requirements. Actuators including motor, integral starter, control transformer unit and all control devices shall be of totally enclosed weather proof and dust proof construction with min. IP 68 enclosure, which shall include the 'O' ring for complete environmental protection. The same shall be suitable for outdoor applications and capable of operating in ambient temperature of -20 deg.C to +70 deg.C.	



365-147/B
31.08.16

BHEL – Tiruchirappalli – 620014,
India

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **2** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause No	Specification requirement	Vendor confirmation / comments / deviation
G.3.0	VOLTAGE:	
G.3.1	The unit shall be suitable for operation on a 415V, 3 phases, 50Hz, 3-wire AC supply. All the internal power supply required for Starter unit and other accessories shall be derived from the above indicated power supply through control transformers.	
G.4.0	CONSTRUCTION:	
G.4.1	Actuators shall have provision to accommodate raising spindle of the valve and the hole shall be properly covered with a removable lid. The actuator shall be supplied with stem protection tube to accommodate larger spindle travel as indicated elsewhere in this specification. All the above parts, i.e. The threaded portion of actuator, removable lids and stem protection tubes shall be able to withstand the prolonged outdoor storage without getting rusted or damaged.	
G.4.2	The actuator shall be suitable for mounting directly on the valve. The actuator shall be capable of giving the required torque, rpm and thrust. The actuator shall be suitable for mounting in any position. Indicate the adjustable range of torque and starting torque of actuator in kgm/Nm for each actuator offered. The maximum thrust capability of the actuators shall also be furnished. The actuators shall be designed to take the full thrust. All Gears used shall be metallic. Fiber gears are not acceptable. Metallic gear trains used shall be self-locking type to prevent drift.	
G.4.3	Actuator shall have thrust base with blank removable adaptor bush of aluminum bronze, which can be threaded to accommodate raising spindles of valve.	
G.4.4	The exact mounting arrangement with dimensions shall be clearly furnished along with the offer. The flange dimension shall be as indicated elsewhere in this specification.	
G.4.5	The dimension drawing of the blank adopter bush shall be furnished along with the offer.	
G.4.6	<u>SPRING LOADED / THRUST COMPENSATOR ASSEMBLY OUTPUT DRIVE</u> Spring loaded (or) thrust compensator drive assembly shall be provided wherever “AF” indicated in the actuator requirement. This drive assembly is required to take care of high dynamic thrust, which will be developed during multistage pressure reduction process.	



365-147/B
31.08.16

BHEL – Tiruchirappalli – 620014,
India

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **3** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause No	Specification requirement	Vendor confirmation / comments / deviation
G.4.7	Each actuator shall have a hand wheel fitted on it for manual operation in case of power failure. It shall be possible to fully open /close the valve with the hand wheel. The hand wheel shall be designed such that its engaging lever declutches automatically when the power supply to the motor is restored. The material of the hand wheel shall be either malleable iron or steel. The hand wheel-engaging lever shall give trouble free performance under repeated operations. Side mounted hand wheel with gear / Top mounted hand wheel can be offered. The hand wheel construction shall be strong enough to withstand the impacts of normal handling and storage of actuator without any damage. The handwheel shall be able support the weight of the actuator, without any damage to actuator or hand wheel, when actuator is rested on the hand wheel.	
G.4.8	Actuators offered shall be with self-locking worm.	
G.5.0	REVOLUTIONS:	
G.5.1	Desired output shaft speeds are given below for different torque ranges. Actual speeds of actuators offered shall be clearly indicated.	
G.5.2	Actuator shall have provision to set the Torque value from 40% of the maximum Torque mentioned in the below table.	

Sl.no	Max.Torque (Kg-M)	RPM (Approx)	Output flange details in mm (LD x PCD x Bolt details)	Stem Protection Cover in mm
1	3	18	F10 (60 x 102 x 4Nos M10)*	100
2	6	24	F10 (60 x 102 x 4Nos M10)*	100
3	10	36	F10 (60 x 102 x 4Nos M10)*	150
4	15	48	F14 (100 x 140 x 4Nos M16)*	250
5	30	36	F14 (100 x 140 x 4Nos M16)*	250
6	30	96	F14 (100 x 140 x 4Nos M16)*	300
7	50	36	F16 (127 x 165 x 4Nos M20)*	300
8	50	96	F14 (100 x 140 x 4Nos M16)*	450
9	60	72	F14 (100 x 140 x 4Nos M16)*	450
10	80	36	F25 (152x254 x 8Nos M16)*	400
11	100	36	F25 (152x254 x 8Nos M16)*	500
12	100	96	F16 (127 x 165 x 4Nos M20)*	500
13	200	24	F25 (152x254 x 8Nos M16)*	500
14	300	24	F30 (177.8x298.5-8NOS M20)*	400
15	400	32	F30 (177.8x298.5-8NOS M20)*	400
16	800	22	F35 (215.9x355.6-8 NOS M24)*	450
17	1600	22	F40 (228.6x406.4-8NOS M30)*	500

*- Vendor has to adhere this BHEL's specific requirement



365-147/B
31.08.16

**BHEL – Tiruchirappalli – 620014,
India**

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **4** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Sl.no	Max.Torque (Kg-M)	RPM (Approx)	Output flange details in mm (LD x PCD x Bolt details)	Stem Protection Cover in mm	Output drive type
1	15	36	F14 (100 x 140 x 4Nos M16)*	250	Spring loaded/ Thrust compensator assembly
2	30	36	F14 (100 x 140 x 4Nos M16)*	250	

*- Vendor has to adhere this BHEL's specific requirement

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
G.6.0	WEIGHT:	
G.6.1	Furnish weight of actuator including all accessories.	
G.7.0	LUBRICANT:	
G.7.1	Oil plugs shall be provided for filling and draining separately.	
G.7.2	The gearbox of the actuator shall be oil filled or grease filled. The oil/grease must be suitable for operation for 80 Deg. above ambient temperature. Furnish detail of lubricant used with Indian oil Company's BPCL & HPCL's equivalent. The actuator shall have proper seals to prevent leakage of oil at all installation positions. The actuator construction shall be such that the oil/grease does not leak to other compartments or outside. In case of any complaint of such leakage, the complaint shall be attended free of cost within one week and root cause of the problem shall be eliminated within one month.	
G.8.0	DIMENSIONAL CATALOGUES:	
G.8.1	Two copies of catalogues of the actuators in English language describing the constructional details shall be sent along with the offer. The catalogues shall also provide over all dimensions of the actuators, maximum spindle acceptance diameters and other details called for in the specification.	
G.9.0	O & M INSTRUCTION MANUALS:	
G.9.1	Operating and Maintenance Instruction Manual should contain Actuator O&M instructions along with End of life disposal procedure also. a. One copy of Operating and Maintenance Instruction Manual shall accompany each actuator ordered. b. One set of Operating and Maintenance Instruction Manual of each type of actuator both in Hard copy and in Soft copy in CD (in pdf format) shall be sent to us before dispatch of the actuator.	



365-147/B
31.08.16

**BHEL – Tiruchirappalli – 620014,
India**

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **5 of 16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
A.0	ACCESSORIES	
A.1.0	POSITION/TORQUE TRANSMITTER:	
A.1.1	The Position/ Limit measurement shall be done using absolute encoders which will give information of position/ limit in both the directions. Electronic measurement of torque shall be provided.	
A.2.0	LOCAL POSITION INDICATORS:	
A.2.1	LCD indication shall be available integral to actuator body to display actuator alarms, status and valve position indications as a minimum.	
A.3.0	REMOTE POSITION TRANSMITTER:	
A.3.1	Open/Close actuator shall have two Nos. of resistance type position transmitter for remote indication. Rating of position transmitter 100ohms, 50 Volts, AC/DC. A suitable fixed dropping resistor must be put in series for limiting the power consumption.	
A3.2	For regulating and inching duty applications, actuators shall be provided with one LVDT type electronic position transmitter (CPT/CLEPT/CEPT), suitable for 24V DC with an output of 4-20mA, wherever indicated.	
M.0	MOTORS	
M.1.0	POWER SUPPLY:	
M.1.1	Motor shall be suitable for operation on a 415V, 3 phase, 3 wire ungrounded supply system.	
M.1.2	Motor shall operate without any trouble under the following conditions.	
	a. If the voltage varies within plus or minus 10% of the rated value of 415 Volts.	
	b. If the frequency of the power source varies within plus or minus 5% of 50 Hz	
	c. If the voltage and frequency of the source vary simultaneously and the sum of the absolute percentage values in variation does not exceed 10%.	



365-147/B
31.08.16

BHEL – Tiruchirappalli – 620014,
India

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **6 of 16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
M.2.0	CONSTRUCTION:	
M.2.1	Motor shall be totally enclosed with min IP 68 or better weatherproof enclosure and shall be suitable for outdoor installation without canopy. In case of any water leakage due to enclosure failure it shall be attended free of cost within one week and root cause of the problem shall be eliminated within one month	
M.2.2	Motor shall be conforming to IEC 60034 or any other equivalent international standard for all requirements unless otherwise specified herein.	
M.2.3	The enclosures shall be treated and prepared for painting with suitable painting system for withstanding 500Hrs of salt spray as per ASTM B-117/ ISO9227 standard. Motor shall be painted with corrosion proof epoxy resin paint.	
M.3.0	INSULATION:	
M.3.1	Motor shall have class F non-hygroscopic insulation with tropicalisation suitable for polluted dusty and corrosion atmospheres of relative humidity 100%. Motor shall be designed for an ambient temp of 50 degree C. However, the temperature rise of the motor winding shall be limited to the maximum temperature allowed for class 'B' insulation. It shall also be possible to rewind the motor in case the windings and insulation get burnt out.	
M.4.0	RATING:	
M.4.1	For ON/OFF application: Motors shall be S2-15 min. rating. This shall not be less than the highest of the following: 1) Fifteen minutes. 2) As required for three successive open/close operations.	
M.4.2	For INCHING application (Wherever with CPT / CEPT / CLEPT specified in actuator requirement): Motors shall be S2-15 min. rating and No. of starts/hour shall be min. 150Starts/hr	
M.5.0	STARTING:	
M.5.1	Motor shall be suitable for direct on-line starting.	
M.5.2	Starting current shall be limited to 6 times the full load current.	



365-147/B
31.08.16

BHEL – Tiruchirappalli – 620014,
India

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **7** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause No	Specification requirement	Vendor confirmation / comments / deviation
M.5.3	Motor shall be capable of a. Starting at 85% of rated voltage. b. Running at 80% of rated voltage for a period of 5 minutes, at 1/3 load. c. The torque at reduced supply voltage shall be mentioned for 75% voltage, 80% voltage, 85% voltage & 90% voltage.	
M.6.0	BEARINGS:	
M.6.1	Bearing shall be of double shielded, grease lubricated antifriction type. The anticipated bearing life shall be indicated for all models.	
M.7.0	EARTHING TERMINALS:	
M.7.1	Two earthing terminals shall be provided on either side of the motor.	
M.8.0	MOTOR DATA:	
M.8.1	One set of hard and soft copies of motor data sheets for each type of actuators ordered shall be furnished as per format furnished.	
M.9.0	WEIGHT	
M.9.1	Weight of the Motor shall be furnished separately along with the offer.	
M.10.0	TESTS:	
M.10.1	Tests shall be carried out as per approved QP.	
C.0	CONTROLS	
C.1.0	INTERNAL WIRING:	
C.1.1	Internal wiring diagram shall be neatly pasted on cover of terminal box.	
C.1.2	Internal wiring shall be done with 1.5 sq.mm PVC insulated copper wires. Ferrules should be provided on both ends of the wire for easy identification.	
C.2.0	FEATURES APPLICABLE TO INTEGRAL STARTER	
C.2.1	The actuators shall have integral starters. Control supply shall be derived with step down transformer from 415V, 3 PH, 50Hz incoming supply. Necessary primary and secondary fuses shall be provided. All the PCBs shall be protected against moisture by suitable coating and treatment. In case of failure of PCBs due to moisture entry. It shall be attended free of cost within one week and root cause of the problem shall be eliminated within one month.	



365-147/B
31.08.16

**BHEL – Tiruchirappalli – 620014,
India**

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **8** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
C.2.2	Automatic phase correction facility and single phasing prevention shall be available.	
C.2.3	All actuators shall be configured for both safety functions SIL Move to limit and SIL to Stayput. i.e Safe OPENING/CLOSING and Safe ESD (i.e STOP)	
C.2.4	Lockable Selector switch for LOCAL-OFF-REMOTE selection. Push buttons OPEN, STOP, CLOSE (for local operation) shall be provided.	
C.2.5	It should also be possible to reverse the direction of travel for inching valves (in LOCAL and REMOTE) without giving stop command.	
C.2.6	Indication for full open, full close and in-travel positions shall be provided.	
C.2.7	Electrically and mechanically interlocked contactors shall be provided for forward and reverse operation. Contactor rating shall be sufficient to withstand the extreme conditions like valve jamming and instantaneous reversal of motor.	
C.2.8	Open/Close command termination logic with position and torque set points shall be suitably built in the PCB inside the actuator.	
C.2.9	All actuator settings indicated below shall be possible without opening the actuator. a) Valve seating by torque (close) or limit (close) shall be available. b) Inching (non self-retaining) or non-inching (self-retaining) for remote command and local mode shall be field configurable.	
C.2.10	24V Power supply for CPT/CEPT / CLEPT shall be derived internally.	
C.2.11	Thermostats shall be embedded in motor winding. thermostats shall be connected in control circuit to trip actuator in case of overload.	
C.2.12	The following status annunciation shall be made available locally (integral to actuator) a) Actuator running in OPEN b) Actuator running in CLOSE c) Internal 24V DC Control voltage healthy d) 24V DC availability for customers use healthy.	
C.2.13	The following individual fault annunciation shall be made available locally (integral to Actuator) for easy trouble shooting a) Open Torque sensor acted b) Close Torque sensor acted c) Thermostat trip d) Motor single phasing e) Wrong phase sequence protection acted	



365-147/B
31.08.16

**BHEL – Tiruchirappalli – 620014,
India**

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **9** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause No	Specification requirement	Vendor confirmation / comments / deviation
C.2.14	a) Open/ close commands, open/ close feedback status, disturbance signal etc. shall be available to the Control System through the fieldbus network along with diagnostics. The detailed diagnostics including the actuator operating data shall be available to the DDCMIS through the fieldbus network. b) All actuators shall be Profibus compatible based on finalized protocol of DDCMIS. Actuator shall have two (redundant) Profibus DP ports for connecting the redundant Profibus DP cables. That is if one profibus cable is cut or not working/ not available, then complete actuator functionality shall be available through the second redundant cable without any manual intervention. Profibus DP Actuator should comply with IEC 61158 c) Open/close command termination logic shall be suitably built inside actuator. d) Actuator shall be suitable for remote operation by potential free contacts for Safe open / safe close and safe stop, the necessary 24V DC power supply shall be derived internally. Also It shall be possible to energise the interposing relays provided (with coil burden $\leq 2.5VA$, one for open and one for close) to initiate opening and closing by 24V DC signal from the external control system, accordingly suitable isolated interface in the actuator shall be provided. e) Change-over contact for SIL collective failure signal and SIL Ready signal/ monitor relay signal f) Based on the input Demand signal, actuator should be in Stay put (or) move to Open/close position (ie. Both safety functions SIL Move to limit and SIL to Stayput to be considered) g) The vendor shall provide all necessary configuration files/application like GSD (General Station description), EDD (Electronic Device Description), DTM (Device Type Manager) and any other file for interface of actuator with DDCMIS h) The vendor has to furnish Profibus Certification of the offered product from accredited Profibus User Organization (PI) Test Lab (PITL)	
C.2.15	Vendor has to consider one no. hand held programming tool for 10 nos. of actuators in his package (Eg. if the total package qty is 61 nos, then vendor has to consider 7nos of configurator as min.), if the same is applicable for configuring the supplied actuator.	



365-147/B
31.08.16

**BHEL – Tiruchirappalli – 620014,
India**

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **10** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
C.2.16	BLINKER RELAY: Blinker relay contact for remote indication of 'actuator running' is to be provided as a standard part of integral starter actuator.	
C.2.17	In the event of voltage dips/ power outage, status of MOVs (OPEN/ CLOSE indication) for remote annunciation shall not undergo any change. The wiring for all MOVs feedback controls shall be fail safe type. Any backup for power supply & hardware required for achieving the same shall be provided by vendor within the actuator. No other power supply other than 415V+/-10%, three phase, 50Hz+/-5% incoming supply to each of MOV Actuator shall be provided.	
C.3.0	TERMINAL BOX:	
C.3.1	The terminals shall be clip-on type with sufficient insulation between 2 adjacent terminals. All terminals must be suitable for 2 nos. of 2.5 sq.mm wires.	
C.3.2	Minimum 10 numbers of terminals shall be available in the terminal board as spare terminals.	
C.3.3	Terminal box of actuator shall be weather proof and have enough space for connecting two numbers of PVC insulated armoured copper conductor control cable 6/12 pair / 1.5 sq.mm. One Number PVC insulated armoured copper / aluminium conductor power cable (Exact Cable size will be furnished after ordering). Grade of TB shall be min. 650V. Motor terminals shall be of stud type, screw type and press fit type depending on the power rating. Terminal box shall be fitted with a removable front cover plate. Suitable terminals/ connectors, integral to actuator, for terminating Profibus cables shall be provided. Necessary glands for the same shall be provided.	
C.4.0	CABLE GLAND:	
C.4.1	Actuators are to be provided as a standard with one cable gland for power, 2 cable glands for control and 2 cable gland for profibus (Exact Cable OD will be furnished after ordering). All the cable glands shall be of double compression type and made of Ni plated Brass material with PVC shroud. Un used cable entries shall be plugged with Ni plated Brass plugs with suitable sealing (like 'o' ring) to ensure IP68 or better protection. Power cable gland as per the below table.	
C.4.2	Preferably all the cable glands shall be provided on one direction (face) only. Wherever this is not technically feasible, the cable gland on the second side shall be provided with necessary elbows, so that all glands will be facing at one side.	



365-147/B
31.08.16

**BHEL – Tiruchirappalli – 620014,
India**

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **11** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Table for Power cable OD

KW Rating	DESCRIPTION	Cable OD
UPTO 3 KW	3 Core x 2.5Sq.mm Copper unarmored PVC insulated	14 +/-2mm
Above 3 to 7 KW	3 Core x 6Sq.mm Aluminum unarmored PVC insulated	17+/-2mm
Above 7 to 13 KW	3 Core x 16Sq.mm Aluminum unarmored PVC insulated	22+/-2mm
Above 13 to 24 KW	3 Core x 35Sq.mm Aluminum unarmored PVC insulated	27+/-2mm
Above 24 to 37 KW	3 Core x 70Sq.mm Aluminum unarmored PVC insulated	33+/-2mm

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
C.5.0	FEATURES APPLICABLE TO FLAME PROOF ACTUATORS	
C.5.1	STANDARDS	
C.5.1.1	Actuators meant for hazardous area shall meet the requirements of latest IS 2148/IEC60079 , IEC – 79 or equivalent International Standards.	
C.5.1.2	Indigenous equipment shall be certified by CIMFR and approved by PESO and DGFASLI and shall carry the BIS License Marking. All the certification shall be valid at the time of delivery.	
C.5.1.3	Imported equipment shall be tested and certified by an independent certifying agency of country of equipment origin. However, the same shall be PESO certified. All the certification shall be valid at the time of delivery.	
C.5.2	ENVIRONMENT:	
C.5.2.1.	Area Classification: Class 1, Division 1, Zone 1	
C.5.2.2.	Gas Group: IIA & IIB. - IIC if specified	
C.5.2.3.	Temperature Class (As per IEC-79): T3 (200 Deg. C) T4 if specified	
C.5.2.4.	Construction: Flame Proof Ex (d) as per IS 2148/IEC60079	



365-147/B
31.08.16

BHEL – Tiruchirappalli – 620014,
India

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **12** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
C.5.3	CABLE GLANDS: Flame proof, double compression Nickel plated brass cable glands with PVC shroud shall be provided for conduit entries. Unused entries shall be plugged with flame proof plugs.	
C.5.4	Document required: CIMFR Test Certificates, Approvals of PESO and DGFASLI, BIS License	
D.0	DOCUMENTS	
D.1.1	Furnish the following documents along with offer & after ordering:	
	a. Outline dimension of assembled motor. - GA drawings for all models including dismantling clearances. - The dimension drawing of the blank adopter bush - Data sheet for all models. Along with weight of the actuator - Dimensional catalogue with maximum spindle acceptance details - Wiring diagram for all models. - Gear selection chart for setting of local position indicator	
	b. Outline dimension of actuator.	
	c. Dimensional drawing of terminal showing the method of terminating incoming cables.	
	d. General arrangement drawing of actuator consisting following as minimum i) Identification of critical component with its material composition. ii) Mounting flange dimension iii) Hand wheel dimensions iv) Actuator cover removal clearances v) Weight of actuator with integral starter vi) Stem protection cover length, thread size and type vii) Double compression cable gland with PVC shroud & plugs viii) Separate drawing for details of cable gland with PVC shroud cross section, min/ max. cable OD that can be accommodated, critical dimension etc.	
	e. SIL-2 certification	
	f. Quality plan	
	g. Type test certificates	
	h. Default settings of torque, dial indicator and torque/limit closing for all models.	



365-147/B
31.08.16

**BHEL – Tiruchirappalli – 620014,
India**

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **13** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
E.0	ERECTION SUPERVISION & COMMISSIONING SUPPORT	
E.1.1	Vendor shall furnish separate lump sum price for providing Erection supervision and commissioning support to these SIL certified Non-Intrusive Actuators with Profibus connectivity. Vendor has to provide training to site and customer personnel on trouble shooting and maintenance of Non-Intrusive hardwired Electric Actuator and proper interfacing with Remote control system.	
S.0	SPARES	
S.1.1	Supplier shall specify a list of recommended spares for 2/5 years trouble free operation. An exploded view of the actuator shall be furnished with part numbers for identifying the spares.	
T.0	TEST REQUIREMENTS FOR ACTUATORS	
T.1.0	ROUTINE TEST:	
T.1.1	Dimensions: Overall and mounting	
T.1.2	Details of painting as per specification and vendor practice: Anti-corrosiveness Epoxy.	
	i. Shade.	
	ii. Finish	
	iii. Paint thickness	
T.1.3	Manual operation through hand wheel.	
T.1.4	Testing of position and torque limit Sensors for accuracy and repeatability.	
T.1.5	Hand-Auto switching function.	
T.1.6	For motors, all routine tests as called in IEC- 60034 from motor manufacturer.	
T.1.7	Output shaft speed and torque of actuator and corresponding current.	
T.1.8	Stall current and stall torque for the actuator assembly.	
T.1.9	a. Position indicator and transmitter: Calibration check for accuracy, linearity and repeatability.	
	b. Functional test for electronic position transmitter (If applicable).	
T.1.10	Leakage test for gear case (visual).	



365-147/B
31.08.16

**BHEL – Tiruchirappalli – 620014,
India**

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **14** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
T.1.11	HV test at 1.6 KV (80% of 2 KV) for the assembled actuator.	
T.1.12	Operation of actuator under variation in supply voltage (plus or minus 10%) for verifying rated torque and speed.	
T.1.13	Checking of wiring as per approved wiring diagram	
T.1.14	The following tests are applicable for integral starter actuators	
	a. Functional test for local / remote / off selection	
	b. Open/close/stop operation in local and remote mode.	
	c. OLR tripping	
	d. Functional test, temperature raise test and burn-in test on PCB	
T.2.0	TYPE TEST certificates shall be provided for the following tests.	
T.2.1	Type test for motor as per IEC- 60034	
T.2.2	Noise and vibration test for total assembly IS: 4729/BS 4999.	
T.2.3	Temperature rise test during:	
	a. Operation of actuator at 90% voltage.	
	b. Operation of actuator at 50 degree C ambient.	
T.2.4	Operation with variation in frequency (plus or minus 5%) for verifying rated torque and speed.	
T.2.5	Enclosure protection for the total assembly (for all type of actuator) Valid CMRI and PESO certificate(if Flame proof actuator)	
T.2.6	Endurance test for actuator.	
T.2.7	Endurance test for limit sensors (if applicable)	
T.2.8	Damp heat cycle test as per IS:9000/IEC 68-30.	
T.2.9	Following test are applicable for integral starter actuators	
	a. Type test on bare PCB	
	b. Life cycle test	
T.3.0	DOCUMENTS TO BE PROVIDED:	
T.3.1	Certificate for routine test.	
T.3.2	Routine and type test reports for motors.	
T.3.3	Type test report for all tests listed under 'T.2.0'	
T.3.4	TC for endurance test for limit sensor and torque sensor (if applicable).	



365-147/B
31.08.16

**BHEL – Tiruchirappalli – 620014,
India**

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **15** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
N.1.0	NOTES:	
N.1.1	The supplier shall also submit quality plan covering quality checks carried out in different stages of procurement process, manufacturing assembly, testing and final inspection stage. These quality plans shall be approved by BHEL/Customer.	
N.1.2	All testing facilities shall be arranged by the vendor, at their works before calling BHEL – TPI /Customer representative for inspection.	
N.1.3	Approved drgs., PO specification and relevant standards if any shall be made available during testing / inspection.	
N.1.4	All measuring and testing instruments shall be periodically calibrated from National test house and certificates made available during inspection.	
N.1.5	All relevant GA drawings, data sheets & wiring diagrams shall be submitted as controlled copy and approval shall be obtained from BHEL. All supply shall be as per these documents.	
N.1.6	Nameplate: Each motorized valve actuator shall be provided with a stainless steel nameplate furnishing the following details as minimum, attached firmly to it at a place convenient for reading: a) Actuator tag number as per data sheet b) Motor kW rating, motor short time rating, motor supply voltage, nominal motor phase current, auxiliary switch rating c) Maximum torque setting d) Actuator enclosure type, lubricant type e) Actuator type, wiring diagram number/ catalogue number, actuator serial number. f) Apart from the nameplate indicating the tag no., a separate nameplate shall also be provided on each actuator to indicate the Details of the testing agency (CIMFR or equivalent), test certificate number with date, statutory approval number with date, approval agency (PESO / equivalent).	



365-147/B
31.08.16

BHEL – Tiruchirappalli – 620014,
India

Valves Engineering and R&D

PURCHASE SPECIFICATION

DOC No: **SPEC:AC:NI1** Rev: **00**

Effective Date: **30/07/2020**

Page: **16** of **16**

Product: Electrical Actuator (NON-INTRUSIVE type with SIL certification and Profibus compatibility)

Clause. No	Specification requirement	Vendor confirmation / comments / deviation
N 1.7	Packing & Transport: The actuator shall be supplied to site packed in wooden crates / Carton boxes. They shall be wrapped with polythene sheets. They shall have skid bottoms for handling. All spares shall be packed separately in boxes marked SPARE. Special precaution notations such as Fragile. This side up, Center of gravity, weight, Owner's particulars. Purchase number etc. shall be clearly marked on the package together with other details as per purchase order. The equipment shall be properly packed for the selected mode of transportation whether indigenous or imported, i.e. by ship, rail or trailer. If the equipment is supplied through ship, Sea worthy packing shall be considered to prevent damage.	

Signature			
Name	K. Jalaludeen	D. Kavitha	K. Chinnasamy
Designation	DM	DGM	AGM
Date	30 July 2020	30 July 2020	30 July 2020
Action	Prepared By	Checked & Reviewed By	Approved By

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

_____, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for Tender enquiry no. 2021-054E dated 08.12.2020 for the supply of Electrical Actuators (Non-Intrusive type with SIL Certification & Profibus compatibility)

_____. The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Principal

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

1.1.3 The Principal will exclude from the process all known prejudiced persons.

1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions:

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and will await their decision in the matter.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 4 - Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to

demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher.

Section 5 - Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/ Contractors / Sub-contractors

- 6.1 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors. In case of sub-contracting, the Principal contractor shall be responsible for the adoption of IP by his sub-contractors and shall continue to remain responsible for any default by his sub-contractors.
- 6.2 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality in line with Non- disclosure agreement.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

- 8.5 The role of IEMs is advisory, would not be legally binding and it is restricted to resolving issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.
- 8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process, the matter should be examined by the full panel of IEMs jointly as far as possible, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.
- 8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to CMD, BHEL, at the earliest. They may also send their report directly to the CVO and the Commission, in case of suspicion of serious irregularities requiring legal/ administrative action. IEMs will tender their advice on the complaints within 10 days as far as possible.
- 8.8 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.
- 8.9 IEM should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the organization should be looked into by the CVO of the concerned organisation.
- 8.10 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code/ Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.11 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.
- 8.12 The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

- 9.1 This Pact shall be operative from the date IP is signed by both the parties till the final completion of contract for successful bidder and for all other bidders 6 months after the contract has been awarded. Issues like warranty / guarantee etc. should be outside the purview of IEMs.
- 9.2 If any claim is made/ lodged during currency of IP, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 - Other Provisions

- 10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.

10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

10.5 Only those bidders / contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

ACHIN GOYAL Digitally signed by ACHIN GOYAL
Date: 2020.12.08 16:29:15 +05'30'

For & On behalf of the Principal
Sh. Achin Goyal / Sr. Engineer / MM
BHEL IVP Goindwal Sahib (Punjab)
(Office Seal)

For & On behalf of the Bidder/
Contractor
(Office Seal)

Goindwal Sahib
Place-----
Date 08.12.2020
Date-----

Sumeet Digitally signed
by Sumeet Bansal
Date: 2020.12.08
16:32:05 +05'30'
Witness: **Bansal**
(Name & Address) _____

Witness: _____
(Name & Address) _____

Sh. Sumeet Bansal
Sr. Manager / MM / IVP
Bharat Heavy Electricals Limited,
433, Industrial Complex,
Industrial Valves Plant,
Goindwal Sahib, Tarn Taran,
Punjab -143422.