

### Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	22-03-2023 09:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	22-03-2023 09:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	180 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Mines
Department Name/विभाग का नाम	Materials
Organisation Name/संगठन का नाम	National Aluminium Company Limited, Bhubaneswar
Office Name/कार्यालय का नाम	Angul
Total Quantity/कुल मात्रा	3
Item Category/मद केटेगरी	TURBINE SUPERVISORY INSTRUMENT RETROFIT (Q3)
MSE Exemption for Years of Experience/अनुभव के वर्षों से एमएसई छूट/ and Turnover	No
Startup Exemption for Years of Experience/अनुभव के वर्षों से स्टार्टअप छूट/ and Turnover	No
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Certificate (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया	No
Type of Bid/बिड का प्रकार	Two Packet Bid
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	2 Days
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation

### EMD Detail/ईएमडी विवरण

Required	No
----------	----

**ePBG Detail/ईपीबीजी विवरण**

Required	No
----------	----

**Splitting/विभाजन**

Bid splitting not applied.

**MII Purchase Preference/एमआईआई खरीद वरीयता**

MII Purchase Preference/एमआईआई खरीद वरीयता	Yes
--	-----

**MSE Purchase Preference/एमएसई खरीद वरीयता**

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
---	-----

1. Preference to Make In India products (For bids < 200 Crore): Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.

2. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25%(selected by Buyer) percentage of total QUANTITY.

**TURBINE SUPERVISORY INSTRUMENT RETROFIT ( 3 set )**

**(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)**

Brand Type/ब्रांड का प्रकार	Unbranded
-----------------------------	-----------

**Technical Specifications/तकनीकी विशिष्टियाँ**

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	<a href="#">Download</a>
---	--------------------------

**Installation Commissioning and Testing (ICT) details for the above item:**

% of Product Cost Payable on Product Delivery	80%
Min Cost Allocation for ICT as a % of product cost	20%
Number of days allowed for ICT after site readiness communication to seller	30 Days/दिन

**Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा**

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	SIBA PRASAD BEHERA	759145,CAPTIVE POWER PLANT NALCO, ANGUL	3	450

**Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें****1. Scope of Supply**

Scope of supply (Bid price to include all cost components) : Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

**2. Certificates**

The bidder is required to upload, along with the bid, all relevant certificates such as BIS licence, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document.

**3. Certificates**

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

**4. Generic**

**Manufacturer Authorization:**Wherever Authorised Distributors/service providers are submitting the bid, Authorisation Form /Certificate with OEM/Original Service Provider details such as name, designation, address, e-mail Id and Phone No. required to be furnished along with the bid

## 5. Generic

Buyer Organization specific Integrity Pact shall have to be complied by all bidders. Bidders shall have to upload scanned copy of signed integrity pact as per Buyer organizations policy along with bid. [Click here to view the file](#)

## 6. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

**INTERNAL REF: 314/3000008922**

**SUB AND SCOPE: SUPPLY OF SUPPLY, INSTALLATION & COMMISSIONING OF 03 Sets of TURBINE SUPERVISORY & VIBRATION MONITORING SYSTEM (RETROFIT) AT NALCO CPP, ANGUL, ODISHA.**

(I) BIDDER SHALL MENTION ABOVE REFERENCE NO. (i.e **INTERNAL REF: 314/3000008922**) FOR ALL CORRESPONDENCES.

(II) The present tender document pertaining to this GeM custom bid for the subject work is as attached under "Buyer uploaded ATC document" of this GeM bid for necessary reference and specific confirmation of NIT terms & conditions of this tender document.

(III) Detailed terms of scope of SUPPLY, INSTALLATION & COMMISSIONING, WARRANTY, TRAINING, PAYMENT, CPBG, PDI, DELIVERY SCHEDULE, etc. is as per per custom catalogue (Technical specification sheet attached under "specification document" of the bid). Hence bidders are requested to quote accordingly.

(IV) Bidder shall upload Technical specification sheet (custom catalogue) along with their offer confirming all points, failing which your offer may be liable for rejection.

(V) Bid must be accompanied with all stated documents, Declarations (Anti-profiteering Clause Declaration, EMD document, MII Local content declaration & Integrity Pact) and confirmation to the terms stated in this GeM custom bid.

## 7. Buyer Added Bid Specific ATC

Buyer uploaded ATC document [Click here to view the file](#).

## Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process.
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.

10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

[This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है](#)

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action

in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्यवाई का आधार होगा।

**---Thank You/धन्यवाद---**

**TECHNICAL SPECIFICATIONS OF TURBINE SUPERVISORY & VIBRATION  
MONITORING SYSTEM (R&M) FOR 6 X 120 MW HMN SERIES SIEMENS KWU  
TURBINE IN CAPTIVE POWER PLANT, NALCO, ANGUL ON TURNKEY BASIS**

The specification is intended to cover the Site Survey, Design, Engineering, Factory Assembly, Testing at Vendor's works, Supply (delivery including packaging), Erection, Site assembly, Installation, Commissioning, Performance Warranty, Handing over and Training for Renovation and Modernization (R&M) of Vibration Monitoring System / Turbine Supervisory System according to latest edition of API670, with Rack Configuration and Vibration Monitoring Software complete with all materials and accessories for efficient and trouble free operation of each 120 MW HMN series Siemens KWU Turbine in Captive Power Plant, NALCO, Angul on Turnkey basis. The present requirement is for 3 Units of Units 1 to 6.

**A. MANDATORY CRITERIA**

- i. The OEM for the specified Vibration Monitoring System / Turbine Supervisory System shall be one of the following only.
  1. Bently Nevada, USA (subsidiary of Baker Hughes, a GE company)
  2. Shinkawa Electric Company Ltd. – Tokyo, Japan
  3. Meggitt SA, Switzerland
- ii. The bidder for the above job shall be the OEM or OEM's authorized Vendor only.
- iii. If represented by a dealer/ distributor, then OEM shall be fully responsible for complete design, engineering, supervision of installation and commissioning.
- iv. The Field Sensors and the Control Rack Cards should essentially be of the same OEM only.
- v. System & Service support: The original manufacturer of the offered system should confirm Service Support and Spares availability in India for minimum ten years from the date of Commissioning of last Unit.
- vi. Mounting brackets and pads shall be made suitable to the existing provisions and supplied for mounting of new field transducers without any modification on the bearing housing / pedestal and turbine casing.
- vii. Bidder has to visit NALCO CPP for complete Site / Machine survey before submission of offer. Based on the Survey, mounting arrangements, 9M /5M Cable System for TSI, junction box schedule, Cable route etc. shall be decided upon mutual agreement.
- viii. The offered transducers and monitoring system should comply with the requirements of API 670 latest edition.
- ix. The offered transducers and monitoring system should essentially cover the following sensors
  1. Absolute Vibration probes. - 7 Nos
  2. Relative Vibration probes. - 5 Nos
  3. Relative Expansion probes in Brg 1, 3 & 4 - 3 Sets (6 Nos)
  4. Axial Shift Probes. in Brg 2 - 3 Nos
  5. LVDTs for HP, IP Casing Expansion, Position Measurement of HP, IP & LP CVs – 8 Nos

- x. The offered transducers and monitoring system should be suitable to 120 MW HMN series Siemens KWU Turbine. The approximate Journal diameter at different bearings are Brg1 – 280 mm, Brg2 - 290 mm, Brg3 - 400 mm, Brg4 - 400 mm, Brg5 - 330 mm, Brg6 - 330 mm & Brg7 - 200 mm.
- xi. Monitoring rack shall be capable of bi-directional communications so that rack can be configured, channels can be activated or bypassed, alarms can be inhibited, and the internal clock can be synchronized.
- xii. The supply and services should include future provision for Remote Connectivity facility for Remote Machinery Diagnostics and System health diagnosis with online expert support.
- xiii. Start-up and commissioning spares, as required shall be provided by the vendor free of cost.
- xiv. The Grounding of the offered system shall be as per API 670 Cl. 4.15. Standard Grounding of NALCO DCS will be available for use. If any special Grounding is required for the offered system, it shall be in the scope of the supplier.
- xv. **Turnkey Job:** This is a turnkey job. All materials and services required for successful installation and commissioning of the system, even if not mentioned in this specification, but required for successful commissioning of the system shall be in the scope of the bidder.

## **B. GENERAL REQUIREMENT**

### **i. QAP**

All equipment furnished under this specification shall be subject to test by authorized quality assurance personnel of the Contractor, representatives of the Owner and/or Technical Specialist during manufacture, erection and on completion as per QAP to be approved by client / consultant. The approval of the Owner/Technical Specialist or passing of such inspection of tests will not, however, prejudice the right of the owner to reject the equipment if it does not comply with the specifications when erected or fails to give complete satisfaction in service.

Bidder shall prepare a detailed shop and site 'Quality Assurance Programme' to meet the requirements of these specifications for Owner's approval. This document shall also contain the formats for reports and maintenance of test records specification of test equipment to be used for site tests.

### **ii. WARRANTY**

The bidder must include warranty period for a period of 30 months from the date of supply or 24 months from the date of commissioning whichever ever expire earlier.

This includes

1. Defect Liability of manufacturing and design. It is excluding mishandling of the supplied hardware and software.
2. Routine check-up at the interval of 12 months from the date of commissioning till warranty period gets over.

### **iii. CPBG**

CPBG for the amount specified elsewhere, valid up to the expiry of Warranty period shall be furnished.

### **iv. PDI / FAT**

All functional tests and physical inspection shall be carried out at manufacturer's/bidder's works before shipment of equipment to the site and shall be subject to approval of Owner. Contactor shall submit the detail Test Protocol. On readiness of the system, owner shall be given minimum 15 days advance information for PDI / FAT.

### **v. TOOLS AND TACKLES**

Bidder must offer general tools & tackles and special calibration instruments required during start-up, trial run, operation and maintenance of the plant.

The Bidder in his proposal shall indicate a list of tools & tackles, which may be required for maintenance, overhaul, and replacement of instrument / equipment / component to be supplied under this specification. Required calibration Kits for all type of sensors shall be supplied by bidder as specified in the BOM.

### **vi. TRAINING**

The bidder shall provide training to 3 Engineers of the owner for 3 days at Vendor's premises or Training Center which must be equipped with required Rotor Kits, 19 Inch Rack and Display Units and simulation facility. The training shall include System operation, maintenance and troubleshooting. Calibration methodology of the probes and monitors shall also be covered during the training programme.

### **vii. DELIVERY SCHEDULE**

Supply of material: 36 weeks from date of PO / LOI.

Installation & commissioning: Within 6 months of supply subject to clearance from NALCO.

Note: The job shall be carried out within TG overhauling period of the units only which are normally of 30 days. Nalco shall intimate 15 days prior to start of overhauling. The party shall mobilise the site accordingly.

### **viii. PAYMENT TERMS**

- a. For supply of material: 80% against receipt and acceptance of material at our site. Balance 20% on successful completion of Installation and Commissioning or within 6 months of supply whichever is earlier.
- b. Installation & commissioning: 100% on successful completion of Installation and Commissioning.

### **ix. FREIGHT PCKING & FORWARDING**

- a. Freight, Packing & forwarding will be in the scope of supplier.
- b. Weather proof and robust packing as recommended by the OEM to withstand hard weather and rough handling during transport shall be ensured by the supplier.

### **C. VIBRATION MONITORING SYSTEM:**

- i.** The on line Vibration Monitoring System / Turbine Supervisory System shall be fully in accordance with API670 5<sup>th</sup> edition or latest i.e. 19" Rack, in one Contiguous Enclosure as per API670 cl 7.1.2, having Motherboard & plug in cards (Hardwired & Din Rail system not accepted). Each Card should not have more than four channels & failure of one card should not affect more than four channels or propagate to any other card within the rack / system.
- ii.** Monitoring modules shall allow "hot" insertion and removal for smooth operation & maintenance.
- iii.** All dynamic monitoring modules shall have each channel's buffered transducer signal available on the front of the monitor through BNC connectors. & at rear terminals connections as per API 670 Cl. No. 4.11.4 d. This will enable the buffered output to be used for connecting portable test and diagnostic equipment.
- iv.** It should have two changeover relays contacts for each vibration / Axial measurements as per API670 Cl. No 7.3.2. The changeover relays should be configurable for AND, OR Logics.
- v.** The system should be fully software programmable, should measure multi-channels continuously in a fully online mode and also provide monitoring, annunciation and protection for critical machinery.
- vi.** The monitoring system shall have the capability to interface via hard wired link an isolated 4-20 mA dc for each Channel to DCS as per API 670 cl 4.11.4.e.
- vii.** All the calibration of the monitors and transducers shall be possible from the front panel via Computer by using RS232/RS485/Ethernet/USB port.
- viii.** All incoming and outgoing signals shall be connected through a terminal block in the Panel and terminals mounted at the back of the monitor.
- ix.** Empty slots on the system rack shall be supplied with blank plates.
- x.** In addition to the above, the monitor shall contain all other required signal conditioning devices and accessories required for proper functioning.
- xi.** Response Time of each type of sensors & Monitors & overall system response time should comply with API 670 Standards and it is to be mentioned in the offer.
- xii.** Individual accuracy of each type of sensors & Monitors & overall system accuracy shall comply with API 670 Accuracy Standards and it is to be mentioned in the offer.
- xiii.** Repeatability of sensors & Monitors should comply with API 670 Standards and it is to be mentioned in the offer.

## **D. MAJOR COMPONENTS**

### **i. Vibration Monitoring Rack:**

Vibration monitors shall be flush panel mounted in 19" racks with modular construction and should be plugged in on the Mother Board of Rack. It should be as per API 670 5th Edition cl 5.4.1.2

Each rack and each monitor on the rack shall have a nameplate.

The Rack must have common mother board with spring loaded connectors to interface all required modules.

### **ii. Power Supplies in the Monitoring Rack:**

Each Rack shall have two power supplies in redundant, fully floating hot standby mode operation. Failure of one power supply shall not affect monitoring functions. Hot-removal (of a faulty power supply) and hot-insertion (of repaired / replacement) power supply should be possible, without any problem in functioning of the rack as per API670 Cl No. 4.10.10

The input power supply for the vibration monitoring system shall be 24 VDC (nominal 19 V DC to 32 V DC) from two different sources as per API670 Cl No. 4.10.2 a.

Both the Power supply modules shall be mounted on the Rack Mother Board. Each of the Power Supplies shall be capable of supplying Power for the entire monitoring system with proper regulated supplies.

The power supply for the transducers and the field-mounted electronics shall be fed through the monitor to which these are connected.

Any short circuit within the rack will not affect the power supply modules/other modules of the vibration monitoring system.

### **iii. Programming / Configuration / CPU Module in the Monitoring Rack:**

Programming of Monitoring rack shall be possible by laptop/desktop with required software.

### **iv. Monitoring Module in the Monitoring Rack:**

The Monitoring module should be microprocessor based and should be able to do following functions

Input from Sensor : Four Channel / Two channel Monitor Module.

(Configurable for Non-Contact/Velocity/Acceleration / LVDT)

: All channels shall be channel to channel isolated so that any

Fault in one channel does not affect other channel.

Output: 1 No's buffer output (1 No. from front BNC per channel and One No's 4-20mA per channel

LED Indications : Sensor or Monitor Failure &

Status and Bypass indication in the front

Functions : Channel Bypass, Trip Multiplier, Self-Diagnosis Function, Suppression Function

Accuracy of monitor : +/-2% of FSD

The Monitoring module should be freely and easily programmable to have all settings for sensitivity, relays adjustable via laptop/desktop. All modules shall have connections at the rear of the module. One spare Channel per Card to be provided.

**v. Display Output Function in the Monitoring Rack:**

Connectivity for external HMI Display shall be available in the Rack.

**vi. Relay Outputs:**

Suitable Relay to meet 2 Relay output / channel to be provided.

Programming of relay logic shall be performed via the configuration software. Logic programming shall be performed with Boolean operators (AND and OR).

The monitor should have integrated relays or separate relay module in the rack as per bidder's standard practice.

**vii. Configuration & View Software**

The monitoring system shall be software configurable using the latest Window operating system. The configuration software shall provide a list that establishes the Modbus register locations of all data exportable from the monitoring system. Display software shall provide displays including Bargraph displays, trend information, as well as access to the system events and alarm events lists.

**E. OTHER HARDWARE, CABLE, SERVERS ETC.**

**i. MOUNTING BRACKETS FOR EDDY CURRENT SENSORS: (Wherever Applicable)**

Suitable Mounting Brackets to be supplied by Bidder to mount Non-Contact sensors for Shaft Vibration, Thrust position or other non-contact sensors on the machines.

**ii. MOUNTING STUD/ PADS: (Wherever Applicable)**

Suitable Mounting Pad/Stud to be supplied by Bidder to mount Contact sensors (Velocity / Accelerometer) for Absolute Bearing Vibration measurement on the machines.

**iii. LOCAL JUNCTION BOX / OSCILLATOR HOUSING BOX: (Wherever Applicable)**

It should be Die Cast aluminum / FRP Type for Indoor usage as minimum IP-66, which is proven & as per standard practice.

Bidder has to visit site during project drawing approval. Based on the mutual agreement junction box schedule shall be decided.

**iv. FIELD SIGNAL CABLES / ETHERNET CABLE / FIBER OPTIC CABLE OR OTHER TYPES: (Wherever Applicable shall be in Bidder's scope)**

All cables as specified elsewhere shall be in bidder's scope

**v. ELECTRICAL CONTROL CABINETS: (Wherever Applicable shall be in Bidder's scope)**

**vi. ETHERNET HUB / SWITCHES & OTHER PARTS REQUIRED TO COMPLETE THE INSTALLATION: (Wherever Applicable shall be in Bidder's scope)**

**vii. LCD Display or Panel PC for viewing Vibration Data:** As specified elsewhere shall be in bidder's scope

**viii. Calibration Equipment: (Wherever Applicable as per standard)**

## **F. SUBMISSION OF DRAWINGS AND DOCUMENTS**

### **i. Data and documents to be furnished along with offer**

Bidder shall furnish system description, operational write-up, bill of materials, drawings, data, information, technical catalogues, test certificates and other detail as required to fully establish the capability and performance of the equipment and systems offered. Any bid not containing the sufficient details to fully describe the equipment and system offered may be treated as non-responsive.

Each Bid shall contain the information but not limited to the following:

b) Complete bill of materials of all items indicating make, model, power requirements, details of accessories etc. required to establish product quality and Scope of Supply. The make, model no., of devices shall be subject to Owner's approval.

c) Write-up highlighting design considerations, working principles etc.

d) Transducers schedule and data sheets.

e) Details of system and accessories along with schematic drawings & wiring diagrams.

f) Manufacturer's catalogues and other related drawings for various instruments.

g) Bill of materials for special cable and cable accessories.

h) List of mandatory spares for the System (specified elsewhere).

i) Signal exchange scheme with DCS etc.

j) Provisional QAP for various Instruments, Local Control Panels etc.

k) List of reference of similar system already in service with complete performance record details.

l) All other documents not specifically mentioned here but required for completion of engineering work and proper coordination shall be submitted.

### **ii. Data and Documents to be furnished after award of contract**

On award of the contract, the successful Bidder (Contractor) shall submit progressively, all drawings and documents for approval of Owner/ Consultant at different stages of the contract. Contractor shall obtain Owner's approval in writing and manufacture the equipment as per these approved drawings and documents. Contractor shall revise the drawings in line with Owner's comments and resubmit till Owner's approval is accorded to the drawings. The Drawings/ documents shall include but not be

limited to the following. After award of the Contract, Owner, in association with Contractor, will draw up a list of drawings / document deliverables with corresponding submission schedule and will assign review status of either “A” (for approval) or “I” (for information) to each deliverable:

- a) Final version of all drawings and data submitted along with the proposal.
- b) Detail dimensional drawings of mounting of sensors.
- c) Instrument list and data sheets.
- d) Instrument Cable Schedules, JB Schedules, Interconnection Diagrams & Terminal details shall be unit wise.
- e) Power Supply distribution schemes for all equipment / system including changeover arrangement etc. as required.
- f) Detailed Hook-up & installation drawings.
- g) Interface detail with DCS.
- h) Operation and Maintenance instruction manual.
- i) Final QAP for various Instruments, Local Control Panels etc.
- j) Test Protocol details.
- k) Step wise job execution plan

### **iii. CODES AND STANDARD**

The design, manufacture, inspection, testing, site calibration and installation of all equipment and systems covered under this specification shall conform to the latest editions of codes and standards mentioned below and all other applicable ANSI, ASME, IEEE, NEC, NEMA, ISA, DIN, VDE and Indian Standards and their equivalents. (Wherever applicable). Vibration, Axial Position & Bearing Temperature Monitoring Systems – API 670 5<sup>th</sup> edition.

## **G. TRANSDUCER SET SPECIFICATIONS**

### **i. RELATIVE SHAFT VIBRATION & AXIAL SENSORS (NON CONTACT EDDY CURRENT SENSORS)**

It will be Non-Contact type Eddy Current Sensors as per API670 5<sup>th</sup> edition to meet technical requirements. It should have 9M/5M cable system with armor.

Sensitivity / Scale Factor	: 787mv/100 Microns (200 mv/mil)
Frequency Response	: DC to 20 KHz (-3dB)
Operating Temperature Range	:
Sensor	: -40 to 177Deg C
Extension cable	: -40 to 177 Deg C
Oscillator	: -38 to 80 Deg C
Operating Humidity	: 30 – 90% RH
Supply Voltage	: -24VDC +/-10%
System Cable Length	: 9 /5 Meter +/-10%
Extension Cable	: 8/4 Meter with Gold Plated Connector, Armoured.
Integral Cable with Sensor	: 1 Meter (Armour/Unarmour based on machine requirement)
Oscillator	: Suitable to meet above, mounted in suitable Housing
Sensor Tip Diameter	: 8 mm
Linear Range	: 2000 Microns.

### **ii. ABSOLUTE BEARING VIBRATION SENSORS**

This Sensor should be Piezo Electric - Velocity Type.

Sensitivity	: 3.94mv/mm/sec pk, +/- 5% at 100 Hz, 25DegC
Frequency response	: 2.5 to 3500 Hz +/- 10%, 2 to 7000Hz at +/- 3dB
Natural frequency	: 15 Khz
Max. Transverse sensitivity	: 5%.
Power Requirements	: 18 VDC to 30VDC
Operating Temperature Range	: -50 Deg C to 120DegC
Relative Humidity	: 95 %RH.
Case material	: Stainless Steel
Extension Cable	: 9/5 Meter Armored with SS Conduit with Suitable MIL Connectors

### **iii. DIFFERENTIAL EXPANSION SENSORS HP/IP (NON CONTACT EDDY CURRENT SENSORS)**

It should have 9/5 M cable system with armor.

Sensitivity / Scale Factor	: 0.8V/MM
Frequency Response	: DC to 3 KHz (-3dB)
Operating Temperature Range	:
Sensor	: -40 to 125Deg C
Extension cable	: -40 to 125Deg C
Oscillator	: -38 to 80 Deg C
Operating Humidity	: 30 – 90% RH
Supply Voltage	: -24VDC +/-10%

System Cable Length	: 9/5 Meter +/-10%
Extension Cable	: 8/4 Meter with Gold Plated Connector, Armoured.
Integral Cable with Sensor	: 1 Meter (Armour/Unarmour based on machine requirement)
Oscillator	: Suitable to meet above, mounted in suitable Housing
Sensor Tip Diameter	: 25 mm or standard practice by OEM
Linear Range	: 13.5 mm.

**iv. DIFFERENTIAL EXPANSION SENSORS LP (NON CONTACT EDDY CURRENT SENSORS)**

It should have 9/5M cable system with armor.

Sensitivity / Scale Factor	: 0.4V/MM
Frequency Response	: DC to 3 KHz (-3dB)
Operating Temperature Range	:
Sensor	: -40 to 125Deg C
Extension cable	: -40 to 125Deg C
Oscillator	: -38 to 80 Deg C
Operating Humidity	: 30 – 95% RH
Supply Voltage	: -24VDC +/-10%
System Cable Length	: 9/5 Meter +/-10%
Extension Cable	: 8/4 Meter with Gold Plated Connector, Armoured.
Integral Cable with Sensor	: 1 Meter (Armour/Unarmour based on machine requirement)
Oscillator	: Suitable to meet above, mounted in suitable Housing
Sensor Tip Diameter	: 50 mm or standard practice by OEM
Linear Range	: 26 mm.

**v. FOR TURBINE CASE EXPANSION & CONTROL VALVE POSITION MEASUREMENT HP/IP/LP**

LVDT (Linear Variable Differential Transformer) as per proven standard practice with suitable signal conditioners for DCS communication.

Stroke in mm – 50 mm for Turbine Casing Expansion & HPCVs, 100 mm for IPCVs & LPCVs

Excitation voltage 5 V rms, 3KHz

Coil impedance 600 ±100 (3kHz)

Vibration resistance 20g up to 2kHz

Linearity 0.5 % Or better

Repeatability Better than 0.1%

Frequency response 3dB @ 180Hz

Operating temperature range -30°C to + 150°C

Shock resistance 1000g for 10 milliseconds

Insulation resistance More than 10MΩ at 500VDC (between pins and case)

Dielectric strength 500V RMS for one minute (between pins and case)

Magnetic shielding Internal magnetic shielding

Construction material Stainless steel

Sealing IP65

Output: 4-20 mA, 4 wires system with required signal conditioners

Cable type PTFE

## **H. FIELD CABLE SPECIFICATIONS –**

<b>Sr. No.</b>	<b>PRODUCT SPECIFICATION</b>	<b>0.75 Sqmm X 4 Triad</b>	<b>0.75 Sq. mm X 4 Pair</b>
1	Make	Polycab / Epsilon /Finolex /Delton / Havells	
2	Cable Type	Individual & overall Aluminium Mylar tape shielded armored cable	
3	Applicable standards	BS-5308-II, BS-6360, BS-6476,ASTMD-2843,ASTMD-2863,IEC-754-I,IEC-332-I,III,IEEE-383,IS-1554-I,IS-5831,IS-8130,IS-3975,IS-10810	
4	No. of pair		4
5	Conductor		
	Material	Stranded Annealed Tin Copper Conductor(ATC)	
	Grade	Electrolyte Grade	
	No. of strands/Dia of each strands(NOM) in mm	7/0.3	
	Area of cross section mm <sup>2</sup>	0.5	
	Shape of conductor	Stranded-circular	
6	Insulation		
	Material	PVC Type 'TM 1' of BS-6746	
	Thickness of insulation mm	Nom 0.6	
	Method of Application	Extruded	
	Diameter of overall insulation mm	2.15	
	Color scheme for identification of core		White + Black
	Pair/Triad twisting lay	Max. 100mm	
	Taping over twisted pair/triad	Individual pair/triad shall be polyester taped with 0.023mm thick(min) tape with 100% coverage % min 255 overlap	
	Pair/Triad identification	By means of numbered polyester tape provided over Individual screened pair/Triad as per BS-5308-II	
7	Individual Pair/triad (Screen)		
	Material	Aluminium Mylar Tape	
	Type	Helical	
	Thickness of tape	Min.0.028	
	Coverage/Overlap mm	100/min. 25	
	Cable stranding	Required nos of two pair /triads(screened)shall be stranded to form a circular cable & cable thus formed shall be polyester taped with 100%	
8	Overall Screen		
	Material	Aluminium Mylar Tape	
	Type	Helical	
	Thickness of tape	Min. 0.055	
	coverage/Overlap mm	100/Min.25	

**I. CONTROL CABINET**

PANEL SIZE ( H X W X D mm)	800x800x2100
PANEL MAKE	RITTAL
PANEL TYPE	FREE STANDING
PANEL COLOR	Project Specific Colour to be provided
DOOR HANDLE AND LOCK	ERGONOMIC FLUSH DESIGN, 3 Point Lock, Door hinges : 3 Nos SS
PROTECTION CLASS	IP 32
MOUNTING PLATE	AS REQUIRED (FOR MOUNTING OF ACCESSORIES)
DESKTOP MOUNTING ARRANGEMENT	DESKTOP PC & ACCESSORIES TO BE MOUNTED INSIDE THE CABINET
PANEL SHEETS ALL	3 mm CRCA SHEET
BASE FRAME	100 mm CRCA CHANNEL
ANTIVIBRATION PAD	15 mm THICK
CABLE ENTRY	FROM BOTTOM
ACCESSORIES	COOLING FAN, LED TUBE LIGHT, UTILITY SOCKET, FULL WIRED ,FREE STANDING 10% EXTRA TERMINAL BLOCKS

**J. JUNCTION BOX –**

PRODUCT SPECIFICATION	
Model	As per standard practice
Make	Standard OEM approved make
Material of Construction (MOS)	Thermoplastic (FRP Type)
Dimension	As required
No. of In / Out Cable Glands	As required
Protection Class	IP66
Color	As per NALCO recommendation during engineering

## **SCOPE OF SUPPLY FOR EACH UNIT.**

1. All applicable TSI and VMS Sensors as below
  - i. Absolute Vibration probes. - 7 Nos
  - ii. Relative Vibration probes. - 5 Nos
  - iii. Relative Expansion probes in Brg 1, 3 & 4 - 3 Sets (6 Nos)
  - iv. Axial Shift Probes. in Brg 2 - 3 Nos
  - v. LVDTs for HP, IP Casing Expansion, Position Measurement of HP, IP & LP CVs – 8 Nos
2. All applicable Extension cables.
3. All applicable Proximity / Drivers
4. Junction Boxes to house Drivers / Proximity, terminate cables, FRP with plastic glands
5. All applicable Adapters / Mounting plates for all field sensors.
6. New Field Cables from JB to Control Room and Ethernet Cables to be supplied.
7. Complete TSI & VMS Rack with all modules with Panel.
8. Desktop Computer with Rack Configuration Software, HMI (Data Acquisition and Operator Display) Software.
9. Complete Installation and Commissioning of the system
10. All materials and services required for successful installation and commissioning of the system, even if not mentioned in the scope of supply, shall be in the scope of the bidder.
11. All required documentation.
12. Mandatory Spares & Calibration Kits as detailed in BOM
13. Training

**K. BILL OF MATERIAL FOR EACH 120 MW UNIT**

SL. NO.	DESCRIPTION	RANGE	QTY / 120 MW UNIT
<b>A)</b>	<b>TRANSDUCER SET</b>		
1	Absolute Bearing vibration sensor for 7 Bearings	0 to 500um pk-pk	7 Nos
2	Relative shaft displacement sensor set (sensor, ext. cable, driver) for 5 Bearings	0 to 500um pk-pk	5 Nos
3	Axial displacement measurement (sensor, ext. cable, driver) at Bearing - 2	(-)1 to (+)1 mm	3 Nos
4	Differential Expansion (sensor, ext. cable, driver) at Bearings 1 & 3	(-)5 to (+)16 mm	4 Nos (2 Sets)
5	Differential Expansion (sensor, ext. cable, driver) at Bearings 4	(-)10 to (+)32 mm	2 Nos (1 Set)
6	Turbine casing expansion measurement near Bearings 1 & 2	0 to 50mm	2 Nos
7	HP Valve position measurement round bolt attachment type	0 to 50mm	2 Nos
8	IP Valve position measurement round bolt attachment type	0 to 100mm	2 Nos
9	LP Valve position measurement round bolt attachment type	0 to 100mm	2 Nos
<b>B)</b>	<b>RACK &amp; CARDS</b>		
1	API 670 complied suitable rack with motherboard (with minimum 2 no blank slot for monitoring module and pre-installed back connectors / IO Modules)		1 No
2	24 V DC power supply (Suitable for 24 V DC Sources)		2 Nos
3	Rack communication card		1 No
4	Monitor cards for Vibration Sensors (4 Ch max., with 1 ch spare in each card or total 25% of installed channels as spare for all cards)		As required (Specify Qty)
5	Monitor cards for Expansion Sensors (4 Ch max., with 1 ch spare in each card or total 25% of installed channels as spare for all cards)		As required (Specify Qty)
6	Blank Plates		As required (Specify Qty)
7	HMI Software & Rack configuration software		1 No
<b>C)</b>	<b>ACCESSORIES</b>		
1	10mtr extension cable for Velometer cable, Teflon, high temperature, machine molded connector.		7 Nos
2	Junction Box to house drivers /terminate cables, FRP with plastic glands		10 Nos
3	Mounting brackets for non-contact type sensors, Axial, Turbine expansion, case expansion, valve displacement etc.		As required
4	Suitable mounting pads for Velometer sensor		5 Nos
5	100mtr Ethernet cable		100 mtrs
6	Cable Seals		1 lot
7	Four triad cable ( individual & overall screened ,0.75mm)		1500 mtrs
8	Desktop PC, minimum i7, Latest Windows OS, 1TB HDD, 8GB RAM, 21" LED display, Keyboard, Optical mouse.		1 No
9	Fully wired, free standing panel, with dust filter, exhaust fans, emergency tube lights suitable for mounting racks, signal conditioners, power distribution etc.		1 No
<b>D)</b>	<b>INSTALLATION &amp; COMMISSIONING</b>		LUMPSUM



**TENDER DOCUMENT**  
**SPECIAL TENDER CONDITIONS (STC)**

**SUB AND SCOPE: SUPPLY, INSTALLATION & COMMISSIONING OF 03 Sets of TURBINE SUPERVISORY & VIBRATION MONITORING SYSTEM (RETROFIT) AT NALCO CPP, ANGUL, ODISHA.**

**Ref: Internal Ref. No: 314/3000008922**

The tender document pertaining to the subject work are enclosed herewith, which contain the followings;

**(I) (A) TECHNICAL SPECIFICATION :** TECHNICAL SPECIFICATION INCLUDING ALL CONDITIONS AS PER CUSTOM CATALOGUE UNDER “BUYER SPECIFICATION DOCUMENT” OF GEM BID.

**(B) PRE QUALIFYING CRITERIA:** PQC for the JOB: Supply, Installation, and commissioning of 03 Sets of TURBINE SUPERVISORY & VIBRATION MONITORING SYSTEM (RETROFIT) as per Annexure-I needs to be complied.

**(II) OTHER CONDITIONS:**

Other detail conditions TECHNICAL COMPLIANCE SHEET (CUSTOM CATALOGUE) under buyer specification document of gem bid shall be confirmed

- (A) INSPECTION: PROPER PACKING SHALL BE DONE TO AVOID TRANSIT DAMAGE AS THE MATERIALS ARE SOPHISTICATED IN NATURE.
- (B) WARRANTY/ GUARANTEE: AS STATED IN TECHNICAL SPECIFICATION SHEET (CUSTOM CATALOGUE) NEEDS TO BE CONFIRMED SPECIFICALLY.
- (C) TRAINING: AS STATED IN TECHNICAL SPECIFICATION SHEET (CUSTOM CATALOGUE) NEEDS TO BE CONFIRMED SPECIFICALLY.
- (D) INSTALLATION AND COMMISSIONING: AS STATED IN TECHNICAL SPECIFICATION SHEET (CUSTOM CATALOGUE) NEEDS TO BE CONFIRMED SPECIFICALLY.
- (E) DELIVERY SCHEDULE: AS STATED IN TECHNICAL SPECIFICATION SHEET (CUSTOM CATALOGUE) NEEDS TO BE CONFIRMED SPECIFICALLY.
- (F) PDI:AS STATED IN TECHNICAL SPECIFICATION SHEET (CUSTOM CATALOGUE) NEEDS TO BE CONFIRMED SPECIFICALLY.
- (G) CONTRACT CUM PERFORMANCE BANK GUARANTEE ( CPBG): AS STATED BELOW NEEDS TO BE CONFIRMED SPECIFICALLY.

The seller shall furnish a CONTRACT CUM PERFORMANCE BANK GUARANTEE (CPBG) in NALCO’S prescribed format (ANNEXURE-III) towards successful execution of the contract and performance guarantee obligation of the equipment/ system to support equipment’s trouble free performance from any bank approved by NALCO (ANNEXURE-IV) for 3% of basic order value including amendment, which shall remain valid up warranty period excluding the claim period of 03 months . The supplier shall furnish the CPBG within 15 days from the date of issue of PO. If the vendor fails to submit CPBG after placement of order, the equivalent amount shall be recovered from the bill(s) of the vendor.

Subject to any deduction which NALCO is authorized to make, CPBG shall be released after satisfactory execution of the contract and guarantee period as mentioned above. On the breach of the contract by the supplier, CPBG shall be forfeited/ encashed whether or not the company has suffered a loss on this account and purchase order shall be rescinded. Forfeiture/Encashment of CPBG does not prejudice NALCO’S rights to make risk and cost purchases and recover damages on account of such risk and cost purchases.

CPBG in NALCO’s prescribed format (Annexure-III) and bank list approved by NALCO (ANNEXURE-IV) are attached under “Additional scope of work” of GTC of this bid.

**(H) PAYMENT:** AS PER GEM BID TERMS.

- (I) Only OEMS can submit bid. wherever authorised distributors are submitting the bid, manufacturers authorisation form (MAF)/certificate with oem should be furnished (uploaded) specifically for this tender (mentioning the reference of gem bid).

**(III) ANTI-PROFITEERING CLAUSE (SEC 171 OF CGST ACT) (APPLICABLE FOR INDIAN BIDDERS):** Bidder has to provide a duly filled declaration (as per Annexure-VIII) along with the tender that they will abide by the requirements under Cl 171 of CGST Act, 2017. This declaration is as per Annexure VII of this tender document.

**(IV) INCOME TAX CLAUSE TO BID:**

(i) For Supply Contracts / Purchase Orders / Supply portion of LSTK

NALCO being buyer (under section 194Q inserted in the Income Tax Act, 1961 vide Finance Act 2021) having total sales, gross receipts, or turnover from business above Rupees Ten Crores during the last Financial year, will deduct TDS under section 194Q, w.e.f. 01.07.2021, at the prescribed rate of 0.1% on the purchase value of any goods, aggregate of which is exceeding the threshold limit of RS. 50 Lakhs in a Financial year.

Accordingly, Vendors/sellers are not to collect tax at source under section 206C(1H) of the act w.e.f. 01.07.2021, in case provisions of section are applicable to them.

The above is as per the current statute and is subject to modification(s) based on amendments / notifications under Income Tax Act, 1961, from time to time.

(ii) For Other Contracts / Orders

Income Tax TDS, as applicable at the prevailing rate on the gross amount billed shall be deducted from the contractor's bills.

**(V) Provision for PREFERENCE TO MAKE IN INDIA**

Provision of the order No.P-45021/2/2017-PP(BE-II) dtd. 04.06.2020 issued with Revised 'Public procurement (Preference to Make in India), Order 2017' dated 16.09.2020 and as amended from time to time and its subsequent Orders/Notifications issued shall be applicable for this tender towards purchase preference. The 'Class-I local supplier' / 'Class II-local supplier' as per this provision at the time of tender, bidding or solicitation shall indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier' / 'Class II-local supplier', as the case may be. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Bidders shall also give details of the location(s) at which the local value addition is made. Declaration to be given in the format given in the Annexure VI of this tender document. Non - Local suppliers **as per MII order dated 04.06.2020 are not eligible to participate.**

**(VI)-(A)** Detailed terms of scope of SUPPLY, INSTALLATION & COMMISSIONING, WARRANTY, TRAINING, PAYMENT, CPBG, PDI, DELIVERY SCHEDULE, etc. is as per per custom catalogue (Technical specification sheet attached under "specification document" of the bid). Hence bidders are requested to quote accordingly.

Bidder shall upload Technical specification sheet (custom catalogue) along with offer confirming all points, failing which your offer may be liable for rejection.

**(B)** Any change / corrigendum/ extension of bid submission end date or bid opening date in respect of this tender shall be issued through the above websites only. Bidders are therefore requested to regularly visit these websites for updates.

**(VII). Pre-bid/Pre-contract Agreement (Integrity Pact) & Independent External Monitor:**

1.0 Bidder shall submit the accompanying 'Integrity Pact' attached at Annexure – VII of Tender document on its company's Letter Head/Plain A4 paper, duly signed by the person(s) signing the bid.

2.0 All the pages of the Integrity pact are to be signed by the bidder. Bidders are required to clearly indicate the name and designation of the signatory (ies) as well as the name and address of the witnesses. The Bidders should not change the contents of the Integrity Pact.

3.0 The scanned copy of the Integrity Pact is to be uploaded along with their offer in GeM portal.

4.0 At present, there are 03 IEMs in NALCO. They are as below;

- (i) Smt. Deepa Krishan IRS (Retd.)  
C 2603, Sushant Lok-1  
Gurgaon, Haryana, PIN-122002

E-mail: [deepakrishnan@gmail.com](mailto:deepakrishnan@gmail.com)

(ii) Dr. Meeran C Borwankar IPS (Retd.)  
C 10/5, Vasant Vihar  
New Delhi-110052  
E-mail: [mcborwankar@gmail.com](mailto:mcborwankar@gmail.com)

(iii) Ms Archana Ranjan IRS (retd.)  
A 4/1, Vasant Vihar,  
Newdelhi- 110057  
E-mail: [ranjan.archana@gmail.com](mailto:ranjan.archana@gmail.com)

*Note:-*

- i. Bidder may write to the IEM through Email (provided in the tender) for their grievances if any, giving details of the tender reference, name of the tender issuing officer and Nalco's unit for quick identification of the tender by the IEM.
- ii. Only representation in respect of Integrity Pact need to be addressed to the IEMs and no query regarding tender terms and conditions should be address to the IEMs.
- iii. Any clarification regarding the tender details and terms & conditions should be addressed to NALCO's officials as per details given in tender documents.

**(VIII) EARNEST MONEY DEPOSIT (EMD):** Scanned copy of EMD BG / DD/ scan copy of Annexure-IX shall be submitted complying to below conditions.

1.0 Bidders are required to submit EMD of INR 2,50,000/- (Rupees Two lakh and fifty only) along with the offer. Detailed modality of submission of EMD, return of EMD and allowable exemptions are mentioned below

## **2.0 MODALITY OF EARNEST MONEY DEPOSIT (EMD)**

2.1. The Part - I Bid must be accompanied by Earnest Money Deposit for INR 2,50,000/- (Rupees Two lakh and fifty only) by Demand Draft/Pay Order/through e-payment (RTGS/NEFT mode INR currency) favouring "National Aluminium Company Limited" payable at Angul, Orissa, India or by way of Bank Guarantee. The BG should be furnished from any of NALCO approved Banks as per the list enclosed as Annexure - IV. The wording of BG should be strictly as per proforma and no deviation to the same shall be permitted. Seller is required to ensure the same from the issuing bank. The Bank Guarantee for Earnest Money Deposit shall remain un-discharged for such a period as may be specified for keeping the tender open. The EMD BG should have a validity of at least three months beyond the offer validity of the bidder, with claim period of three months. The validity of the EMD BG may have to be extended by the bidder on request of NALCO, till the tender is finalized.

2.2. Offer without EMD may be liable for rejection. However, State / Central Government organizations, Public Sector Undertakings, Firms registered with DGS&D/ NSIC/ District Industries Centers (DICs)/ Khadi & Village Industries Commission (KVIC)/ Khadi & Village Industries Board (KVIB)/ Coir Board/ Directorate of Handicrafts & Handloom or any other body specified by Ministry of Micro, Small and Medium Enterprises (for the tendered item) and NALCO's Ancillary units and all start ups recognized by Deptt. of Industrial Policy & Promotion, Ministry of commerce and Industry Govt. of India and other categories of Sellers applicable as per GeM GTC are exempted from furnishing EMD.

Bidders must upload the scanned copy of the certificate and send the hard copy to the tender inviting authority before the due date of submission. In the absence of such certificate, the bidder's offer may be liable for rejection.

2.3. MSME bidders are requested to register their Udyog Aadhar Memorandum (UAM) issued by Ministry of Micro, Small and Medium Enterprises (MSME) vendors on Central Public Procurement Portal. In this regard, MSE vendors are required to give declaration of UAM number, failing which such bidders will not be considered as MSEs bidder.

2.4. If the tenderer, after submitting his tender, revokes the offer or modifies the terms & conditions thereof, in a manner not acceptable to the Purchaser, the EMD BG shall be liable to be forfeited /

enforced. Any forfeiture / recovery made by the owner shall be with applicable GST at the time of settlement. In case the EMD has been paid in the form of DD/RTGS/NEFT, the EMD amount will not be refunded back in case of forfeiture of EMD.

2.5. After finalization of the tender, the EMD BG of unsuccessful tenderers will be returned. The EMD of successful tenderer shall be returned after successful execution of order and after submission of acceptable Contract- cum -Performance Bank Guarantee(CPBG), as the case may be. In case where submission of SD/CPBG is not a condition of tender, EMD of successful bidder will be released after successful execution of order. In case where submission of SD/CPBG is a condition of Purchase Order and If the successful bidder accepts the order but fails to submit the CPBG, the EMD will be retained. In such case differential amount towards CPBG and EMD may be deducted from the bills of vendor, which shall be released after receipt of acceptable Contract- cum -Performance Bank Guarantee (CPBG).

2.6. In the event of non-execution of Order, the EMD will stand forfeited. Any forfeiture of EMD made by NALCO will be with applicable GST at the time of settlement.

**(IX)** The bidder must prepare all the required documents and then upload the soft copies along with their offer in GeM Portal.

**(X). HARD COPY OF DOCUMENTS:**

In addition to submitting their offer on-line through GeM portal, the Bidders shall also submit hard copy of following original documents to the address of “**GM (Materials) - Purchase, Captive Power Plant Plant, NALCO, Angul-759145 (Odisha)**”. **The Hard Copy of documents shall be submitted as follow and should reach on or before scheduled tender opening date & time of the present GeM bid.**

(i) The Original copy of EMD BG / DD shall be submitted as mentioned at Clause No.-IX.

(ii) The envelope of the hard copy documents should contain **a certificate / undertaking by the bidder, stating that the hard copy of the documents submitted is exactly the same as the on-line scanned copies (if any) uploaded by you in GeM portal.**

*The Hard copy of the documents should be submitted in a sealed envelope clearly super scribed with the GeM Bid No... and Internal ref No...i.e 314/3000008922 , due date and the list of enclosed documents.*

**(XI) CRITERIA FOR REJECTION OF TENDER**

1. Bids not fulfilling Bidder Pre-qualification criteria as per Clause-(I).
2. Bids without EMD excepting those exempted.
3. Bids without duly filled Integrity Pact.
4. Bids not as per technical requirement & scope of work shall be considered as non-responsive and rejected.
5. Incomplete bid(s) either technical or commercial.
6. Non-acceptance of or any deviation from stated terms and conditions of NIT and GeM Bid.

**(I) PRE QUALIFYING CRITERIA:**

Job: Description : Supply, Installation & Commissioning of Turbine Supervisory & Vibration Monitoring System (Retrofit) for 3X120 MW HMN Series Siemens KWU Turbine In Captive Power Plant, NALCO, Angul.

<b>PRE QUALIFYING CRITERIA</b>	
<b>A) Technical</b>	
<b><u>Eligibility criteria :</u></b>	<b><u>Documentary proof.</u></b>
<p>The bidder should have experience of having successfully completed <b>“Similar work ”</b> during the last seven years ending on last day of the month previous to the one in which the NITs are invited, should be either of the following :</p> <p><b>“Similar Work”</b> means The party should have designed, supplied, installed, and successfully commissioned the <b>R&amp;M job</b> of Turbine Supervisory &amp; Vibration Monitoring System on 120 MW or higher Capacity preferably HMN Series Siemens KWU design Steam Turbine Generators in Power plants in India.</p> <p><b>(i) Three</b> similar completed works each (with above criteria) having <b>executed value</b> not less than <b>Rs 99.92 lakhs (Rupees Ninety Nine lakhs Ninety two thousand only)</b></p> <p style="text-align: center;"><b>OR</b></p> <p><b>(ii) Two</b> similar completed works each (with above criteria) having <b>executed value</b> not less than <b>Rs. 124.90 Lakhs (Rupees One Hundred Twenty Four Lakhs Ninety Thousand only)</b></p> <p style="text-align: center;"><b>OR</b></p> <p><b>(iii) One</b> Similar Completed work (with above criteria) having <b>executed value</b> not less than <b>Rs. 199.84 lakhs (Rupees One Hundred Ninety Nine lakhs Eighty Four thousand only).</b></p> <p><b><u>Evaluation criteria:</u></b> Cost of the completed works by the bidder shall be escalated @ 10% per annum (Simple rate) to bring them at the current price level. (The cost of work completed within one year prior to original date of bid opening shall not be considered for any weightage. The weightage shall only be considered for work completed prior to one year of original date of bid opening on annual basis and no weightage shall be given for part of the year) *Partly completed work in progress (not abandoned and for a plant with multiple units in which at least one unit has been completed in full) shall be considered and the part completion certificate submitted by the bidder should clearly indicate the value of work completed along with completed portion of the work (which should satisfy similar work) and the performance of the supplied system for the unit(s) completed and commissioned should be satisfactory.</p>	<ol style="list-style-type: none"> <li>1. The bidder should submit copy of following documents duly <b>attested by a notary public or Gazetted Officer.</b> <ol style="list-style-type: none"> <li>a) PO with Order value, Scope of work and Bill of quantity for assessment of Eligibility Criteria.</li> <li>b) Satisfactory Completion* (with at least one year of satisfactory operation) Certificate indicating value of work executed &amp; period of contract obtained from Principal Owner of the work for whom the work has been executed.</li> </ol> </li> <li>2. In case, the bidder submits the credentials as a subcontractor the following are to be submitted copies duly <b>attested by a notary public or gazetted officer :</b> <ol style="list-style-type: none"> <li>a) Detailed work order / PO / Agreement with the main agency.</li> <li>b) Completion* certificate issued by main agency showing due completion of the package.</li> <li>c) Completion certificate issued by the Principal / project authorities in favour of the main agency showing due completion* of the package.</li> </ol> </li> </ol> <p><b>Note : The Experience/Completion Certificates shall be considered only when it bears the Name and Designation of Issuing Authority. This is only applicable for Experience/Completion Certificates issued after 30/06/2022.</b></p>

<b>B) Financial</b>	
<b><u>Eligibility Criteria</u></b>	<b><u>Documentary Proof.</u></b>
<p>1) The minimum average annual turnover of the vender for last three financial years ending on 31st March of the previous financial year should be minimum <b>Rs. 75 lakhs</b> (Turn over shall be escalated @ 10% per annum (Simple Rate) to bring them at the current price level. The turnover of the latest previous year shall not be considered for any weightage.)</p> <p>2) Net worth of the bidder during the latest financial year shall be positive <b>Rs. 103.36 lakhs</b> as per audited balance sheet.</p> <p>3) The bidder shall have minimum positive working capital of <b>Rs 51.68 lakhs</b>. Alternatively, exclusive credit limit from one or more scheduled commercial bank shall be available.</p>	<p>Documentary evidence for criteria 1 &amp; 2, in the form of certified Audited Balance Sheets and profit &amp; loss statement 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. In case the date of constitution / incorporation of the bidder is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria."</p> <p>Documentary evidence for criteria 3, Letter from bank towards availability of exclusive credit limit (if applicable).</p> <p><b><u>Note</u></b> For bids received prior to 30<sup>th</sup> June of any year, the financial figure for the previous to previous year may also be considered for evaluation. Whereas for bids submitted after 30<sup>th</sup> June, the bidder may also submit financial statement for the previous year certified by Chartered Accountant / Auditor for consideration of their bid.</p>

**TECHNICAL SPECIFICATION**

TECHNICAL SPECIFICATION INCLUDING ALL CONDITIONS AS PER  
CUSTOM CATALOGUE UNDER “BUYER SPECIFICATION DOCUMENT” OF GEM BID.

**BIDDER COMPLIANCE STATEMENT TO SPECIAL TENDER CONDITIONS(STC) :**

(To be filled in by the Tenderer and submitted along with Techno-Commercial bid.)

1. This bidder compliance statement must be filled in against all serial nos. & to be enclosed with the offer. Non submission or submission of incomplete questionnaire may lead to rejection of the offer.
2. All the terms & conditions of present GeM bid along with addendum/corrigendum except to any deviations taken must be given in this bidder compliance statement itself and not elsewhere in the quotation. In case of contradiction/ conflicting version found by NALCO at different places of quotation, NALCO can choose any version or the terms given below shall prevail.

Sl.	Description	Bidder's confirmation with detail
1.	We M/s._____ ( <i>please specify your company name</i> ) have understood the complete technical requirements and scope of supply of 03 Sets of TURBINE SUPERVISORY & VIBRATION MONITORING SYSTEM (RETROFIT) with scope of supply, Installation & commissioning on turnkey basis for the Nalco CPP plant as per present GeM bid and we confirmed to have offered exactly as per our requirement.	
2.	Bidders shall upload the technical compliance sheet (custom catalogue under buyer specification document of gem bid) with duly signed declaration towards confirmation of the technical specification. <i>Mere uploading of buyer's specification (technical compliance sheet attached under "specification document") as copy and pasting will not be sufficient</i>	
3.	Documentary evidence towards Pre-qualification criteria (PQC) as per Clause No.- I of SPECIAL TENDER CONDITIONS(STC) & Annexure-I is submitted along with offer in GeM portal.	
4.	Confirm that required EMD has been furnished along with submitted offer as clause no.VIII of SPECIAL TENDER CONDITIONS(STC)). In case EMD exemption is requested, please confirm necessary documents in support of the same has been uploaded.	
5.	INDEPENDENT EXTERNAL MONITOR (IEM) AND INTEGRITY PACT (as per Clause No.-VII of SPECIAL TENDER CONDITIONS(STC)) Please confirm submission of signed integrity pact duly filled in as per Annexure-VII along with the submitted offer.	
6.	Declaration by the bidder of percentage of local content (as per Clause No. V of SPECIAL TENDER CONDITIONS(STC));Please confirm submission of signed copy of Declaration by the bidder of percentage of local content as per Annexure-VI.	
7.	Anti –Profiteering Clause (Sec 171 of CGST Act) (as per Clause No. III of SPECIAL TENDER CONDITIONS(STC)); Please confirm submission of signed copy of Declaration as per Annexure-VIII.	
8.	PAYMENT TERM: As per GEM bid condition. Pl. Confirm.	
9.	WARRANTY/ GUARANTEE (as per Clause No. II-(B) of SPECIAL TENDER CONDITIONS(STC)); Please confirm acceptance.	
10.	TRAINING (as per Clause No. II-(C) of SPECIAL TENDER CONDITIONS(STC)); Please confirm acceptance.	
11.	SERVICE WORK INCLUDING I&C (as per Clause No. II-(D) of SPECIAL TENDER CONDITIONS(STC)); Please confirm acceptance.	
12.	DELIVERY TERM: As per TECHNICAL SPECIFICATION SHEET (CUSTOM CATALOGUE). Pl. Confirm.	
13.	PDI (as per Clause No. II-(F) of SPECIAL TENDER CONDITIONS(STC)); Please confirm acceptance.	
14.	CONTRACT CUM PERFORMANCE BANK GUARANTEE (as per Clause No. II-(G) of SPECIAL TENDER CONDITIONS(STC)); Please confirm acceptance.	
15.	PAYMENT TERM (as per Clause No. II-(H) of SPECIAL TENDER CONDITIONS(STC)); Please confirm acceptance.	

**PROFORMA FOR CONTRACT CUM PERFORMANCE GUARANTEE BY SELLER/ CONTRACTOR.**

(To be executed on non-judicial stamped paper of appropriate value)

B. G. No.....

Date.....

1. WHEREAS National Aluminium Company Limited (A Government of India Enterprise) having its Unit/Office at ..... (UNIT/OFFICE ADDRESS WHERE THE WORK IS EXECUTED) (hereinafter referred to as “The Company” which expressions shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) has entered into a contract with M/s. .... has placed a purchase order on M/s.....( hereinafter referred to as “Contractor(s)/Seller(s)” which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns) for .....(work/assignment description) on the terms and conditions as set out inter alia, in the Company’s contract No./ P.O. No. ....dated .....and various documents forming part thereof hereinafter referred to as the “said contract” which expression include all amendments, modifications and/ or variations thereto and whereas the Contractor(s)/Seller(s) has agreed for due execution of the entire contract and guarantees its performance including any parts executed through any other agencies/subcontractors.

AND WHEREAS one of the conditions of the “said contract” is that “contractor(s)/seller(s) shall furnish to the Company a Bank Guarantee from a bank for ...% (.....percent) of the total value of the “said contract” against due and faithful performance of the “said contract” including defect liability obligations and the performance guarantee obligations of the contractor(s)/seller(s) for execution/ supplies made under the “said contract.”

2. We .....Bank having its branch office at .....do hereby agree and undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Company stating that in the opinion of the Company, which is final & binding, the amount claimed is due by reason of default made by the Contractor(s)/Seller(s) in performing any of the terms & conditions of the said Contract including defect liability obligations, in fulfilling the performance guarantee obligation or loss or damage caused to or would be caused to or suffered by the Company by reason of any breach by the said Contractor(s)/Seller(s) of any of the terms & conditions of the contract. Any such demand made on the Bank by the Company shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However our liability under this guarantee shall be restricted to ` ..... (Rupees.....only).
3. We undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the contractor(s)/Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under. Our liability to pay is not dependent or conditional on the Company proceeding against the Contractor(s)/Seller(s).
4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said Contractor(s)/Seller(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/Order(s) are fulfilled.
5. We .....Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract(s)/Order(s) and that it shall continue to be enforceable till all the dues of the company under or by virtue of the said Contract(s)/Order(s) have been fully paid and its claims satisfied or discharged or till a duly authorised officer of the Company certifies that the terms and conditions of the said Contract(s)/Order(s) have been fully and properly carried out by the said contractor(s) and accordingly discharges the guarantee.
6. We .....Bank further agree with the Company that the company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the

terms and conditions of the said Contract(s)/Order(s) or to extend the time of performance by the said Contractor(s)/Seller(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s)/Seller(s) and to forbear or enforce any of the terms and conditions relating to the said Contract(s)/Order(s) and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s)/Seller(s) or for any forbearance, act or omission on the part of the Company or any indulgence by the Company to the said Contractor(s)/Seller(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have affect of so relieving us.

7. Notwithstanding anything contained herein before, our liability shall not exceed Rs.....(Rupees.....only) and shall remain in force till.....Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry, we shall be discharged from all the liabilities under this guarantee.
8. We.....Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time at the request of Contractor(s)/Sellers(s).
9. We \_\_\_\_\_Bank further agree that this Guarantee shall be invocable at our place of business at \_\_\_\_\_(Bank Name), \_\_\_\_\_(Branch Name and address of the branch), Bhubaneswar , Odisha-751\_\_\_\_\_.

Date.....

.....Bank

Corporate Seal of the Bank

By its constitutional Attorney

Signature of duly Authorised person

On behalf of the Bank With seal & signature code

Details of Persons Issuing the BG:

Name-----

Address for Correspondence: -----

Telephone & Fax No.

E-mail:

Note: 1 : BGs to be furnished from any of the approved banks of NALCO.

Note 2: BG confirmation must be sent to our Banker through SFMS with the followings details :

Beneficiary : NATIONAL ALUMINIUM CO LTD

Banker : State Bank of India

Branch : Kandsar(Nalco Nagar)

A/C No : 00000010657908589

IFSC Code : SBIN0008279

Address of Bank : AT/P.O – Kandsar,P.S - Nalco Nagar,Dist – Angul ,ODISHA,,Pin - 759145

**ANNEXURE-IV****LIST OF STANDARDISED BANKS FOR BG & EMD**

**Any domestic Guarantee issued by PSU Bank (or) Private Bank (or) Foreign Bank operating in India must be operational and invocable in Bhubaneswar only. For Guarantee to be operational in Bhubaneswar the issuing bank must designate a specified Bank Branch in Bhubaneswar.**

**I-SCHEDULED PUBLIC SECTOR BANKS (INDIAN)**

1	Bank of Baroda	7	Punjab & Sind Bank
2	Bank of India	8	Punjab National Bank
3	Bank of Maharashtra	9	State Bank of India
4	Canara Bank	10	UCO Bank
5	Central Bank of India	11	Union Bank of India
6	Indian Bank		

**II SCHEDULED PRIVATE SECTOR BANKS (INDIAN)**

1	HDFC Bank Ltd.	10	The Karur Vysya Bank Ltd.
2	ICICI Bank Ltd.	11	The Karnataka Bank Ltd.
3	Axis Bank Ltd.	12	IDFC Bank
4	Kotak Mahindra Bank Ltd.	13	RBL Bank
5	YES Bank	14	The Lakshmi Vilas Bank Ltd.
6	IndusInd Bank Ltd.	15	Tamilnad Mercantile Bank Ltd.
7	The Federal Bank Ltd.	16	City Union Bank Ltd.
8	The Jammu & Kashmir Bank Ltd.	17	IDBI Bank Ltd.
9	The South Indian Bank Ltd.		

**III. LIST OF FOREIGN BANKS**

<b>Sl. No</b>	<b>Name of the Bank</b>	<b>BIC</b>
1	Abu Dhabi Commercial Bank Limited	ADCB AE AA
2	Australia & New Zealand Banking Group Limited	ANZB AU 3M
3	Bank of America NA	BOFA US 3N
4	Bank of Bahrain and Kuwait B.S.C.	BBKU BH BM
5	Bank of Ceylon	BCEY LK LX
6	Barclays Bank PLC	BARC GB 22

7	BNP Paribas	BNPA FR PP
8	Citibank N.A.	CITI US 33
9	Commonwealth Bank of Australia	CTBA AU 2S
10	Credit Agricole Corporate & Investment Bank	BSUI FR PP
11	Credit Suisse AG	CRES CH ZZ
12	DBS Bank Ltd.	DBSS SG SG
13	Deutsche Bank AG	DEUT DE FF
14	Doha Bank	DOHB QA QA
15	FirstRand Bank Ltd.	FIRN ZA JJ
16	Industrial Bank of Korea	IBKO KR SE
17	Industrial & Commercial Bank of China Limited	ICBK CN BJ
18	JP Morgan Chase Bank	CHAS US 33
19	KEB Hana Bank	KOEX KR SE
20	Krung Thai Bank Public Company Ltd.	KRTH TH BK
21	Mashreqbank PSC	BOML AE AD
22	Mizuho Bank Ltd.	MHCB JP JT
23	National Australia Bank Ltd.	NATA AU 33
24	Sberbank	SABR RU MM
25	Shinhan Bank	SHBK KR SE
26	Societe Generale	SOGE FR PP
27	Sonali Bank Ltd.	BSON BD DH
28	Standard Chartered Bank	SCBL GB 2L
29	Sumitomo Mitsui Banking Corporation	SMBC JP JT
30	The Bank of Nova Scotia	NOSC CA TT
31	The Bank of Tokyo-Mitsubishi UFJ, Ltd.	BOTK JP JT
32	The Hongkong and Shanghai Banking Corp.Ltd.	HSBC HK HH
33	The Royal Bank of Scotland PLC	RBOS GB 2L
34	United Overseas Bank Ltd.	UOVB SG SG
35	Westpac Banking Corporation	WPAC AU 2F
36	Woori Bank	HVBK KR SE

X X X X X

**PROFORMA FOR BANK GUARANTEE FOR EARNEST MONEY DEPOSIT**

(To be executed on non-Judicial stamped paper of appropriate value)

B.G. No \_\_\_\_\_

Date \_\_\_\_\_

- a. WHEREAS National Aluminium Company Limited (A Government of India Enterprise), having its Office at Nalco Bhavan, P/1, Nayapalli, Bhubaneswar – 751 013, Orissa (hereinafter referred as "The Owner/ Company" which expression shall unless repugnant to the subject or context includes its legal representatives, successors and assigns), has issued tender paper vide its Tender No. .... for ..... (hereinafter called "the said tender") to M/s. .... (hereinafter called "the said Tenderer(s)" which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns) and as per terms and conditions of the said tender, the tenderer shall submit a Bank Guarantee for Rs. .... (Rupees ..... only) towards earnest money in lieu of cash.
- b. We \_\_\_\_\_ Bank having its branch office at \_\_\_\_\_ do hereby undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Company stating that in the opinion of the company, which is final & binding, the amount claimed is due because of any withdrawal of the tender or any material alteration to the tender after the opening of the tender by way of any loss or damage caused or would be caused or suffered by the Company by reason of any breach by the said tenderer(s) of any terms and conditions contained in the said tender or failure to accept the letter of Intent/Agreement or that the amount covered under this Guarantee is forfeited. Any such demand made on the Bank by the owner shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However our liability under this guarantee shall be restricted to an amount not exceeding Rs. .... (Rupees. .... Only).
- c. We undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the tenderer(s) in any suit or proceeding pending before any office, court or Tribunal relating thereto, our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under. Our liability to pay is not dependant or conditional on the owner proceeding against the tenderer(s).
- d. The guarantee herein contained shall not be determined or affected or suspended by the \_\_\_\_\_ liquidation or winding up, dissolution or change of constitution or insolvency of the said tenderer(s) but shall in all respects and for all purposes be binding and operative until payment of all money due or liabilities under the said tender are fulfilled.
- e. We \_\_\_\_\_ Bank Ltd, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the finalisation of the said tender and that it shall continue to be enforceable till the said tender is finally decided and order placed on the successful tenderer(s) and/or till all the dues of the Company under/or by virtue of the said tender have been fully paid and its claims satisfied or discharged or till a duly authorised officer of the Company certifies that the terms and conditions of the said tender have been fully and properly carried out by the said tenderer(s) and accordingly discharges the guarantee.

- f. That the Owner/Company will have full liberty without reference to us and without affecting this guarantee to postpone for any time or from time to time, the exercise of any of the power of the owner under the tender.
- g. Notwithstanding anything contained herein before, our liability shall not exceed Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) and shall remain in force till \_\_\_\_\_ unless a demand or claim under this guarantee is made on us within three months from the date of expiry, we shall be discharged from all the liability under this guarantee.
- h. We \_\_\_\_\_ Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time on the request of the Tenderer(s).
- i. We \_\_\_\_\_ Bank further agree that this Guarantee shall be invocable at our place of business at \_\_\_\_\_ (Bank name), \_\_\_\_\_ (Branch Name and address of the Branch), Bhubaneswar, Odisha 751xxxx.

Date:

Corporate Seal of the Bank

.....Bank

By its constitutional Attorney

Signature of duly  
Authorised person  
on behalf of the Bank  
With seal & signature code

**(Declaration by the bidder on their letter head)**

To,  
GM(Materials) ,  
M/s. National Aluminium Company Limited,  
Smelter Plant  
Dist.- Angul, Odisha-759145

Date-

Dear Sir,

We, M/s. \_\_\_\_\_ having its office at  
\_\_\_\_\_(address) hereby confirm that  
the offered product has \_\_\_\_% of the local content.

Following is/are the location(s) at which local value addition is made:

\_\_\_\_\_  
\_\_\_\_\_

Yours sincerely,

Signature  
Name  
Designation  
Contact No.

**PRE-BID PRE-CONTRACT INTEGRITY PACT**

**GENERAL**

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on \_\_\_\_\_ day of the month of \_\_\_\_\_ 2023, between, on one hand, the National Aluminium Company Limited (NALCO), a company registered under the Companies Act 1956 and a Government of India Enterprise, having its Registered Office at NALCO Bhawan, P/1, Nayapalli, Bhubaneswar- 751013, Odisha, India (referred to as NALCO) acting through Shri A. K. BHOI, DGM (MATLS.) (hereinafter called the “BUYER”, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s. \_\_\_\_\_ represented by Shri \_\_\_\_\_, Chief Executive Officer (hereinafter called the “BIDDER / Seller” which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns ) of the Second Part.

WHEREAS the BUYER proposes to procure TURBINE SUPERVISORY & VIBRATION MONITORING SYSTEM (RETROFIT) and the BIDDER/Seller is willing to offer/has offered the stores and WHEREAS the BIDDER is a private company / public company /Government undertaking/ partnership /registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Company under the administrative control of the Ministry of Mines, Govt. of India.

**NOW THEREFORE**

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence / prejudiced dealings prior to during and subsequent to the currency of the contract to be entered into with a view to :-

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will comment to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

**Commitments of the BUYER**

- 1.1 The BUYER undertakes that no official of the BUYER, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage

from the BIDDER, either for themselves or for any person or organisation or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

- 1.2 The BUYER will, during the pre-contract stage, treat all BIDDERS alike and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.
- 1.3 All the officials of the BUYER will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the BUYER with full and verifiable facts and the same is prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

### **Commitments of BIDDERS**

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following :-
  - 3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the bidding process, or to any person, organisation or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
  - 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Government.
  - 3.3 BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
  - 3.4 BIDDERS shall disclose the payment to be made by them to agents / brokers or any other Intermediary, in connection with this bid / contract.
  - 3.5 The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make

to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

- 3.6 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 3.7 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.8 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.9 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable fact.
- 3.10 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.11. If the Bidder or any employee of the Bidder or any person acting on the behalf of the Bidder, either directly or indirectly, is a relative of any of the officers of the Buyer, or alternatively, if any relative of an officer of the Buyer has financial interest/stake in the Bidder's firm, the same shall be disclosed by the Bidder at the time of filing of tender.  
The term "relative" for this purpose would be as defined in Section 6 of the Companies Act 1956.
- 3.12. The Bidder shall not lend to or borrow any money from or enter into monetary dealings or transactions, directly or indirectly, with any employee of the Buyer.
- 3.13 Bidder(s)/ Contractor(s) who have signed the integrity pact shall not approach the courts while representing the matter to IEMs and shall wait for their decision in the matter.

#### **4. Previous Transgression**

- 4.1. The Bidder declares that no previous transgression occurred in the last three years immediately before signing of this integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could Justify Bidder's exclusion from the tender process.
- 4.2. The Bidder agrees that if it makes incorrect statement on this subject, Bidder can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

#### **5.. Sanctions for Violations :**

- 5.1. Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle of the BUYER to take all or any one of the following actions, wherever required: -

- (i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
- (ii) The Earnest Money Deposit ( in pre-contract stage) and/or Security Deposit / Performance Bond ( after the contract is signed) shall stand forfeited either fully or partially, as decided by the BUYER and the BUYER shall not be required to assign any reason therefore.
- (iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
- (iv) To recover all sums already paid by the BUYER, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
- (v) To en-cash the advance bank guarantee and performance bond / warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest.
- (vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation / rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
- (vii) To debar the BIDDER from participating in future bidding processes of NALCO for a minimum period of five years, which may be further extended at the discretion of the BUYER.
- (viii) To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
- (ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.
- (x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

5.2 The BUYER will be entitled to take all or any of the actions mentioned at para 5.1(i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal Code 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.

5.3 The decision of the BUYER to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the independent Monitor(s) appointed for the purposes of this Pact.

**6. Independent External Monitors (IEMs):**

6.1. The BUYER has a panel of Independent External Monitors (hereinafter referred to as IEMs) for this Pact in consultation with the Central Vigilance Commission as mentioned in NALCO's NIT/NALCO's website ([www.nalcoindia.com](http://www.nalcoindia.com)).

6.2 The task of the IEMs shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.

6.3 The IEMs shall not be subject to instructions by representatives of the parties and perform their functions neutrally and independently.

6.4 Both the parties accept that the IEMs have the right to access all the documents relating to the project / procurement including minutes of meetings.

6.5 As soon as the IEM notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER.

6.6 The BIDDER(s) accepts that the IEM has the right to access without restriction to all Project documentation of the BUYER including that provided by the BIDDER. The BIDDER will also grant the IEM, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The IEM shall be under contractual obligation to treat the information and documents of the BIDDER / Subcontractor(s) with confidentiality.

6.7 The BUYER will provide to the IEM sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the IEM the option to participate in such meetings.

6.8 The IEM will submit a written report to the designated Authority of BUYER / Secretary in the Department / within 8 to 10 weeks from the date of reference or intimation to him by the BUYER / BIDDER and should be occasion arise, submit proposals for correcting problematic situations.

**7. Facilitation of Investigation:**

In case of any allegation of violation of any provisions of this Pact or payment of commission, the IEMs shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

**8. Law and Place of Jurisdiction:**

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the BUYER.

9. **Other Legal Actions:**

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

10. **Validity:**

10.1 This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. If any claim is made/lodged during this time, 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 CMD,NALCO.

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

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

12. The parties hereby sign this Integrity Pact at \_\_\_\_\_ on \_\_\_\_\_.

For & on behalf of

For & on behalf of

**BUYER**

**BIDDER**

Name of the Officer:

Designation:

Company: NALCO

Official Seal

Witness

1. \_\_\_\_\_

2. \_\_\_\_\_

Witness

1. \_\_\_\_\_

2. \_\_\_\_\_

**Format:- (To be submitted at the time of release of Final Due)**

**ANTI-PROFITEERING DECLARATON FORMAT**

To whomsoever it may concern.

I, Mr. \_\_\_\_\_, proprietor / \_\_\_\_\_ (other authorized signatories) of M/s. \_\_\_\_\_, hereby solemnly and sincerely declare that, while executing the Order No \_\_\_\_\_ Dt. \_\_\_\_\_, me/my firm/my company has abided by all Tax Laws and Rules including but not limited to Section 171 of the Central Goods and Services Tax Act, 2017.

I further declare that, me/my firm/my company, in furtherance and in compliance to the said section, have not made profit out of reduction in Input Tax benefits wherever applicable and reduced Tax charged to 'Nalco' w.r.t. Output Tax benefits in connection with goods and/or services provided.

I further declare that the foregoing is true and correct and the same is a legal obligation and failure to fulfil it could result in penalties under the law.

Date: \_\_\_\_\_

Place: \_\_\_\_\_

To be signed by the authorized person under the firm's seal

**Format:- (To be submitted with NIT)**

**ANTI-PROFITEERING DECLARATON FORMAT**

To whomsoever it may concern.

I, Mr. \_\_\_\_\_, proprietor / \_\_\_\_\_ (other authorized signatories) of M/s. \_\_\_\_\_, hereby solemnly and sincerely declare that, while giving this quotation to 'Nalco' against Tender No \_\_\_\_\_ Dt. \_\_\_\_\_, me/my firm/my company has abided by all Tax Laws and Rules including but not limited to Section 171 of the Central Goods and Services Tax Act, 2017.

I, hereby solemnly and sincerely further declare that me/my firm/my company will continue to abide by the said laws, including but not limited to Section 171 of the Central Goods and Services Tax Act, 2017, as applicable from time to time during the life of the tender and during execution of any order placed with reference to the said tender.

I further declare that, me/my firm/my company, in furtherance and in compliance to the said section, will make commensurate reduction in the basic prices w.r.t. Input Tax benefits and reduction in Tax charged to 'Nalco' w.r.t. Output Tax benefits in connection with goods and/or services provided.

I further declare that the foregoing is true and correct and the same is a legal obligation and failure to fulfil it could result in penalties under the law.

Date: \_\_\_\_\_

Place: \_\_\_\_\_

To be signed by the authorized person under the firm's seal

**FORMAT FOR ONLINE SUBMISSION OF EARNEST MONEY DEPOSIT (EMD)****DETAILS TO BE FURNISHED BY NALCO**

1)	TENDER NO.	
2)	DATE	
3)	DESCRIPTION OF TENDER	03 SETS OF TURBINE SUPERVISORY & VIBRATION MONITORING SYSTEM (RETROFIT)
4)	EMD AMOUNT (IN RS)	INR 2,50,000/- (AS APPLICABLE BASED ON THE MATERIALS QUOTED BY THE BIDDER)
5)	SBI ACCOUNT NO	10657908589
6)	SBI BRANCH CODE	08279
7)	SBI IFSC CODE	SBIN0008279

**DETAILS TO BE FURNISHED BY BIDDER**

1)	NAME OF THE BIDDER	
2)	NALCO VENDOR CODE	(FOR EXISTING VENDOR)
3)	AMOUNT DEPOSITED	
4)	DATE OF DEPOSIT	
5)	NAME OF BANK & BRANCH	
6)	BRANCH CODE	
7)	IFSC CODE	
8)	UTR NO.	(ENCLOSE COPY)
9)	DATE	

Indian bidders submitting the EMD in INR should send the scanned copy of the duly filled in and signed Annexure – IX along with the scanned copy of Transaction Slip/ receipt of the Bank within 3 days of payment by e-mail to [ranjeet.kumar@nalcoindia.co.in](mailto:ranjeet.kumar@nalcoindia.co.in) and [aira.bhoi@nalcoindia.co.in](mailto:aira.bhoi@nalcoindia.co.in) .

The bidders should upload the scanned copy of the duly filled in and signed Annexure – IX along with the scanned copy of Transaction Slip/ receipt of the Bank with their submitted offer in GeM bid.