



भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited

Corporate Office: BHEL House,
Siri Fort, New Delhi-110049
Tele No. 011- 66337401

निविदा आमंत्रण सूचना/ NOTICE INVITING TENDER

Sir/Madam,

Bharat Heavy Electricals Limited, (a Public Sector Enterprise) having its Corporate / Registered Office at BHEL House, Siri Fort, New Delhi-110049 invites offer in two parts viz. Techno-commercial (Part-I) and Price (Part-II) bids for **Supply, Installation, Commissioning & Maintenance of Biometric System for Access Control and Attendance Recording on lease basis for 5 years for PAN INDIA**. Please submit your competitive offer for the above subject work as per the tender terms & conditions.

SCHEDULE TO TENDER

1	Tender Reference No.	AA: GAX:24: TAMS:101
2	Date of Issue of Tender:	13/12/2024
3	Tender Title:	Supply, Installation, Commissioning & Maintenance of Biometric System for Access Control and Attendance Recording on lease basis for 5 years for PAN INDIA
4	Name of BHEL Units where work is to be carried out	Details of BHEL units and sites (Refer to Annexure A)
5	Last date/ time for receipt of tender:	22-01-2025 by 11:30 AM
6	Date/ time of opening of (Part-I):	22-01-2025 at 12:00 PM
7	Place of Submission of Tender / Bid:	Tender box placed at the reception of Corporate Office, BHEL House, New Delhi-110049
8	Tender will be opened at:	Corporate Office, BHEL House, Siri Fort
9	Pre-bid Queries, for Pre-Bid Meeting 1	Prospective bidders may send queries to Manager (HR-GAX) through email to meenat@bhel.in/habib@bhel.in on or before 22-12-2024
10	Pre-bid Meeting 1:	The date, time and venue of Pre-bid meeting shall be: Date: 23-12-2024 Time: 14:00 Hrs. Venue: BHEL House, Siri Fort, New Delhi-110049
11	Pre-bid Queries, for Pre-Bid Meeting 2	Prospective bidders may send queries to Manager (HR-GAX) through email to meenat@bhel.in/habib@bhel.in on or before 05-01-2025
12	Pre-bid Meeting 2:	The date, time and venue of Pre-bid meeting shall be: Date: 07-01-2025 Time: 14:00 Hrs. Venue: BHEL House, Siri Fort, New Delhi-110049
13	Date of POC	Will be intimated separately
14	Date/Time of Conducting Reverse Auction:	Will be intimated separately.
15	EMD (₹):	Rs. 30 lakhs

Meena Thakran
13/12/2024
प्रबंधक / Manager
आचार्य / Manager
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

16	Minimum Validity of tender offer:	180 days from the due date of submission of offer
17	Scope of Work:	Supply, Installation, Commissioning & Maintenance of Biometric System for Access Control and Attendance Recording on lease basis for 5 years for PAN INDIA
18	Contract Period:	1 year
19	Lease Period:	5 years

All corrigenda, addenda, amendments, time extension, clarifications, etc. to the tender will be hosted on website <http://www.bhel.com> and <http://eprocure.gov.in/cppp/> only. Bidders should regularly visit website till the due date of submission to keep themselves updated. Any clarification(s) regarding Notice Inviting Tender (NIT), if required, should be sought from the undersigned before the tender due date.

Thanking you,

For & on behalf of
Bharat Heavy Electricals Ltd.


 मीना ठाकरान / MEENA THAKRAN
 प्रबंधक / Manager
 कॉर्पोरेट प्रशासन एवं मानव संसाधन विभाग / Corporate Admin. & ISMG
 भारती हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 (Meena Thakran)
 Manager (HR-GAX & ISMG)
 Off:011-6337401/9625062397;
 e-mail: meenat@bhel.in

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INTRODUCTION:

BHEL is the largest engineering and manufacturing enterprise in India in the energy related/infrastructure sector, today. BHEL was established more than 50 years ago, ushering in the indigenous Heavy Electrical Equipment industry in India - a dream that has been more than realized with a well-recognized track record of performance.

BHEL manufactures over 180 products under 30 major product groups and caters to core sectors of the Indian Economy viz., Power Generation & Transmission, Industry, Transportation, Telecommunication, Renewable Energy, etc. The wide network of BHEL's 16 manufacturing divisions, four Power Sector regional centres, over 100 project sites, 8 service centres and 4 regional offices, enables the Company to promptly serve its customers and provide them with suitable products, Systems and services. The high level of quality & reliability of its products is due to the emphasis on design, engineering and manufacturing to international standards by acquiring and adapting some of the best technologies from leading companies in the world, together with technologies developed in its own R&D centres.

BHEL's vision is to become a world-class engineering enterprise, committed to enhancing stakeholder value. The company is striving to give shape to its aspirations and fulfil the expectations of the country to become a global player.

BHEL (A Govt. of India Undertaking) requires **Biometric Access Control and Attendance Recording System** for its Units, Sites & offices under lease scheme.

Lease Period under the Leasing scheme shall be **FIVE years** and the Total Price shall be for the complete scope as per technical specifications, **inclusive of comprehensive maintenance including repair/ replacement of parts during the lease period, insurance and any other incidental charges**. All the statutory taxes like GST should be inclusive in quoted price. Accordingly, reverse price breakup to be provided by the party or contractor; after quoting Percentage (%) (above/below) BHEL Estimate. Lease Period of Five years shall start from the date of **successful installation by bidder and acceptance by respective Units, Sites & offices of BHEL. USER ACCEPTANCE TEST (UAT)**; elaborated at **Clause 2.1 (o)** - shall be ensured by contractor. Payments shall be released on quarterly basis, as per Payment Terms of BHEL and other Commercial Terms & Conditions (mentioned in Section-V).

The tender is invited for Biometric technology of access control and attendance recording system on 5 years lease rental basis consisting of the following:

- a) Design, Supply, Installation, Configuring, Testing, Commissioning and maintenance of the **Biometric Access Control and Attendance Recording System** as per specifications enclosed. (**Annexure-1 to 17 of Technical specification**)
- b) The system shall permit access to the factory/ office premises as per stipulated rules.
- c) Comprehensive Maintenance of entire system for a period of 5 years including deployment of required personnel for smooth functioning of the system.

- d) **Integration of Software Solution:** The software solution should be configurable to create master databases, approval workflows, and integrated with SAP platform / any other ERP package currently in use in the organization or which may be used in the future. Such integrations with ERP systems / creation of master database shall also enable creation of dropdowns in various fields as required. The software should also allow upload / download of data as per the requirements of the corporation. The deployed software solution should be able to seamlessly integrate with the backend SAP ERP system / Active directory so that all requirements as specified in Functional scope of work can be fulfilled and manual processes can be minimized.

The software solution should have the module to create various master databases / pull master database inputs from integrated SAP/ERP systems which will be further utilized to validate, populate, create dropdowns, create approval workflow etc. within the platform. The software shall allow upload of scanned documents, images etc. wherever required. Facility should be provided to upload bulk data through options of bulk upload through .csv / excel file formats etc.

Master Establishment Database must be integrated with SAP -ERP system to ensure updation / changes in the database in line with the changes in the internal SAP system without any manual updates. This Master Establishment Database shall be used to configure approval workflows as defined in Centralized Software (Annexure 6) & Role-based dashboards (Annexure-B). This database shall be used to define and configure admin roles, approval roles etc. within the overall management workflow.

The Software / Platform shall be fully expandable & futuristic with an open architecture which shall enable any future integration with other associated systems such as SAP etc. currently in use or that may be deployed in the future by the establishment.

मीना ठाकरान / MEENA THAKRAN

प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG

भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited

बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort

नई दिल्ली- 110049 / New Delhi-110049

SECTION-I

DEFINITIONS

1.1 DEFINITIONS: The following terms shall have the meaning hereby assigned to them except where the context otherwise requires

- i) **BHEL** shall mean Bharat Heavy Electricals Limited (of the respective Power Sector Region inviting the Tender), a company registered under Indian Companies Act 1956, with its Registered Office at BHEL HOUSE, SIRI FORT, NEW DELHI - 110049, or its Manufacturing Units (MU) or Power Sector Regional Offices or its Authorized Officers or its Site Engineers or other employees authorized to deal with any matters with which these persons are concerned on its behalf.
- ii) **"EXECUTIVE DIRECTOR"** or **"GENERAL MANAGER (In- charge)"** or **"GENERAL MANAGER"** shall mean the Officer in Administrative charge of the respective MUs/Power Sector Region.
- iii) **"COMPETENT AUTHORITY"** shall mean BHEL Officers who are empowered to act on behalf of BHEL.
- iv) **"ENGINEER"** or **"ENGINEER IN CHARGE"** shall mean an Officer of BHEL as may be duly appointed and authorized by BHEL to act as "Engineer" on his behalf for the purpose of the Contract, to perform the duty set forth in this General Conditions of Contract and other Contract documents.
- v) **"SITE"** shall mean the places or place at which the equipments are to be installed and services are to be performed as per the specification of this Tender.
- vi) **"CLIENT OF BHEL"** or **"CUSTOMER"** shall mean the project authorities with whom BHEL has entered into a contract for supply of equipments or provision of services.
- vii) **"CONTRACTOR"** shall mean the successful Bidder/Tenderer who is awarded the Contract and shall include the Contractor's successors, heirs, executors, administrators and permitted assigns.
- viii) **"CONTRACT"** or **"CONTRACT DOCUMENT"** shall mean and include the Agreement of Work Order, the accepted appendices of Rates, Schedules, Quantities if any, Offer submitted by contractor including acceptance to General Conditions of Contract, Special Conditions of Contract, Instructions to the Tenderers, Drawings, Technical Specifications, the Special Specifications if any, the Tender documents, subsequent amendments /corrigendum to Tender mutually agreed upon and the Letter of Intent/Award/Acceptance issued by BHEL. Any conditions or terms stipulated by the contractor in the tender documents or subsequent letters shall not form part of the contract unless, specifically accepted in writing by BHEL in

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the Letter of Intent/Award and incorporated in the agreement or amendment thereof.

- ix) **“GENERAL CONDITIONS OF CONTRACT”** shall mean the ‘Instructions to Bidders’ and ‘General Conditions of Contract’ pertaining to the work for which above tenders have been called for.
- x) **“TENDER SPECIFICATION”** or **“TENDER”** or **“TENDER DOCUMENTS”** shall mean General Conditions, Common Conditions, Special Conditions, Price Bid, Rate Schedule, Technical Specifications, Appendices, Annexures, Corrigendums, Amendments, Forms, Procedures, Site information etc. and drawings/documents pertaining to the work for which the tenderers are required to submit their offers. Individual specification number will be assigned to each Tender Specification.
- xi) **“LETTER OF INTENT/ AWARD”** shall mean the intimation by a Letter/Fax/email to the bidder that the tender has been accepted in accordance with provisions contained in the letter. The responsibility of the contractor commences from the date of issue of this letter and all terms and conditions of the contract are applicable from this date.
- xii) **“COMPLETION TIME”** shall mean the period by ‘date/month’ specified in the ‘Letter of Intent/Award’ or date mutually agreed upon for handing over of the intended scope of work, the installed equipment which are found acceptable by the Engineer, being of required standard and conforming to the specifications of the Contract.
- xiii) **“EQUIPMENT”** shall mean equipment, machineries, materials, structural, electricals and other components of the system covered by the contract.
- xiv) **“TESTS”** shall mean and include such test or tests to be carried out on the part of the contractor as are prescribed in the contract or considered necessary by BHEL in order to ascertain the quality, workmanship, performance and efficiency of the contractor or part thereof.
- xv) **“APPROVED”, “DIRECTED”** or **“INSTRUCTED”** shall mean approved, directed or instructed by BHEL.
- xvi) **“WORK or CONTRACT WORK”** shall mean and include deployment of manpower, supply, installation, commissioning, configuration, testing & Maintenance of all categories of equipment/hardware, software, tools and tackles etc. required for complete operation of the system to the entire satisfaction of BHEL.
- xvii) **“SINGULAR AND PLURALS ETC”** words carrying singular number shall also include plural and vice versa, where the context so requires. Words imparting the masculine Gender shall be taken to include the feminine Gender and words imparting persons shall include any Company or Associations or Body of Individuals, whether incorporated or not.

Attn: Mr. K. K. K.

- xxviii) **"HEADING"** - The heading in these General Conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken as instructions thereof or of the contract.
- xix) **"MONTH"** shall mean calendar month unless otherwise specified in the Tender.
- xx) **'Day' or 'Days'** unless herein otherwise expressly defined shall mean calendar day or days of twenty-four (24) hours each. A Week shall mean continuous period of seven (7) days.
- xxi) **"COMMISSIONING"** shall mean the synchronization testing and achieving functional operation of the Equipment with associated system after all initial adjustments, trials, cleaning, re-assembly required at site if any, have been completed and Equipment with associated system is ready for taking into service.
- xxii) **"WRITING"** shall include any manuscript type written or hand written or printed statement or electronically transmitted messages, under the signature or seal or transmittal of BHEL.
- xxiii) **"TEMPORARY WORK"** shall mean all temporary works for every kind required in or for the execution, completion, maintenance of the work.
- xxiv) **'CONTRACT PRICE' or 'CONTRACT VALUE'** shall mean the sum mentioned in the LOI/LOA/Contract Agreement subject to such additions thereto or deductions there from as may be made under provisions hereinafter contained.
- xxv) **'EXECUTED CONTRACT VALUE'** shall mean actual value of works executed by the contractor and certified by BHEL. This value shall not include PVC, ORC, Extra Works and Taxes.
- xxvi) **"COMMENCEMENT DATE" or "START DATE"** shall mean the commencement/start of work at Site as per terms defined in the Tender.
- xxvii) **"SHORT CLOSING" or "FORE CLOSING"** of Contract shall mean the premature closing of Contract, for reasons not attributable to the contractor and mutually agreed between BHEL and the contractor.
- xxviii) **"TERMINATION"** of Contract shall mean the pre mature closing of contract due to reasons as mentioned in the contract.
- xxix) **"DE MOBILIZATION"** shall mean the temporary winding up of Site establishment by Contractor leading to suspension of works temporarily for reasons not attributable to the contractor.
- xxx) **"RE MOBILIZATION"** shall mean the resumption of work with all resources required for the work after demobilization.

Meena Thakran

श्री. मेना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं संचालन विभाग
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
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नई दिल्ली- 110049 / New Delhi-110049

- xxxi) **CONTRACT PERIOD:** The contract period of one year (01 Year) will begin from the date specified in the work order issued by the Corporate Office, considering the resource mobilization period mentioned in the tender. Site clearance orders or instructions for all locations must be issued within this one-year contract period by respective location/Unit, and the Supply, Installation, Testing, and Commissioning (SITC) must be completed within the designated timeframe for each phase or location, as outlined in the tender or specified in the clearance provided for that particular location.
- xxxii) **LEASE PERIOD:** The lease period of five years (05 Year) will commence from the Go-Live date of the project for each respective unit/division region.
- xxxiii) **UNIT/BHEL UNIT:** The Unit mentioned in the tender covers all BHEL manufacturing Units/ Regions/ Divisions/ Sites /Centres/ Offices.

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत भारी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
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SECTION-II
GENERAL CONDITIONS OF TENDER

2.1 GENERAL INSTRUCTION TO BIDDERS

- a) The General Conditions of Contract form part of the Tender specifications. **Tender to be submitted offline in Tender Box placed at Reception of BHEL House, Siri Fort, New Delhi-110049; within the date and Time.** In exceptional cases, where due to bulky size of the bid documents and it is not possible to drop the bids in the tender box, the bid documents may be handed over to the tender inviting authority.
- b) **All pages of the tender documents shall be duly signed, stamped and submitted along with the offer in token of complete acceptance thereof.** The information furnished shall be complete by itself. The bidder is required to furnish all the details and other documents as per the tender terms & conditions.
- c) Documents not signed & stamped by the authorized signatory of the bidder shall not be accepted and considered for evaluation of bid.
- d) Any additional documents submitted by the bidder during processing of tender or after placement of order, shall not be accepted unless it is submitted with forwarding letter and duly signed & stamped as mentioned above.
- e) The above requirement is equally applicable even if the documents are received in soft form. In such cases, Documents / Clarifications received through e-mails should be from the registered e-mail ID of the bidder.
- f) All documents submitted by the bidder in his submission shall be accompanied with a covering letter giving index interlinking of all the documents, which shall be numbered page wise.
- g) **COMMUNICATION & CORRESPONDENCE:** Bidder(s) has to provide at least one valid email ID for fast communications. Two email IDs are desirable. All communications related to the tender shall be sent to these email IDs and hard copies will not be sent. Such communication(s) shall be deemed as delivered and final. Bidder(s) has to regularly view their email and also remain in touch with the Notice Inviting Authority to remain updated. Non-viewing of e-mail or non-functioning of Internet & PC will not be entertained as a reason for no-response to any official communication. Two Mobile phones numbers should also be provided for communication / reminder(s). Such phones should be promptly attended. If due to any reason, bidder / authorized representative is unable to attend a call, he/she should revert to BHEL officials as soon as possible on the same day or, at the maximum, on the next working day. Any change in e-mail ID should be properly communicated in person, e-mail & hard copy. Later, during the execution of contract as well, non-response to a communication calling for action, shall be deemed to be a deliberate violation of contract condition and may invite suitable penalty for respective violation as per penalty causes.
- h) Bidders are advised to study all the tender documents carefully. Any submission of tender by the bidder shall be deemed to have been done after careful study and examination of the tender documents and with the full understanding of the implications thereof. Should the bidders have any doubt about the meaning of

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any portion of the Tender Specification or find discrepancies or omissions in the tender documents or are incomplete or shall require clarification on any of the technical aspect, the scope of work etc., he shall at once, contact the authority inviting the tender well in time (so as not to affect last date of submission) for clarification before the submission of the tender. Bidder's request for clarifications shall be with reference to Sections and Clause numbers given in the tender documents. The specifications and terms and conditions shall be deemed to have been accepted by the bidder in his offer. Non-compliance with any of the requirements and instructions of the tender enquiry may result in the rejection of the tender.

- i) Bid should be free from correction, overwriting, using corrective fluid etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection.
- j) No clause of the tender document should be altered /amended /edited etc. by the bidder under any circumstances.
- k) **Integrity Pact (IP)** -IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. Following Independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.

Sl. No.	IEM	Email
1.	Shri Otem Dai, IAS (Retd.)	iem1@bhel.in
2.	Shri Bishwamitra Pandey, IRAS (Retd.)	iem2@bhel.in
3.	Shri Mukesh Mittal, IRS (Retd.)	iem3@bhel.in

The IP as enclosed (**Annexure C**) with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, in case of two/ three-part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.

- l) Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEMs shall be done through email only.
- m) The Integrity Pact shall survive independently to the main contract. Terms and Conditions of the Integrity Pact shall be applicable only for the specific purpose as provided in this Clause and Integrity Pact.
- n) Integrity pact (IP) shall be applicable for all tenders / contracts if indicated in NIT. This IP shall be issued as part of the Tender documents and shall be submitted by the bidder along with Techno-commercial bid duly filled, signed and stamped by the authorized signatory who signs the bid. Entering into this pact shall be a preliminary qualification.

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

COMMITMENT BY BIDDER/ SUPPLIER/ CONTRACTOR: The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Bhartiya Nyaya Sanhita or any other law in force in India.

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

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

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

Note:

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

o) USER ACCEPTANCE TEST (UAT):

- i. **UAT Part-I :** UAT after Server installation, software configuration and complete system installation & commissioning including integration with SAP platform / any other ERP package currently in use in the organization; for any 01 major unit (Bhopal/Haridwar/Delhi-NCR/Bangalore/Hyderabad), UAT-1 shall be conducted to ascertain whether the implemented solution meets the requirements as indicated in Technical Specifications mentioned in **Annexure -1 to 17** and work is completed as per Scope of Work (mentioned in Section-IV). Contractor shall submit Installation report to BHEL once the equipment is successfully installed so

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

that BHEL can carry out the acceptance test. All manuals, accessories etc. will be handed over by contractor to BHEL. UAT Part-I shall be issued by Corporate Office & the 01 major unit for which the installation and commissioning has been completed.

- ii. All the software/hardware offered, shall be made functional in all respects before the start of the acceptance test by Contractor. Contractor shall demonstrate all the features of the equipment software and show that equipment and software is performing as per specified configuration.
 - iii. Contractor shall be responsible for preparation and submission of test strategy & test plan for BHEL approval and demonstration of features and functionalities of deployed solutions.
 - iv. **The UAT clearance shall be issued post successful 01 salary cycle of the major unit.**
 - v. Contractor shall resolve the issues reported in UAT within 7 days. Once the issues are resolved, contractor shall offer the solution for testing again. The system again will be tested for 7 days.
 - vi. In case the implemented solution is not able to meet UAT, the supplied solution is liable to be rejected. Subsequently, the Security Deposit may be forfeited and Order may be cancelled.
 - vii. **User Acceptance Test (UAT) Part-II:** UAT Part-II shall be done for all BHEL units other than the 01 major unit covered in UAT Part-I. UAT Part-II will be issued after software configuration & complete system installation and commissioning for respective Units, UAT-II shall be conducted to ascertain whether the implemented solution meets the requirements as indicated in Technical Specifications mentioned in **Annexure -1 to 17** and work is completed as per Scope of Work. Accordingly, UAT certificate shall be issued by respective BHEL unit.
 - viii. BHEL will issue a Commissioning Certificate on successful completion of UAT for the entire solution.
- p) The products whose remaining end-of-support is less than 07 years should not to be offered.
- q) Any travel, boarding and lodging incurred for installation, commissioning, migration, upgrade will be borne by the vendor.
- r) **LEASE RENTALS:**
- i. Lease Rentals will commence only after successful supply, installation and commissioning of the entire equipment as per the scope of the

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contract. The completion of installation and commissioning shall be as per the UAT and shall be certified by BHEL.

- ii. Lease Rentals will be paid on quarterly basis, on successful completion of each quarter and on certification by BHEL.

2.2 SUBMISSION OF TENDERS

- a) The bidders must submit their tenders to Officer inviting tender as per instructions in the NIT.
- b) Tender shall be submitted offline in Tender Box placed at Reception of BHEL House, Siri Fort, New Delhi-110049; within the date and Time.
- c) Bids submitted by post shall be sent by 'REGISTERED POST / COURIER' and shall be posted with due allowance for any postal/courier delays. BHEL takes no responsibility for delay, loss or non-receipt of bids sent by post/courier. The bids received after the specified time of their submission are treated as 'Late Bids' and shall not be considered under any circumstances.
- d) Bidders whose bids are found techno commercially qualified shall be notified through email/telephonically about the date and time of Reverse Auction. BHEL's decision in this regard shall be final and binding.
- e) The information given in the tender documents is for general guidance and shall not be construed as contractually binding on BHEL. All relevant site data/information as may be necessary for bidding shall have to be obtained/ collected by the Bidder.
- f) The Bidders are advised to physically visit the site to acquaint and satisfy themselves about the weather conditions, working culture in the area, socio-political environment, safety & security aspects, law & order situation, law of the land, transportation routes, various distances, surroundings of plant/ project premises together with all statutory, obligatory, mandatory requirements of various authorities and obtain for themselves all necessary information as to the risks, contingencies and all other circumstances, which may influence or affect the discharge of various obligations under the Contract during contract and lease period including extended period (if any).
- g) The submission of bid will tantamount to due diligence having been done and it shall be deemed that:
 - i. the Bidder has obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Works.
 - ii. the Bidder accepts total responsibility for having foreseen all difficulties and costs of successfully completing the Works
 - iii. the Bidder accepts that, the Contract Price shall not be adjusted to take account of any unforeseeable or unforeseen difficulties or costs and the

Bidder shall not raise any claims/ disputes against BHEL at later date in any manner whatsoever.

- h) **SITE VISIT:** Before submission of Offer, the bidders are advised to inspect the site of work and the environments and be well acquainted with the actual working, HR business rules at various Units/Sites/Offices and other prevalent conditions that may affect the performance of contract in any manner before quoting for this tender. Bidder may also assess, facilities available, position of material and labour, means of transport and access to site, accommodation, etc. Visit shall be made on any working day between 09:00AM to 04:30PM with prior intimation to Nodal Officer of the respective BHEL Unit (Annexure D). A declaration regarding knowledge of site condition has to be submitted as per Annexure-E.

No claim will be entertained later on the grounds of lack of knowledge of any of site conditions. The costs of visiting the site shall be borne by the Bidder. The Bidder shall not be entitled to hold any claim against BHEL for non-compliance due to lack of any kind of pre-requisite information as it is the sole responsibility of the Bidder to obtain all the necessary information with regard to site, surrounding, working conditions, weather etc. on its own before submission of the bid.

- i) **COST OF BIDDING:** The Bidder shall bear all costs associated with the preparation and submission of the Bid including but not limited to Bank charges all courier charges including taxes & duties etc. incurred thereof. Further, BHEL will in no case, be responsible or liable for these costs, regardless of the outcome of the bidding process.

2.3 LANGUAGE

- a) The bidder shall quote the “Rates (in %) (Above or below w.r.t BHEL estimated Amount)” in English language and international numerals ONLY. The “Rates (in %)” shall be entered in figures as well as in words.
- b) All entries in the tender shall either be typed or written legibly in ink. Erasing and over-writing is not permitted and may render such tenders liable for rejection. All cancellations and insertions shall be duly attested by the bidder.
- c) Currencies of Bid & Payment: Indian Rupees (₹) only.
- d) Un-price bid format duly signed by the bidder shall be submitted along with technical bid, by mentioning ‘Q’ in all the columns/rows where quote is to be offered by the bidder.

2.4 TENDER PRICES:

- 2.4.1 If the “Rate” is not filled up in the Price-bid and is not as per the requirements of the Bidding Documents, then that bid is deemed to be violating the terms of tender and shall not be considered for financial comparison and shall be rejected declaring “unresponsive bid” for violating term and conditions of tender.

- 2.4.2 L-1 shall be decided on the basis of TOTAL COST TO COMPANY; amongst the remaining bidder(s) after removal of unresponsive bid(s); with due process of Reverse auction.
- 2.4.3 While quoting, bidders should consider all cost elements like financing cost, cost of maintenance of accounts, Insurance, Overheads, Profit Margins, cost of any other item under its scope etc.
- 2.4.4 All duties, taxes and other levies payable by the seller under the contract, or for any other cause, as in the month prior to the month of the deadline for submission of bids, should be included in the total bid price submitted by the bidder.
- 2.4.5 Lowest "PRICE" received against the Tender need not be acceptable to BHEL and in that case BHEL would not consider the same for Award of Contract. BHEL would negotiate or re-float the Tender if L-1 price is not the lowest-acceptable price to them inter-alia other reasons.

2.5 APPLICABLE CONTRACTUAL VARIATIONS:

Within the validity or any extension of contract thereof, rates shall remain firm without any escalation / variation for any reason, whatsoever, unless specifically provided herein. Contractor's obligation shall remain unaffected by such escalation / variation. GST (as applicable) will be payable by BHEL to the Contractor during the execution of the contract along with respective bill(s), against the documentary evidence.

2.6 PRE - BID MEETING

- 2.6.1 The pre-bid meetings for clarifying any doubts with respect to the tender document will be held in BHEL office, Siri fort Road, New Delhi-110049. Representatives of each Bidder shall be allowed to participate on production of authority letter from the Bidder. Bidders are requested to submit their queries (Annexure-F) on the tender document if any, latest by 11:00 AM (IST) 01 day prior to the day of pre-bid meeting i.e. by 22-12-2024. BHEL's responses to the queries/clarifications etc. and/or minutes of the pre-bid meeting (if deem necessary) shall also form part of this tender document and will be hosted on the tender portal without disclosing source of the query. No further queries shall be entertained until and unless decided by BHEL. All decisions taken by BHEL after pre-bid meeting shall be binding on all the bidders.
- 2.6.2 During the course of Pre-Bid meeting, the Bidders will be free to seek clarifications and make suggestions for consideration. BHEL shall endeavour to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process.

Date of pre-bid meeting-1: 23-12-2024; Time: 14: 00 Hrs./02:00PM

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प्रबंधक / Manager

Venue of Pre-bid meeting-1: 2nd Floor, Meeting Room, BHEL House, Sirifort, New Delhi

- 2.6.3 Considering quantum of project and technicality involved in subject tender, pre-bid meeting - 2 shall also be organised by BHEL. Bidders are requested to submit their pending queries (if any after pre-bid meeting-1) (Annexure-F) on the tender document if any, latest by 03:00 PM (IST) dated 05-01-2025

2.6.4 Date of pre-bid meeting-2: 07-01-2025; Time: 14: 00 Hrs./02:00PM

Venue of Pre-bid meeting- : 2nd Floor, Meeting Room no, BHEL House, Sirifort, New Delhi

Note: Bidders may please share the estimated number of attendees along with their pre-bid queries so that necessary arrangements can be made by BHEL in advance for successful conduction of pre-bid meetings.

2.7 TENDER OPENING & PRICE DISCREPANCY:

- 2.7.1 Tender shall be opened on appointed date & time (or the extended date/ time, if any) by representatives of Contracting Dept. and Finance Dept. The last day of submission (or the extended date of submission) and the opening date of part-I (Techno-commercial bid) shall be same. Bidders shall note that if the date of tender opening given in the Tender Document is declared an Off / Holiday by BHEL, then the next working day shall be considered as the last date of submission & opening of bids up to the time specified:

- 2.7.2 After/during the scrutiny of technical bids, bidder(s) may be asked to attend meeting(s) for clarifications, if any.

- 2.7.3 Post techno - commercial evaluation of the bidders, BHEL shall be resorting to Reverse Auction (RA) for this tender.

“BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among the techno commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.”

For RA, techno-commercially qualified H-1 will not be allowed to participate in RA. In case more than one H-1 bidder quote the same rate, the Price-offer received last, as per the time log of the Portal, shall be removed first, on the principle of last in, first out by the system.

However, H-1 will be allowed to participate in RA in the following cases:

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- a) If no of techno-commercially qualified bidders are only 2 or 3.
- b) In case Primary product of only one OEM is left in contention for participation in RA on elimination of H-1.
- c) For cases where there are more than 3 techno-commercially qualified bidders, if lowest bidder in sealed price bid is non - MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE lowest bidder.
- d) For cases where there are more than 3 techno-commercially qualified bidders, if lowest bidder in sealed price bid is non - MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MSE lowest bidder.

2.7.4 Provided that the bid is substantially responsive, BHEL shall correct arithmetical errors on the following basis:

- a. "Rates (in %)" must be quoted in figures as well as in words. If there is a discrepancy between words and figures, the percentage quoted in words shall be considered for further evaluation and ordering. BHEL's decision regarding the same shall be final and binding.
- b. "Rates (in %)" shall be considered up to TWO decimal points only. Digits beyond TWO decimal points will be ignored and not rounded off. No representations on this account shall be entertained.
- c. If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date up to which the bidder has to send his acceptance on the above lines. If any bidder does not accept the correction of errors, their bids will be disqualified.
- d. The authorized employee(s) of the Bidder shall be signing the Bid and any consequence resulting due to such signing shall be binding on the Bidder.

2.8 QUALIFICATION OF BIDDERS

- i) Only bidders who have previous experience in the work of the nature and description detailed in the Notice Inviting Tender and/or tender specification are expected to quote for this work duly detailing their experience along with offer.
- ii) Offers from bidders who do not have proven and established experience in the field shall not be considered.
- iii) The offers of the bidders who are on the debarred list shall be rejected. Further, offer of the bidders, who engage the services of the debarred firms or associated with the debarred firm, for present bid, shall also be rejected. The list of debarred firms is available on BHEL web site www.bhel.com.

2.9 EVALUATION OF BIDS

- 2.9.1 Tender evaluation shall be carried out on the basis of PQR and other techno-commercial terms & conditions specified in the tender documents and corrigenda, addenda, amendments thereof, if any, shall be communicated to all the bidders before conducting Reverse Auction.
- 2.9.2 Evaluation of the bids shall be carried out by Committee(s) of BHEL. The committee(s) will technically qualify the bidders in line with tender terms & conditions. **Financial Evaluation shall be done on the "Total cost to Company" after reverse auction.**
- 2.9.3 Bidders who qualify PQC criteria shall arrange Proof of Concept (PoC) at BHEL, Bhopal (BHEL-Bhopal, Piplani, Pincode-462022) within one week from the date of intimation from BHEL. In the PoC the vendor shall successfully demonstrate various technical parameters as per the technical specification of each type of Facial Recognition devices/ Turnstile as follows:
- a. **Facial Recognition devices (with Tower Light):** Readers for PoC should be as per Annexure 9 - Type III, IV and V and should be demonstrated with functioning of Tower light. Readers should function in no network/offline mode. Demonstration of minimum 25 nos. of transactions from each Facial recognition reader (in 1:1, 1: N mode) and smart card reader for proving the specified parameters of the Technical specification like verification speed & Face Authentication Distance of the reader, FAR, FRR etc. Face Authentication Distance: as per technical specifications with Auto face detection, Wide angle detection for users of different heights. The vendor has to show/ prove the number of users & template stored in Biometric Reader by connecting to BHEL database for confirming the verification speed and user turnaround time. The vendor has also to show/ prove the Facial Recognition Enrolment time, Card Authentication Time & Card Read Range. Face recognition reader with GPRS System should support GPRS for wireless communication with application server web interface through https protocol. Reader shall confirm to biometric technology like Auto Face detection, Fake Face Detection, Auto Push, real-time face recognition and shall support high speed processing. It must be capable of detecting and authenticating the face either through device capability or inbuilt LED light in extreme dark/ daylight environment. Live Face Detection Method - System should be intelligent enough to accept only live faces and prevent security breach by a face in a recorded video, live stream, a photograph or any other means. Display of the readers should accommodate all the parameters as mentioned in technical specs. Facial log (photo of user) must be stored along with punch data as per industry practice to enquire the FAR situations. There should be option in software for checking deduplication (already enrolled as a different entity) & Blacklist/ suspended person. The bidder shall prove the working of keypad based Biometric readers along with software for accommodating various permissions to allow & track the entry & exit through a gate pass.

- b. **Turnstile:** Before the validation is done the turnstile should be in locked mode. On successful reader validation, the turnstile should be automatically unlocked and we should be able to rotate the turnstile in forward mode only. After completion of one arm rotation, the turnstile should be locked. The turnstile should not rotate in the reverse mode. The swipe time of this transaction to be recorded as the time when the rotation of turnstile has been completed.
- 2.9.4 Reverse Auction (RA) shall be conducted among techno-commercially acceptable and PoC cleared bidders, for further evaluation. Techno-commercially acceptable and PoC cleared bidders shall be informed of the date & time of conducting Reverse Auction telephonically/ email by BHEL. The Reverse Auction shall be conducted on the due date and time.
- 2.9.5 Price Bids of unqualified bidders shall not be opened. Reasons for rejection shall be intimated in due course through letter/e-mail after award to successful bidder.
- 2.9.6 Based on the outcome of RA, the bidders would be ranked from L-1 position in ascending order on the basis of "Total cost to Company". However, the L1 bidder shall have no claim on the award & BHEL reserves the right to award the tender at its sole discretion.
- 2.9.7 Any discount/ revised offer submitted by a bidder on its own shall be accepted provided it is received on or before the due date and time of offer submission (i.e. Part-I bid). The discount shall be applied on pro-rata basis to all items unless specified otherwise by the bidder. Unsolicited discounts/ revised offers given after Part-I bid opening shall not be accepted.
- 2.9.8 In case there is no change in the technical scope and/ or specifications and/ or commercial terms & conditions, the bidder/s shall not be allowed to change his/ their price bids after the due date, within the validity period.
- 2.9.9 In case of changes in scope and/ or technical specifications and/ or commercial terms & conditions, having price implications, techno-commercially acceptable bidders shall be asked by BHEL (after freezing the scope, technical specifications and commercial terms & conditions) to submit the impact of such changes on their price bid. A suitable cut-off date and time should be given to all the techno-commercially acceptable bidders to submit the impact on their price bids.

In such cases, the estimates prepared will be re-examined with respect to the changes in specifications/ terms & conditions.

In the event of any bidder, after finalizing the technical specification & scope of work, opting to revise and submit their latest price bid instead of submitting impact on their price bid asked by BHEL, then their original price (i.e. the previous bid) shall also be opened to know the price impact.

Meena

- 2.10 The tender schedule and the tender shall be deemed to form an integral part of the contract to be entered into for this work. All the terms & conditions mentioned in this tender document shall form a part of the Contract-Agreement, which shall be executed between the successful bidder and BHEL.
- 2.11 The Contractor will be abiding to execute the work assignments on contract basis strictly in accordance with the terms and conditions of the tender documents.
- 2.12 The Contractor will be responsible for the quality of the work and will immediately rectify the deficiency pointed out in the work performed.
- 2.13 **NO CLAIM CERTIFICATE:** The Contractor shall not, be entitled to make any claim, whatsoever, against BHEL under or by virtue of or arising out of this contract nor shall BHEL entertain or consider any such claim after Contractor shall have signed a "no claim certificate (WAM 10)" in favour of BHEL in such forms as shall be required by BHEL after the finalization of contract.
- 2.14 The quality of the works will be continuously evaluated by the designated committee/user groups nominated by BHEL.
- 2.15 The Contractor shall comply with all statutory and safety requirements of BHEL while executing the contract. PF and ESI for their deployed employees shall be ensured by the Contractor. The personnel engaged should also be provided with necessary PPEs (Personal Protective Equipment) by the Contractor.
- 2.16 No inferior work should be acceptable.
- 2.17 All work should be done as directed by designated BHEL Engineer-in-charge at all the BHEL units.
- 2.18 After completion of work the contractor shall clean and clear the site at the earliest.
- 2.19 The contractor shall perform all the works mentioned in the Scope of Work/Bill of Quantity as detailed.
- 2.20 Continuation of the Contract shall be based on the performance of the Contractor. The following parameters shall inter-alia be considered while evaluating performance timely rendering of work, quality of works, compliance with statutory requirements, Safety consciousness, maintaining of Workers in proper uniform bearing logo of the contractor and valid identity card with lanyards issued by the contractor.
- 2.21 The Contractor will be solely responsible for any unlawful act of their Workers while on duty. In case of theft or loss of BHEL's property take place due to the negligence or carelessness of Workers(s), the contractor will be responsible and shall make good of the same.
- 2.22 In case, while on duty and during the course of engagement in work premises of the BHEL under this Agreement, if any of the Contractor's Workers meet (s) with any injury / indisposition due to accident or other natural calamities, the Contractor shall ensure that immediate and adequate medical aid viz., first -aid and subsequent treatment facilities are provided to the person(s) concerned free of cost without fail.

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- 2.23 The Contractor shall be responsible for proper maintenance of all registers, records and accounts so far as it relates to compliance of statutory provisions/ obligations.
- 2.24 All necessary precautions for safety of the man/ machine, fire hazard & environmental aspects shall have to be taken by the Contractor for the activities performed by his Workers.
- 2.25 The successful contractor shall abide by all the rules / regulations / status imposed by the Government or other concerned authorities. The contractor will be responsible for workmen's compensation & other requirements of local Municipalities / Govt. or any other law regulating bodies.
- 2.26 The BHEL shall have no direct responsibility / liability in respect of the Workers engaged by the Contractor for said work.
- 2.27 **VALIDITY OF OFFER:** Offers shall remain valid for **180 days'** period from the due date of submission of bids (including extension, if any). In case BHEL calls for negotiations, such negotiations shall not amount to cancellation or withdrawal of the original offer which shall be binding on the bidder(s). In exceptional circumstances, prior to expiry of the original 'Bid Validity Period', BHEL may request the Bidders to extend the 'Period of Bid Validity' for a specified additional period. The request and the responses thereto shall be made in writing or by email. A Bidder may refuse the request and in that case the bid will not be evaluated further. A Bidder agreeing to the request will not be required or permitted to modify his Bid.

2.28 **DATA TO BE ENCLOSED**

i) *Full information shall be given by the bidder in respect of the following. Non-submission of this information may lead to rejection of the offer.:*

a) **INCOME TAX PERMANENT ACCOUNT NUMBER**

Certified copies of Permanent Account Numbers as allotted by Income Tax Department for the Company/Firm/Individual Partners etc. shall be furnished along with tender.

b) **ORGANIZATION CHART**

The organization chart of the bidder's organization, including the names, addresses and contact information of the Directors/Partners shall be furnished along with the offer.

c) An attested copy of the Power of Attorney, in case the tender is signed by an individual other than the sole proprietor.

d) **IN CASE OF INDIVIDUAL BIDDER:**

His / her full name, address, PAN and place & nature of business.

e) **IN CASE OF PARTNERSHIP FIRM:**

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The names of all the partners and their addresses, copy of the partnership deed/instrument of partnership duly certified by the Notary Public shall be enclosed.

f) **IN CASE OF COMPANIES:**

- i. Date and place of registration including date of commencement certificate in case of Public Companies (certified copies of Memorandum and articles of Association are also to be furnished).
- ii. Nature of business carried on by the Company and the provisions of the Memorandum relating thereof.

2.29 **AUTHORIZATION AND ATTESTATION**

Tenders shall be signed by a person duly authorized/empowered to do so, for which a Power of Attorney is to be submitted along with the tender offer. For company, a Power of Attorney (as per Annexure-G) shall be submitted.

2.30 **EARNEST MONEY DEPOSIT**

2.30.1 Every tender must be accompanied by the prescribed amount of Earnest Money Deposit (EMD) in the manner described herein.

- (i) EMD shall be furnished before tender opening / along with the offer in full as per the amount indicated in the NIT.
- (ii) The EMD up to an amount of Rs. 2 Lakh is to be paid only in the following forms:
 - a) Cash deposit as permissible under the extant Income Tax Act (before tender opening).
 - b) Electronic Fund Transfer credited in BHEL account (before tender opening).
 - c) Banker's cheque / Pay order / Demand draft, in favour of 'Bharat Heavy Electricals Limited' and payable at Regional HQ issuing the tender (along with offer).
 - d) Fixed Deposit Receipt (FDR) issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL) duly marking lien in favour for BHEL (along with offer). The Fixed Deposit in such cases shall be valid for at least six months from the due date of tender submission.
 - e) Insurance Surety Bonds
 - f) In case EMD amount is more than Rs. Two Lakhs, Bidder has the option to submit the amount in excess of Rs. Two lakhs in the forms described above in clause no. 2.30.1 ii) (a) to (e) or in the form of Bank Guarantee from Scheduled Bank (along with the Offer). The Bank Guarantee in such cases shall be valid for at least six

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months from the due date of tender submission. The Bank Guarantee format for EMD shall be in the prescribed formats (Annexure-H).

- (iii) No other form of EMD remittance shall be acceptable to BHEL.
- (iv) **Proof of EMD:** Same shall be submitted with the tender in separate envelope. If EMD is not submitted by any bidder then his/her Technical bid shall not be evaluated further and his/her bid shall be rejected upfront.

2.30.2 EMD by the bidder will be forfeited as per NIT conditions, if:

- i) After opening the tender and within the offer validity period, the bidder revokes his tender or makes any modification in his tender which is not acceptable to BHEL.

OR

- ii) The successful Contractor, on whom the work has been awarded, fails to deposit the required Security deposit or commence the work within the period as per LOI/ LOA/ Contract or refuse to accept the LIO/LOA/Contract.

EMD by the bidder shall be withheld in case any action on the bidder is envisaged under the provisions of extant "Guidelines on Suspension of business dealings with suppliers/ contractors" of BHEL and forfeited/ released based on the action as determined under these guidelines.

2.30.3 EMD shall not carry any interest.

2.30.4 EMD given by all unsuccessful bidders shall be refunded normally within fifteen days of award of work.

2.30.5 Cash portion of EMD of successful bidder will be retained as part of Security Deposit. EMD submitted in the form of Bank Guarantee/ FDR shall be retained by BHEL until the receipt of the Security Deposit.

2.31 SECURITY DEPOSIT

2.31.1 Upon acceptance of Tender, the successful bidder shall be required to deposit the **5% of the contract value** as Security Deposit towards fulfilment of any obligations in terms of the provisions of the contract.

2.31.2 At least 50% of the required Security Deposit, shall be collected before start of the work. Balance of the Security Deposit can be collected by deducting 10% of the gross amount progressively from each of the running bills (at Corporate Office) of the Contractor till the total amount of the required Security Deposit is collected.

If the value of work done at any time exceeds the contract value, the amount of Security Deposit shall be correspondingly enhanced and the additional Security Deposit shall be immediately deposited by the Contractor or recovered from payment/s due to the Contractor. The

recoveries made from running bills (cash deduction towards balance SD amount) can be released against submission of equivalent Bank Guarantee in acceptable form, but only once, before completion of work, with the approval of the authority competent to award the work.

2.31.3 The required Security Deposit may be accepted in the following forms.

- i) Cash (as permissible under the extant Income Tax Act).
- ii) Local cheques of Scheduled Banks (subject to realization)/ Pay Order/ Demand Draft/ Electronic Fund Transfer in favour of BHEL.
- iii) Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL).
- iv) Bank Guarantee from Scheduled Banks/ Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format for Security Deposit shall be in the prescribed formats.
- v) Fixed Deposit Receipt issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL). Specific lien in favour of BHEL on the FDR shall be marked and letter from the Bank having created such lien in the format shall be submitted along with FDR.
- vi) Insurance Surety Bonds.

Note:

- i. BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.
- ii. In case of delay in submission of Security Deposit, enhanced security deposit which would include interest (Repo rate + 4%) for the delayed period, shall be submitted by the bidder before submission of first bill

2.31.4 The Security Deposit shall not carry any interest.

2.31.5 In case the value of work exceeds the awarded / accepted value, the Security Deposit shall be correspondingly enhanced as given below:

- i. The enhanced part of the Security Deposit shall be immediately deposited by the Contractor or adjusted against payments due to the Contractor.
- ii. Contract value for the purpose of operating the increased value of Security Deposit due to Quantity Variation, shall be exclusive of Price Variation Clause, Over Run Compensation and Extra works done on man-day rates.
- iii. The recoveries made from running bills can be released against submission of equivalent Bank Guarantee in acceptable form, but only once, before completion of work, with the approval of competent authority of BHEL.

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2.31.6 The validity of Bank Guarantees towards Security Deposit shall be valid till actual completion of work + Guarantee Period + 3 months. The same shall be kept valid by proper renewal till the acceptance of Final Bills of the Contractor, by BHEL

2.31.7 BHEL reserves the right of forfeiture of Security Deposit in addition to other claims, damages and remedies in the event of the Contractor's failure to fulfil any of the contractual obligations or in the event of termination of contract as per terms and conditions of contract. BHEL reserves the right to set off the Security Deposit against any claims of other contracts with BHEL by giving prior notice to the contractor.

2.32 RETURN OF SECURITY DEPOSIT

Security Deposit shall be released to the contractor upon fulfillment of contractual obligations as per terms of the contract including completion of Guarantee Period after deducting all expenses / other amounts due to BHEL under the contract.

2.33 BANK GUARANTEES

Where ever Bank Guarantees are to be furnished/submitted by the contractor, the following shall be complied with

- i) Bank Guarantees shall be from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. Bank Guarantees issued by Co-Operative Banks/ Financial Institutions shall not be accepted.
- ii) The Bank Guarantees shall be as per **prescribed formats. Format shall be shared to contractor with award of work.**
- iii) It is the responsibility of the bidder to get the Bank Guarantees revalidated/extended for the required period as per the advice of BHEL Site Engineer / Construction Manager. BHEL shall not be liable for issue of any reminders regarding expiry of the Bank Guarantees.
- iv) In case extension/further extensions of any Bank Guarantees are not required, the bidders shall ensure that the same is explicitly endorsed by the respective Site representative and submitted to Office issuing the LOI/LOA.
- v) In case the Bank Guarantees are not extended before the expiry date, BHEL reserves the right to invoke the same by informing the concerned Bank in writing, without any advance notice/communication to the concerned bidder.
- vi) Bidders to note that any corrections to Bank Guarantees shall be done by the issuing Bank, only through an amendment in an appropriate non-judicial stamp paper.
- vii) The Original Bank Guarantee shall be submitted to Work order issuing authority.

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2.34 EXECUTION OF CONTRACT AGREEMENT

The successful bidder's responsibility under this contract commences from the date of issue of the Letter of Award by Bharat Heavy Electricals Limited.

The successful bidder shall be required to execute an agreement in the prescribed form, with BHEL, within a reasonable time after the acceptance of the Letter of Award, and in any case before releasing the first running bill. The contract agreement shall be signed by a person duly authorized/empowered by the bidder.

2.35 REJECTION OF TENDER AND OTHER CONDITIONS

2.35.1 The acceptance of tender will rest with BHEL which does not bind itself to accept the lowest tender nor any tender and reserves to itself full rights for rejecting any or all of the tenders without assigning any reasons whatsoever.

a To reject any or all of the tenders.

b To split up the work amongst two or more bidders as per NIT.

c To award the work in part if specified in NIT.

d In case of either of the contingencies stated in (b) and (c) above, the time for completion as stipulated in the tender shall be applicable.

2.35.2 Conditional tenders, unsolicited tenders, tenders which are incomplete or not in the form specified or defective or have been materially altered or not in accordance with the tender conditions, specifications etc. are liable to be rejected.

2.35.3 Tenders are liable to be rejected in case of unsatisfactory performance of the bidder with BHEL or bidder under suspension (debarred) by any unit / region / division of BHEL. BHEL reserves the right to not consider a bidder for further processing of tender in case it is observed that they are overloaded and may not be in a position to execute this job as per the required schedule. The decision of BHEL will be final in this regard.

2.35.4 If a bidder who is a proprietor expires after the submission of his tender or after the acceptance of his tender, BHEL may at their discretion, cancel such tender. If a partner of a firm expires after the submission of tender or after the acceptance of the tender, BHEL may then cancel such tender at their discretion, unless the firm retains its character. In case BHEL resolves to cancel the tender under this clause, BHEL will issue a notice in this regard containing reasons as to the cancellation of tender. The contractor shall be required to furnish his response to such notice within a period of 14 days from the date of receipt of such notice through any means (BHEL reserves the right to decrease the period upto 05 days). BHEL after due consideration of the representation made by contractor shall communicate its final decision within a reasonable period.

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In case contractor fails to submit any response to the notice issued by BHEL within the period stipulated in the notice, BHEL at its discretion may proceed to cancel the contract.

Contractor shall not be eligible for any compensation whatsoever for the cancellation of contract under this clause

2.35.5 BHEL will not be bound by any Power of Attorney granted by changes in the composition of the firm made subsequent to the execution of the contract. BHEL may, however, recognize such power of Attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.

2.35.6 If the bidder deliberately gives wrong information in his tender, BHEL reserves the right to reject such tender at any stage or to cancel the contract if awarded and forfeit the Earnest Money/Security Deposit/any other money due.

2.35.7 Canvassing in any form in connection with the tenders submitted by the Bidder shall make his offer liable to rejection.

2.35.8 In case the Proprietor, Partner or Director of the Company/Firm submitting the Tender, has any relative or relation employed in BHEL, the authority inviting the Tender shall be informed of the fact as per specified format, along with the Offer. Failing to do so, BHEL may, at its sole discretion, reject the tender or cancel the contract and forfeit the Earnest Money/Security Deposit.

2.35.9 BHEL reserves the right to accept or reject any of the bid / all bids with or without deviation or cancel / withdraw the invitation for bid without assigning any reason whatsoever and in such case, bidder shall have no claim arising out of such action by BHEL. The acceptance of bid will rest with BHEL, not binding itself to accept the lowest tender.

2.35.10 BHEL also reserves the right to cancel the tender at any stage due to any administrative / internal reasons; whatsoever and in such case bidder(s)/successful bidder shall have no claim arising out of such action by BHEL.

2.35.11 The Contractor shall not sub-contract any portion of work detailed in the tender specification undertaken by him without written permission of BHEL work order issuing authority. BHEL, at its discretion, may consider the written request from the Contractor and permit subletting of part scope. However, the Contractor is solely responsible to BHEL for the work awarded to him.

2.35.12 The Tender submitted by a techno commercially qualified bidder shall become the property of BHEL who shall be under no obligation to return the same to the bidder.

2.35.13 Unsolicited discount received after the due date and time of Bid Submission shall not be considered for evaluation. However, if the party who has submitted the unsolicited discount/rebate becomes the

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L-1 party, then the awarded price i.e. contract value shall be worked out after considering the discount so offered.

2.35.14 BHEL shall not be liable for any expenses incurred by the bidder in the preparation of the tender irrespective of whether the tender is accepted or not.

2.36 INTIMATION OF CHANGE OF NAME/RE-CONSTITUTION OF THE ORGANISATION

In the event of the organization (Proprietorship/Partnership/Company) undergoing any change of name or reconstitution, prior intimation of the same shall be given to BHEL. Upon such changes coming into effect, the same is to be intimated to BHEL immediately with supporting documents as applicable.

2.37 **ACCEPTANCE OF LOI / ORDER:** Letter of Seller/ Contractor/ bidder's acceptance of the LOI /Order is to be submitted within one week of issue date of LOI/Order. Otherwise, it will be deemed as accepted.

2.38 LAW GOVERNING THE CONTRACT AND COURT JURISDICTION

The contract shall be governed by the Laws of India. Subject to clause 2.59 this contract/NIT, the Civil Court having original Civil Jurisdiction at **NEW DELHI**, shall alone have exclusive jurisdiction in regard to all matters in respect of the Contract.

2.39 ISSUE OF NOTICE

2.39.1 Service of notice to the Contractor

Any notice to be given to the Contractor under the terms of the contract shall be served by sending the same by **Email/ Registered Post/Speed Post to or leaving the same at** the Contractor's last known address of the principal place of business (or in the event of the contractor being a company, to or at its Registered Office). In case of change of address, the notice shall be served at changed address as notified in writing by the Contractor to BHEL. Such dispatch or display of the notice as the case may be shall be deemed to be good service of such notice and the time mentioned to the condition for doing any act after notice shall be reckoned from the date so mentioned in such notice.

2.39.2 Service of notice to BHEL

Any notice to be given to BHEL In-charge of the Unit under the terms of the Contract shall be served by sending the same by Registered/AD or Speed post to BHEL address or changed address as notified in writing by BHEL to the Contractor.

2.40 USE OF LAND

No land belonging to BHEL or their Customer under temporary possession of BHEL shall be occupied by the contractor without written permission of BHEL.

2.41 COMMENCEMENT OF WORK

- 2.41.1 The contractor shall commence the work as per the time indicated in the Letter of Intent/Award from BHEL and shall proceed with the same with due expedition without delay.
- 2.41.2 If the contractor fails to start the work within stipulated time as per LOI/ LOA or as intimated by BHEL, then BHEL at its sole discretion shall have the right to cancel the contract. The Earnest Money and/or Security Deposit furnished by the contractor to under this tender will stand forfeited without any further reference to him and without prejudice to BHEL's other rights and remedies under this contract and the applicable laws in this regard.
- 2.41.3 All the work shall be carried out under the direction and to the satisfaction of BHEL.

2.42 INDEMNITY (Annexure-ZZ)

Contractor shall fully indemnify and keep indemnified BHEL against all claims which may be made in respect of the use of System / Software / Item(s) / services supplied / rendered by the bidder, for infringement of any rights protected by patent, registration of designs or trademarks and legality of the Software.

All such claims in this regard will be settled as per Indian Laws.

In the event of any such claims being made against BHEL, BHEL will inform in writing to the Contractor who shall settle any such dispute or conduct any litigation that may arise there from.

2.43 PATENTS & TRADEMARKS

Contractor shall at all times indemnify BHEL against all claims which may be made in respect of the Systems/goods/software supplied by the Bidder, for infringement of any right protected by patent, registration of designs or trademarks and legality of usage of Software. In the event of any such claims being made against BHEL, BHEL will inform the contractor who shall in turn, at his own cost either may settle any such dispute or conduct any litigation that may arise there from.

2.44 INSURANCE: Detailed in clause no. 2.56.

2.45 MEASUREMENT OF WORK AND MODE OF PAYMENT:

- 2.45.1 All payments due to the contractors shall be made by e-mode only, unless otherwise found operationally difficult for reasons to be recorded in writing and approved by contract executing department.

- 2.45.2 All recoveries due from the contractor for the month/period shall be effected in full from the corresponding running bills unless specific approval from the competent authorities is obtained to the contrary.
- 2.45.3 Measurement shall be restricted to that portion of work for which it is required to ascertain the financial liability of BHEL under this contract.
- 2.45.4 The measurement (wherever applicable) shall be taken jointly by persons authorized on the part of BHEL and by the Contractor.
- 2.45.5 The Contractor shall bear the expenditure involved if any, in making the measurements and testing of materials to be used/ used in the work. The contractor shall, without extra charges, provide all the assistance with appliances and other things necessary for measurement.
- 2.45.6 If at any time due to any reason whatsoever, it becomes necessary to re-measure the work done in full or in part, the expenses towards such re measurements shall be borne by the contractor unless such re measurements are warranted solely for reasons not attributable to contractor.
- 2.45.7 Passing of bills covered by such measurements does not amount to acceptance of the completion of the work measured. Any left-out work has to be completed, if pointed out at a later date by BHEL.

Final measurement bill shall be prepared in the final bill format prescribed for the purpose based on the certificate issued by BHEL Engineer that entire works as stipulated in tender specification has been completed in all respects to the entire satisfaction of BHEL. The Contractor shall submit the final bill in line with WAM 7 format as per tender documents with an additional recording of the dispute, if any and shall sign with the following declaration:

I/ We hereby certify that I/We have performed the work as per the terms and conditions of Contract Agreement/Work Order No.....dated.....for which payment is claimed as above and that I/We have no further claim under this agreement/work order except for the following (nature of claim with details & amount claimed, if any. NIL may be mentioned if there are no further claims). -*

- a).....*
b).....

It is agreed that the authorized signatory of Contractor shall necessarily record his claims/ dispute in Form WAM 7 only and any claim(s)/ dispute in any other form/ letter shall not be taken cognizance of by BHEL and admissible before any forum. BHEL shall make the payment of undisputed amount within the stipulated time without any unreasonable delay.

- 2.45.8 All the tools and tackles loaned to him should be returned in satisfactory condition to BHEL. The abstract of final quantities and financial values

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shall also be entered and signed by both parties to the contract. The Final Bill shall be prepared and paid within a reasonable time after completion of work.

2.46 RIGHTS OF BHEL

BHEL reserves the following rights in respect of this contract during the original contract period or its extensions if any, as per the provisions of the contract, without entitling the contractor for any compensation.

- 2.46.1 To withdraw any portion of work and/or to restrict/alter quantum of work as indicated in the contract during the progress of work and get it done through other agencies to fulfil BHEL's requirement or the date of completion is advance due to other emergent reasons.
- 2.46.2 Where the contractor fails to deploy adequate manpower to meet the contractual target, BHEL reserves the right to deploy manpower to meet such shortfall, through any other agency for expediting activities in the interest of the project. Supplied manpower shall be put on job by the contractor. Fulfilling of all obligations towards payments and other statutory compliances related to such manpower shall be the contractor's responsibility. In case of contractor's failure to fulfill his obligations in respect of such manpower, BHEL shall be entitled to take action as provided herein.

2.47 TERMINATION OF THE ORDER/ LEASE AGREEMENT & ITS CONSEQUENCES

- 2.47.1 BHEL will issue a written notice of non-compliance to the Bidder and after a rectification period of One month, termination and fore-closure clauses will be applicable.
- 2.47.2 BHEL reserves the right to terminate the order/contract, either wholly or in part, upon situations arising due to non-compliance of contract Terms & Conditions of the Order/contract by the Contractor. However, without prejudice to any other clause BHEL reserves the right to terminate the contract if performance of the equipment/system remains below 99% continuously for more than one month.
- 2.47.3 In case of the contract termination, Contractor shall remove the equipment from BHEL premises after due permission from BHEL.
- 2.47.4 BHEL reserves the right to terminate the order/contract or a portion thereof for the stores not so delivered within the stipulated period.
- 2.47.5 Contractor shall continue the performance of the order/contract under all circumstances, to the extent the order/contract is not cancelled.

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2.47.6 BHEL reserves the rights to cancel the lease agreement in case the equipment and services are not found to be satisfactory.

2.47.7 Consequences: As soon as the lease agreement is cancelled / terminated, no lease rent will be payable to the bidder.

2.48 BREACH OF CONTRACT, REMEDIES AND TERMINATION

2.48.1 The following shall amount to breach of contract:

- I. Non-supply of material/ non-completion of work by the Bidder within scheduled delivery/ completion period as per contract or as extended from time to time.
- II. The Bidder fails to perform as per the activity schedule and there are sufficient reasons even before expiry of the delivery/ completion period to justify that supplies shall be inordinately delayed beyond contractual delivery/ completion period.
- III. The Bidder delivers equipment/ material not of the contracted quality.
- IV. The Bidder fails to replace the defective equipment/ material/ component as per guarantee clause.
- V. Withdrawal from or abandonment of the work by the Bidder before completion as per contract.
- VI. Assignment, transfer, subletting of Contract by the Bidder without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.
- VII. Non-compliance to any contractual condition or any other default attributable to Bidder.
- VIII. Any other reason(s) attributable to Bidder towards failure of performance of contract. In case of breach of contract, BHEL shall have the right to terminate the Purchase Order/ Contract either in whole or in part thereof without any compensation to the Bidder.
- IX. Any of the declarations furnished by the contractor at the time of bidding and/ or entering into the contract for supply are found untruthful and such declarations were of a nature that could have resulted in non-award of contract to the contractor or could expose BHEL and/ or Owner to adverse consequences, financial or otherwise.
- X. Bidder is convicted of any offence involving corrupt business practices, antinational activities or any such offence that compromises the business ethics of BHEL, in violation of the Integrity Pact entered into with BHEL has the potential to harm the overall business of BHEL/ Owner.

Note- Once BHEL considers that a breach of contract has occurred on the part of contractor, BHEL shall notify the contractor by way of notice in this regard. Contractor shall be given an opportunity to rectify the reasons causing the breach of contract within a period of 14 days.

In case the contractor fails to remedy the breach, as mentioned in the notice, to the satisfaction of BHEL, BHEL shall have the right to take recourse to any of the remedial actions available to it under the relevant provisions of contract.

2.48.2 REMEDIES IN CASE OF BREACH OF CONTRACT.

- i) Wherein the period as stipulated in the notice issued under clause 2.39.1 & 2.47 has expired and Contractor has failed to remedy the breach, BHEL will have the right to terminate the contract on the ground of "Breach of Contract" without any further notice to contractor.
- ii) Upon termination of contract, BHEL shall be entitled to recover an amount equivalent to 10% of the Contract Value for the damages on account of breach of contract committed by the Contractor. This amount shall be recovered by way of encashing the security instruments like performance bank guarantee etc available with BHEL against the said contract. In case the value of the security instruments available is less than 10% of the contract value, the balance amount shall be recovered from other financial remedies (i.e. available bills of the contractor, retention amount, from the money due to the Contractor etc. with BHEL) or the other legal remedies shall be pursued.
- iii) Wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is 10% of the contract value or more, such security instruments to the extent of 10% contract value will be encashed. In case no security instruments are available or the value of the security instruments available is less than 10% of the contract value, the 10% of the contract value or the balance amount, as the case may be, will be recovered in all or any of the following manners:
- iv) In case the amount recovered under sub clause (ii) & (iii) above is not sufficient to fulfil the amount recoverable then; a demand notice to deposit the balance amount within 30 days shall be issued to Contractor.
- v) If Contractor fails to deposit the balance amount within the period as prescribed in demand notice, following action shall be taken for recovery of the balance amount:
 - a. from dues available in the form of Bills payable to defaulted Contractor against the same contract.
 - b. If it is not possible to recover the dues available from the same contract or dues are insufficient to meet the recoverable amount, balance amount shall be recovered from any money(s) payable to Contractor under any contract with other Units of BHEL including recovery from security deposits or any other deposit available in the form of security instruments of any kind against Security deposit or EMD.
 - c. In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted Contractor.
- vi) It is an agreed term of contract that this amount shall be a genuine pre-estimate of damages that BHEL would incur in completion of balance contractual obligation of the contract through any other agency and BHEL will not be required to furnish any other evidence to the Contractor for the purpose of estimation of damages.
- vii) In addition to the above, imposition of liquidated damages, debarment, termination, descoping, short-closure, etc., shall be applied as per provisions of the contract.

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Note: The defaulting contractor shall not be eligible for participation in any of the future enquiries floated by BHEL to complete the balance work. The defaulting contractor shall mean and include:

- a) In case defaulted contractor is the Sole Proprietorship Firm, any Sole Proprietorship Firm owned by same Sole Proprietor.
- b) In case defaulted contractor is The Partnership Firm, any firm comprising of same partners/ some of the same partners (but not including any new partner); or sole proprietorship firm owned by any partner(s) as a sole proprietor.

2.48.3 In case Contractor fails to deploy the resources as per requirement informed by BHEL in writing to expedite the work, BHEL can deploy own/hired/otherwise arranged resources and recover the expenses incurred from the dues payable to contractor. Recoveries shall be actual expenses incurred plus 5% overheads or as defined in Tender.

2.48.4 To terminate the contract or to restrict the quantum of work and pay for the portion of work executed in case BHEL's contract with their customer are terminated for any reason, whatsoever.

2.48.5 Whenever any Claim or Claims for payment of any sum of money(s) arises under this or any other contract against the contractor, BHEL shall be entitled to withhold and also have a lien to retain such sum of money(s) in whole or in part from any money(s) payable to contractor and/or security deposits furnished or deducted in cash from the bills of contractor, (if any) under this contract. In the event of the securities or the amounts payable to Contractor, being insufficient to cover BHEL claims, then BHEL shall be entitled to withhold and have a lien to the extent of such claims from any sum or sums found payable or which at any time thereafter may become payable to the contractor under this or any other contract with BHEL.

- a) Claim or Claims for payment of any sum of money(s) arising from the Contractor under this or any other contract against the contractor, shall mean, the sum of money(s) actually incurred by BHEL in fulfilling the contractual responsibilities of contractor under the contract, to which he has failed to fulfil plus applicable overheads (@ 5%) along with interest as applicable under the Contract on total amount (i.e. money actually incurred plus overheads)
- b) It is an agreed term of the contract that, the sum or sums of money so withheld or retained under the lien by BHEL will be kept withheld or retained as such by BHEL till the claims arising out of this or any other contract are finally adjudicated wither through Arbitration or a Court of competent jurisdiction as the case may be in accordance with the terms of contract. Intimation given by the BHEL Engineer regarding withholding of such money(s) shall be considered as sufficient and relevant date for all purposes. No Interest shall be payable on such sum(s) of money which becomes due or as the case may be adjudged to be due from BHEL to Contractor, whether under contract or otherwise.
- c) Where the contractor is a partnership firm, BHEL shall be entitled to withhold and also have a lien to retain towards such claims in whole or in part, from any other money(s) payable to any partner, whether in his individual capacity or otherwise.

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- d) If any money(s) shall, as a result of any claim or application made under the relevant provisions of any Labour Welfare Act and/ or Rules, including but not limited to Contract Labour Regulation & Abolition Act, Minimum Wages Act, Payment of Gratuity Act, BOCW (RE&CS) Act, Provident Fund Act, Employee State Insurance Act, be directed to be paid by the BHEL, such money shall be deemed to be moneys payable to the BHEL by the Contractor.
- e) Where the Contractor fails to repay to BHEL such moneys along with applicable overheads (@ 5%) and interest, as aforesaid within seven days of being demanded, BHEL shall be entitled to recover the same from Contractor's bills/ Security Deposit or any other money(s) payable to Contractor under this Contract or any other Contract with BHEL.

2.48.6 While every endeavor will be made by BHEL to this end, yet BHEL cannot guarantee uninterrupted work due to conditions beyond its control. The Contractor will not be normally entitled for any compensation/extra payment on this account unless otherwise specified elsewhere in the contract.

2.48.7 BHEL may permit or direct contractor to demobilize and remobilize at a future date as intimated by BHEL in case of following situations for reasons other than Force majeure conditions and not attributable to contractor:

- i) suspension of work(s) at a Unit either by BHEL or Customer,

or

- ii) where work comes to a complete halt or reaches a stage wherein worthwhile works cannot be executed and there is no possibility of commencement of work for a period of not less than three months

In such cases, charges towards demobilization and remobilization shall be as decided by BHEL after successful remobilization by contractor at site, and decision of BHEL shall be final and binding on the contractor. After remobilization, all conditions as per contract shall become applicable. In case Contractor does not remobilize with adequate resources or does not start the work within the period as intimated, then BHEL reserves the right to terminate the contract and effect remedies under Clause 2.48.2. In case of any conflict, BHEL decision in this regard shall be final and binding on the contractor.

2.48.8 In the unforeseen event of inordinate delay in receipt of materials, software, services etc. due to which inordinate discontinuity of work is anticipated, BHEL on its own or contractor's request at its discretion may consider to short close the contract in any of the following cases:

- a) The balance works (including but not limited to installation of boom barriers/turnstile etc) are minor vis a vis the scope of work envisaged as per the contract.
- b) There has been no significant work in past 6 months OR no significant work is expected in next 6 months (example in projects where work has stopped due to reasons beyond the control of BHEL).

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- c) The balance works cannot be done within a reasonable period of time as they are dependent on unit shut down or on other facilities of customer or any other such reasons not attributable to the contractor.

At the point of requesting for short closure, contractor shall establish that he has completed all works possible of completion and he is not able to proceed with the balance works due to constraints beyond his control. In such a case, the estimated value of the unexecuted portion of work (or estimated value of services to be provided for carrying out milestone/stage payments) as decided by BHEL, shall however be reduced from the final contract value.

Note: The Contractor shall not be eligible for any compensation on account of Quantity Variation arising out of short-closure of contract as per clause no. 2.48.8 (b) above.

2.48.9 LIQUIDATED DAMAGES

Liquidated Damages, wherever referred under this Tender/Agreement, shall mean and refer to the damages, not in the nature of penalty, which the contractor agrees to pay in the event of delay in delivery of items, installation, commissioning, breach of contract etc. as the case may be.

Liquidated Damages leviable upon the contractor is a sum which is agreed by the parties as a reasonable and genuine pre-estimate of damages which will be suffered by BHEL on account of delay/breach on the part of the contractor.

Liquidated Damages shall be calculated in the manner stipulated hereinafter:

In case the work is not completed within the stipulated time period, BHEL at its discretion may grant provisional time extension to contractor for the sole purpose of completion of balance works keeping its right reserved under the contract and law.

Grant of any provisional time extension shall by no means be considered as waiver of BHEL rights under the contract or law.

After the completion of work, duly certified by Engineer Incharge, a comprehensive delay analysis shall be carried out to ascertain the attribution of delays in the provisional time extensions granted to contractor. The delay analysis shall record:

- a) Delays solely attributable to contractor
- b) Delays attributable to BHEL
- c) Delays on account of Force Majeure (as specified elsewhere in the contract)

The total period under the final time extension shall be equal to the period between the scheduled date of completion and the actual date of completion of contract. LD shall be imposed/ levied for the portion of time extensions solely attributable to contractor and recoverable from the dues payable to the contractor.

For the periods, wherein the delay as per the comprehensive delay analysis carried out is solely attributable to contractor, BHEL shall have the right to impose Liquidated Damage at the rate mentioned at the specified clause in the tender.

Contract Value for this purpose, shall be the final executed value exclusive of ORC, Extra Works executed on Man-day rate basis, Supplementary/ Additional Items and PVC. Before levying LD, the contractor shall be duly intimated the amount and reasons thereof for imposition of LD.

2.49 RESPONSIBILITIES OF THE CONTRACTOR IN RESPECT OF LOCAL LAWS, EMPLOYMENT OF WORKERS ETC.

The following are the responsibilities of the contractor in respect of observance of local laws, employment of personnel, payment of taxes etc. The contractor/subcontractor shall fully indemnify BHEL against any claims of whatsoever nature arising due to the failure of the contractor in discharging any of his responsibilities hereunder:

- 2.49.1 As far as possible, Unskilled Workers shall be engaged from the local areas in which the work is being executed.
- 2.49.2 The contractor at all times during the continuance of this contract shall, in all his dealings with local labour for the time being employed on or in connection with the work, have due regard to all local festivals and religious and other customs.
- 2.49.3 The contractor shall comply with all applicable State and Central Laws, Statutory Rules, Regulations, Notifications etc. such as Payment of Wages Act, Minimum Wages Act, Workmen Compensation Act, Employer's Liability Act, Industrial Disputes Act, Employers Provident Fund and Miscellaneous Provisions Act, 1952, Employees State Insurance Scheme, Contract Labour (Regulation and Abolition) Act, 1970, Payment of Bonus & Gratuity Act, Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996, The Building and Other Construction Workers' Welfare Cess Act 1996 and other Acts, Rules, and Regulations for labour/workers as applicable and as may be enacted by the State Government and Central Govt. during the tenure of the Contract and having force or jurisdiction at Site. The Contractor shall also comply with provisions of and give all such notices to the local Governing Body, Police and other relevant Authorities as may be required by the Law. The Contractor shall without any fail maintain all the registers/records in proper formats as per all the Acts, Rules and Regulations mentioned in this clause 2.49.3.
- 2.49.4 The Contractor shall obtain independent License (if applicable) under the Contract Labour (Regulations and Abolition) Act, 1970 for engaging contract labour as required from the concerned Authorities based on the certificate (Form- V or as applicable) issued by the Principal Employer of respective Unit/Location.
- 2.49.5 The contractor shall pay and bear all taxes, fees, license charges, Cess, duties, deposits, tolls, royalties, commission or other charges which may be leviable on account of his operations in executing the contract.
- 2.49.6 Contractor shall be responsible for provision of Health and Sanitary arrangements (more particularly described in Contract Labour Regulation &

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Abolition Act), Safety precautions etc. as may be required for safe and satisfactory execution of contract.

- 2.49.7 The contractor shall be responsible for proper accommodation including adequate medical facilities for personnel employed by him.
- 2.49.8 The contractor shall be responsible for the proper behaviour and observance of all regulations by the staff employed by him.
- 2.49.9 The contractor shall ensure that no damage is caused to any person/property of other parties working at BHEL site/company/unit premises. If any such damage is caused, it is responsibility of the contractor to make good the losses or compensate for the same.
- 2.49.10 All the properties/equipments/components of BHEL/their Client/Customer loaned with or without deposit to the contractor in connection with the contract shall remain properties of BHEL/their Client/Customer.
- 2.49.11 The contractor shall use such properties for the purpose of execution of this contract. All such properties/equipments/components shall be deemed to be in good condition when received by the contractor unless he notifies within 48 hours to the contrary. The contractor shall return them in good condition as and when required by BHEL/their Client. In case of non-return, loss, damage, repairs etc. the cost thereof as may be fixed by BHEL Engineer will be recovered from the contractor.
- 2.49.12 In case the contractor is required to undertake any work outside the scope of this contract, the rates payable shall be those mutually agreed upon if the item rates are not mentioned in existing contract.
- 2.49.13 Any delay in completion of works/or non-achievement of periodical targets/or non-execution of contract due to the reasons attributable to the contractor, the same may have to be compensated by the contractor either by increasing manpower and resources or by working extra hours and/or by working more than one shift. All these are to be carried out by the contractor at no extra cost.
- 2.49.14 The contractor shall arrange, coordinate his work in such a manner as to cause no hindrance to other agencies working in the same premises.
- 2.49.15 All safety rules and codes applied by the Customer /BHEL at site shall be observed by the contractor without exception. The contractor shall be responsible for the safety of the equipment/material and works to be performed by him and shall maintain all light, fencing guards, slings etc. or other protection necessary for the purpose. Contractor shall also take such additional precautions as may be indicated from time to time by the BHEL with a view to prevent pilferage, accidents, fire hazards. Due precautions shall be taken against fire hazards and atmospheric conditions. Suitable number of Clerical staff, watch and ward, store keepers to take care of equipment/materials and construction tools and tackles shall be posted at site by the contractor till the completion of work under this contract.

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The contractor shall arrange for such safety devices as are necessary for such type of work and carry out the requisite site tests of handling equipment, lifting tools, tackles etc. as per prescribed standards and practices.

Contractor has to ensure the implementation of Health, Safety and Environment (HSE) requirements (Annexure-XIV) as per directions given by BHEL. The contractor has to assist in HSE audit by BHEL and submit compliance Report. The contractor has to generate and submit record/reports as per HSE plan/activities as per instruction of BHEL.

In addition to the safety practices to be flowed, the contractor shall establish document and maintain an effective Safety, Health and Environment management system.

HSE Clause: The Contractor & his employees shall strictly follow the security instructions and safety instructions applicable for industry as per the safety instructions of BHEL. In case the contractor is not taking effective steps to improve his safety performance as directed by Engineer-in-Charge based on advice given by HSE, the contractor shall be penalized including termination of his contract. In case of fatal accident which result in permanent total disability to the worker of any contractor, the contractor may be levied a maximum penalty as per BHEL norms & terms and conditions (This penalty will be in addition to the compensation to be paid to the employee by the contractor as per statutory obligations).

For safety purpose, the Contractor shall adhere to the safety guidelines of respective Unit.

- 2.49.16 The contractor shall be directly responsible for payment of wages to his workmen/labours before the expiry of seven days from the last day of wage period.

Contractor shall create awareness amongst their workforce by helping & encouraging in opening bank accounts and to encourage them to adopt digital mode of transactions. While releasing wages/ salary to their workers/ supervisors/ staff, Contractor shall comply with the GOI's guidelines for maximizing such transactions through Non-Cash / digital means.

- 2.49.17 In case of any class of work for which there is no such specification as laid down in the contract, such work shall be carried out in accordance with the instructions and requirements of the Engineer/BHEL.

- 2.49.18 Also, no idle charges will be admissible in the event of any stoppage caused in the work resulting in contractor's labour and Tools & Plants being rendered idle due to any reason at any time.

- 2.49.19 The contractor shall take all reasonable care to protect the materials and work till such time the plant/equipment has been taken over by BHEL.

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- 2.49.20 The contractor shall not stop the work or abandon the work/unit for whatsoever reason of dispute, excepting force majeure conditions. All such problems/disputes shall be separately discussed and settled without affecting the progress of work. Such stoppage or abandonment shall be treated as breach of contract and dealt with accordingly.
- 2.49.21 The contractor shall keep the area of work clean and shall remove the debris etc. while executing day-to-day work. Upon completion of work, the contractor shall remove from the vicinity of work, all scrap, packing materials, rubbish, unused and other materials and deposit them in places specified by the Engineer/BHEL. The contractor will also demolish all the hutments, sheds, offices etc. constructed and used by him and shall clean the debris. In the event of his failure to do so, the same will be arranged to be done by the Engineer/BHEL and the expenses recovered from the contractor.
- 2.49.22 The contractor shall execute the work in the most substantial and workman like manner in the stipulated time. Accuracy of work and timely execution shall be the essence of this contract. The contractor shall be responsible to ensure that the quality, assembly and workmanship conform to the dimensions and clearance given or as per the instructions of the Engineer/BHEL.
- 2.49.23 The Contractor to note that some of BHEL's T&Ps may not be insured. The Contractor will take necessary precautions and due care to protect the same while in his custody from any damage/ loss till the same is handed over back to BHEL. In case the damage / loss is caused due to carelessness/ negligence on the part of the contractor, the Contractor is liable to get them repair/ replaced immediately and in case of his failure to do so within a reasonable time, BHEL shall to recover the loss from the contractor.
- 2.49.24 For all works having contract value of Rs. 5,00,000/- or above, BHEL shall recover the amount of compensation paid to victim(s) by BHEL towards loss of life/ permanent disability due to an accident which is attributable to the negligence of contractor, agency or firm or any of its employees as detailed below.
- a) Victim: Any person who suffers permanent disablement or dies in an accident as defined below.
 - b) Accident: Any death or permanent disability resulting solely and directly from any unintended and unforeseen injurious occurrence caused during the manufacturing/ operation and works incidental thereto at BHEL factories/ offices and precincts thereof, project execution, erection and commissioning, services, repairs and maintenance, trouble shooting, serving, overhaul, renovation and retrofitting, trial operation, performance guarantee testing undertaken by the company or during any works/ during working at BHEL Units/ Offices/ townships and premises/ Project Sites.
 - c) Compensation in respect of each of the victims:

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- i. In the event of death or permanent disability resulting from Loss of both limbs:

Rs. 10,00,000/- (Rs. Ten Lakh).

- ii. In the event of other permanent disability: Rs.7,00,000/- (Rs. Seven Lakh)

d) **Permanent Disablement:** A disablement that is classified as a permanent total disablement under the proviso to section 2 (I) of the Employee's Compensation Act, 1923.

2.49.25 Contractor shall be fully responsible for the safety of their T&Ps and other material mobilized at site. In any case, BHEL shall not be liable for any damage/loss/misuse of any item(s) belong to the contractor.

2.49.26 Contractor will ensure that the work/job is executed through his/her employees on and under no circumstances, the contractor shall subcontract the job without prior written permission from BHEL.

2.49.27 The liability for any compensation on account of injury sustained by an employee of the contractor will be exclusively that of the contractor.

2.50 TIME OF COMPLETION

2.50.1 The time for phase-wise completion shall be as mentioned in the LOA/Contract. The time for completion shall be reckoned from the date of commencement of work at Site/Unit as certified/notified in writing by BHEL.

2.50.2 Time being the essence of the contract, the entire work shall be completed by the contractor within the time schedule or within such extended periods of time as may be allowed by BHEL under clause 2.51.

2.51 EXTENSION OF TIME FOR COMPLETION

2.51.1 If the completion of work as detailed in the scope of work gets delayed beyond the contract period, the contractor shall request for an extension of the contract and BHEL at its discretion may extend the Contract. If the completion of work gets delayed for reasons not attributable to the contractor, the contract period may be suitably extended at the sole discretion of BHEL.

2.51.2 However, if any 'Time extension' is granted to the contractor to facilitate continuation of work and completion of contract, due to backlog attributable to the contractor alone, then it shall be without prejudice to the rights of BHEL to impose penalty/LD for the delays attributable to the contractor, in addition to any other actions BHEL may wish to take under Clause 2.48 of GCC i.e. Breach of Contract, Remedies and Termination.

2.52 OVERRUN COMPENSATION (ORC) - NOT APPLICABLE

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2.53 QUANTITY VARIATION

2.53.1 Variation in Final Executed Contract Value

The quantities given in the contract are tentative and may change to any extent (both in plus side and minus side). No compensation becomes payable in case the variation of the final executed contract value is within the limits of Minus (-) 15% of awarded contract value. Also, no compensation becomes payable in case the contract gets partially executed/ short closed/ terminated/ work withdrawn under Rights of BHEL mentioned in Clause 2.46, 2.47 & 2.48 of GCC. Compensation due to variation of final executed contract value in excess of the limits defined in clause above, shall be as follows:

- i) In the event the finally executed contract value reduces below the lower limit of awarded Contract Value due to quantity variation specified above, the Contractor will be eligible for compensation @ 15% of the difference between the lower limit of the awarded contract value and the actual executed contract value.
- ii) In the event the finally executed contract value increases above the awarded Contract Value due to quantity variation, the Contractor is not eligible for any compensation.

2.53.2 Variation in Individual Quantities of BOQ Item(s)

The quantities given in the contract are tentative and may change to any extent (both in plus side and minus side). No compensation becomes payable in case the variation of the quantity of individual BOQ item(s) is within the limits of Plus (+) 30% of the quantity in the original price schedule in this regard.

In case executed quantity for a particular BOQ item(s) exceeds 1.3 times the quantity in the original price schedule (30% increase), then the revision in rates for such BOQ item(s) for the quantity in excess of 1.3 times the quantity in the original price schedule including any subsequent increase in quantity, may be considered based on request from the Contractor, however, BHEL decision in this regard shall be final. Revised rates for subject BOQ item(s) shall be worked out on the basis of prevailing market rates mutually agreed between BHEL and Contractor.

BHEL, however, retains the right to arrange the excess quantity through any other source for expediting activities in the interest of the Project.

Note:

- (a) Revision in rates under clause 2.53.2 will remain admissible in those cases also, where, the Contractor is eligible for compensation under clause 2.53.1 i).
- (b) The value of work executed at revised rates due to variation in Individual Quantities of BOQ Item(s) shall be included while calculating the finally executed contract value in clause no. 2.53.1 above.

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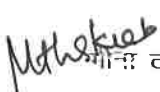
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2.54 EXTRA WORKS

- 2.54.1 All rectifications/modifications, revamping and reworks required for any reasons not due to the fault of the contractor, or needed due to any change in deviation from drawings and design of equipments, operation/maintenance requirements, mismatching or due to damages in transit, storage and erection/commissioning and other allied works which are not very specifically indicated in the drawings, but are found essential for satisfactory completion of the work, will be considered as extra works.
- 2.54.2 Extra works arising on account of the contractor's fault, irrespective of time consumed in rectification of the damage/loss, will have to be carried out by the contractor free of cost. Under such circumstances, any material and consumable required for this purpose will also have to be arranged by the contractor at his cost.
- 2.54.3 All the extra work should be carried out by a separately identifiable gang, without affecting routine activities. Daily log sheets in the pro-forma prescribed by BHEL should be maintained and shall be signed by the contractor's representative and BHEL engineer. No claim for extra work will be considered/entertained in the absence of the said supporting documents i.e. daily log sheets. Signing of log sheets by BHEL engineer does not necessarily mean the acceptance of such works as extra works.
- 2.54.4 BHEL retains the right to award or not to award any of the major repair/rework/modification/ rectification/fabrication works to the contractor, at their discretion without assigning any reason for the same.
- 2.54.5 After eligibility of extra works is established and finally accepted by BHEL engineer/designer, payment will be released on competent authority's approval at the following rate.

MAN-HOUR RATE FOR ELIGIBLE EXTRA WORKS: Single composite average labour man-hour rate, including overtime if any, supervision, use of tools and tackles and other site expenses and incidentals, consumables for carrying out any major rework/repairs/ rectification/ modification/ fabrication as certified by site as may arise during the course of erection, testing, commissioning or extra works arising out of transit ,storage and erection damages, payment, if found due will be paid as per the minimum wages of the respective location/mutually agreed rates.

- 2.54.6 The above composite labour man hour rate towards extra works shall remain firm and not subject to any variation during execution of the work.

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2.55 SUPPLEMENTARY ITEMS

2.55.1 For NON-Civil Works

Supplementary items are items/works required for completion of entire work but not specified in the scope of work. Subject to certification of such items/works as supplementary items by BHEL Unit, rates shall be derived on the basis of any one of the following on mutual agreement:

- i) Based on percentage breakup/rates indicated for similar/nearby items.
- ii) In case (i) above does not exist, then BHEL/site may derive the percentage breakup/rates to suit the type of work.

2.55.2 Execution of Supplementary Works/Additional Works through the Contractor shall be at the sole discretion of BHEL, and shall be considered as part of executed contract value for the purpose of Quantity Variation as per clause 2.53.

2.55.3 BHEL Engineer's decision regarding fixing the rate as above is final and binding on the contractor.

2.56 INSURANCE

2.56.1 BHEL/their customer shall arrange for insuring the materials/properties of BHEL/customer covering the risks during transit, storage, erection and commissioning.

2.56.2 It is the sole responsibility of the contractor to insure his materials, equipment, workmen etc. against accidents and injury while at work and to pay compensation, if any, to workmen as per Workmen's compensation Act. The work will be carried out in a protected area and all the rules and regulations of the client /BHEL in the area of project which are in force from time to time will have to be followed by the contractor.

2.56.3 If due to negligence and or non-observation of safety and other precautions by the contractors, any accident/injury occurs to the property / manpower belong to third party, the contractor shall have to pay necessary compensation and other expense, if so decided by the appropriate authorities.

2.56.4 Comprehensive Insurance for all the equipment shall be arranged by the Contractor during transit, movement, storage and throughout the period of lease. Purchaser, under any circumstances, will not be responsible for any loss/damage/theft of any equipment, due to any reasons, whatsoever. Claim(s) etc., if any, will be dealt with the underwriters directly by the Contractor. **Evidence of insurance policy shall be submitted to BHEL.**

Insurance shall cover perils like natural calamities, fire, theft, transit loss, breakage, and moisture.

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- 2.56.5 The contractor will take necessary precautions and due care to protect the material, while in his custody from any damage/ loss due to theft or otherwise till the same is taken over by BHEL or customer. For lodging / processing of insurance claim, the contractor will submit necessary documents. BHEL will recover the loss including the deductible franchise from the contractor, in case the damage / loss is due to carelessness / negligence on the part of the contractor. In case of any theft of material under contractor's custody, matter shall be reported to Police by the contractor immediately and copy of FIR and subsequently police investigation report shall be submitted to BHEL for taking up with insurance. However, this will not relieve the contractor of his contractual obligation for the material in his custody.

2.1 STRIKES & LOCKOUT

- 2.1.1 The contractor will be fully responsible for all disputes and other issues connected with his labour. In the event of the contractor's labour resorting to strike or the Contractor resorting to lockout and if the strike or lockout declared is not settled within a period of one month, it may be considered as 'Breach of Contract' under Clause 2.48 and the remedies under Clause 2.48.2 may be executed, at the discretion of BHEL.
- 2.1.2 For all purposes whatsoever, the employees of the contractor shall not be deemed to be in the employment of BHEL.

2.2 FORCE MAJEURE

- 2.2.1 "Force Majeure" shall mean circumstance which is:

- a) beyond control of either of the parties to contract,
- b) either of the parties could not reasonably have provided against the event before entering into the contract,
- c) having arisen, either of the parties could not reasonably have avoided or overcome, and
- d) is not substantially attributable to either of the parties And Prevents the performance of the contract,

Such circumstances include but shall not be limited to:

- i) War, hostilities, invasion, act of foreign enemies.
- ii) Rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war.
- iii) Riot, commotion or disorder by persons other than the contractor's personnel and other employees of the contractor and sub-contractors.
- iv) Strike or lockout not solely involving the contractor's personnel and other employees of the contractor and sub-contractors.
- v) Encountering munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the contractor's use of such munitions, explosives, radiation or radio- activity.

vi) Natural catastrophes such as earthquake, tsunami, volcanic activity, hurricane or typhoon, flood, fire, cyclones etc.

vii) Epidemic, pandemic etc.

2.2.2 The following events are explicitly excluded from Force Majeure and are solely the responsibilities of the non-performing party: a) any strike, work-to-rule action, go-slow or similar labour difficulty (b) late delivery of equipment or material (unless caused by Force Majeure event) and (c) economic hardship.

2.2.3 If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within 15 (fifteen) days after the occurrence of such event.

2.2.4 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The Time for Completion shall be extended by a period of time equal to period of delay caused due to such Force Majeure event.

2.2.5 Delay or non-performance by either party hereto caused by the occurrence of any event of Force Majeure shall not

a) Constitute a default or breach of the Contract.

b) Give rise to any claim for damages or additional cost expense occasioned thereby, if and to the extent that such delay or non-performance is caused by the occurrence of an event of Force Majeure.

2.2.6 BHEL at its discretion may consider short closure of contract after 1 year of imposition of Force Majeure in line with extant guidelines. In any case, Supplier/Vendor cannot consider deemed short-closure after 1 year of imposition of Force Majeure

2.3 SETTLEMENT OF DISPUTE

If any dispute or difference of any kind whatsoever shall arise between BHEL and the Contractor, arising out of the contract for the performance of the work whether during the progress of contract termination, abandonment or breach of the contract, it shall in the first place referred to Designated Engineer for amicable resolution by the parties. Designated Engineer (to be nominated by BHEL for settlement of disputes arising out of the contract) who within 60 days after being requested shall give written notice of his decision to the contractor. Save as hereinafter provided, such decision in respect of every matter so referred shall forthwith be given effect to by the Contractor who shall proceed with the work with all due diligence, whether he or BHEL desires to resolve the dispute as hereinafter provided or not.

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भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited

बी.एन.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
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If after the Designated Engineer has given written notice of this decision to the party and no intention to pursue the dispute has been communicated to him by the affected party within 30 days from the receipt of such notice, the said decision shall become final and binding on the parties. In the event the Contractor being dissatisfied with any such decision or if amicable settlement cannot be reached then all such disputed issues shall be resolved through conciliation in terms of the BHEL Conciliation Scheme 2018 as per Clause 2.59.1

2.3.1

CONCILIATION:

Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure as per BHEL Conciliation Scheme 2018. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in - "Procedure for conduct of conciliation proceedings" (as available in www.bhel.com)).

Note: Ministry of Finance has issued OM reference No. 1/2/24 dated 03.06.2024 regarding "Guidelines for Arbitration and Mediation in Contracts of Domestic Public Procurement. In the said OM it has been recommended that Government departments/

Entities/agencies are to encourage mediation under the Mediation Act, 2023 . The said Act has not yet been notified by the Government. Therefore, the clause "Settlement of Disputes" shall be modified accordingly as and when the Mediation Act 2023 gets notified.

2.3.2 ARBITRATION:

2.3.2.1 Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause 2.59.1 herein above or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract (hereinafter referred to as the 'Dispute'), then, either Party may, refer the disputes to Arbitral Institution (to be identified by the contract issuing agency (eg. "IIAC" (India International Arbitration Centre) for Delhi/NCR offices) and such dispute to be adjudicated by Sole Arbitrator appointed in accordance with the Rules of said Arbitral Institution.

2.3.2.2 A party willing to commence arbitration proceeding shall invoke Arbitration Clause by giving notice to the other party in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice') before referring the matter to arbitral institution. The Notice shall be addressed to the Head of the Region, Power Sector/ Unit,

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BHEL, executing the Contract and shall contain the particulars of all claims to be referred to arbitration with sufficient detail and shall also indicate the monetary amount of such claim including interest, if any.

- 2.3.2.3 After expiry of 30 days from the date of receipt of aforesaid notice, the party invoking the Arbitration shall submit that dispute to the Arbitral Institutions..... (to be identified by the contract issuing agency) and that dispute shall be adjudicated in accordance with their respective Arbitration Rules. The matter shall be adjudicated by a Sole Arbitrator who shall necessarily be a Retd Judge having considerable experience in commercial matters to be appointed/nominated by the respective institution. The cost/expenses pertaining to the said Arbitration shall also be governed in accordance with the Rules of the respective Arbitral Institution. The decision of the party invoking the Arbitration for reference of dispute to a specific Arbitral institution for adjudication of that dispute shall be final and binding on both the parties and shall not be subject to any change thereafter. The institution once selected at the time of invocation of dispute shall remain unchanged.
- 2.3.2.4 The fee and expenses shall be borne by the parties as per the Arbitral Institutional rules.
- 2.3.2.5 The Arbitration proceedings shall be in English language and the seat and venue of Arbitration shall be New Delhi.
- 2.3.2.6 Subject to the above, the provisions of Arbitration & Conciliation Act 1996 and any amendment thereof shall be applicable. All matters relating to this Contract and arising out of invocation of Arbitration clause are subject to the exclusive jurisdiction of the Court(s) situated at New Delhi.
- 2.3.2.7 Notwithstanding any reference to the Designated Engineer or Conciliation or Arbitration herein, a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree. Settlement of Dispute clause cannot be invoked by the Contractor, if the Contract has been mutually closed or 'No Demand Certificate' has been furnished by the Contractor or any Settlement Agreement has been signed between the Employer and the Contractor.
- 2.3.2.8 It is agreed that Mechanism of resolution of disputes through arbitration shall be available only in the cases where the value of the dispute is less than Rs. 10 Crores.
- 2.3.2.9 In case the disputed amount (Claim, Counter claim including interest is Rs. 10 crores and above, the parties shall be within their rights to take recourse to remedies other than Arbitration, as may be available to them under the applicable laws after prior intimation to the other party. Subject to the aforesaid conditions, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof as amended from time to time, shall apply to the arbitration proceedings under this clause.

2.3.2.10 In case, multiple arbitrations are invoked (whether sub-judice or arbitral award passed) by any party to under this contract, then the cumulative value of claims (including interest claimed or awarded) in all such arbitrations shall be taken in account while arriving at the total claim in dispute for the subject contract for the purpose of clause 2.59.2.9. Disputes having cumulative value of less than 10 crores shall be resolved through arbitration and any additional dispute shall be adjudicated by the court of competent jurisdiction.

2.3.3 In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:

In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD (Administrative Mechanism for Resolution of CPSEs Disputes) as mentioned in DPE OM No. 05/0003/2019-FTS10937 dated 14-12-2022 as amended from time to time.

2.3.4 NO INTEREST PAYABLE TO CONTRACTOR

Notwithstanding anything to the contrary contained in any other document comprising in the Contract, no interest shall be payable by BHEL to Contractor on any moneys or balances including but not limited to the Security Deposit, EMD, Retention Money, RA Bills or the Final Bill, or any amount withheld and/or appropriated by BHEL. etc., which becomes or as the case may be, is adjudged to be due from BHEL to Contractor whether under the Contract or otherwise.

2.4 FINAL BILL

Final Bill' is used for final payment on closing of Running Account for works or for single payment after completion of works. 'Final Bill' shall be submitted after completion of works as per scope and upon material reconciliation, along with the following:

- i) 'No Claim Certificate' by Contractor as per Clause 2.13 & 2.45.7 of the GCC.
- ii) Clearance certificates where ever applicable viz. Clearance Certificates from BHEL, various Statutory Authorities like Labour department, PF Authorities, Commercial Tax Department etc.
- iii) 'Indemnity Bond as per prescribed format.

BHEL shall settle the final bills after deducting all liabilities of Contractor to BHEL.

2.5

PERFORMANCE GUARANTEE FOR WORKMANSHIP

2.5.1 BHEL shall release the Security Deposit subject to the following:

- a) Contractor has submitted 'Final Bill'
- b) Guarantee period as per contract has expired
- c) Contractor has furnished 'No Claim Certificate' as per clause 2.13 & 2.45.7 of GCC
- d) BHEL Site Engineer/Construction Manager has furnished the 'No Demand Certificate' in specified format.
- e) Contractor has carried out the works required to be carried out by him during the period of Guarantee and all expenses incurred by BHEL on carrying out such works is included for adjustment from the Security Deposit refundable.

2.6

CLOSING OF CONTRACTS

The Contract shall be considered completed and closed upon completion of contractual obligations and settlement of Final Bill or completion of Guarantee period whichever is later. Upon closing of Contract, BHEL shall issue a performance/ experience certificate as per standard format, based on specific request of Contractor as per extant BHEL guidelines through the online portal available at <https://siddhi.bhel.in> only.

2.7

SUSPENSION OF BUSINESS DEALINGS

BHEL reserves the right to take action against Contractors who either fail to perform or Bidders/Contractor who indulge in malpractices, by suspending business dealings with them in line with BHEL guidelines issued from time to time.

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

If any bidder / supplier / contractor during pre-tendering / tendering / post tendering / award / execution / post-execution stage indulges in any act, including but not limited to, mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or tampers the tendering process or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, or does anything which is actionable under the Guidelines for Suspension of Business dealings, action may be taken against such bidder / supplier / contractor as per extant guidelines of the company available on www.bhel.com and / or under applicable legal provisions. Guidelines for suspension of business dealings is available in the webpage: <https://bhel.com/supplier-registration>

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2.8 LIMITATION ON LIABILITY:

Notwithstanding anything to the contrary in this Contract or LOA or Work Order or any other mutually agreed document between the parties, the maximum liability, for damages, of the contractor, its servants or agents, shall under no circumstances exceed an amount equal to the Price of the Contract or the Work Order. The Contractor shall not in any case be liable for loss of profit or special, punitive, exemplary, indirect or consequential losses whatsoever.

2.9 NON-DISCLOSURE AGREEMENT (NDA) & NON-DISCLOSURE CERTIFICATE (NDC):

Bidder shall, at all times, undertake to maintain complete confidentiality of all data, information, software, drawings & documents, etc. belonging to the BHEL and also of the Systems, procedures, reports, input documents, manuals, results and any other company documents discussed and/or finalized during the course of execution of the order/contract. The bidders shall enter into the Non-disclosure agreement totally voluntarily, with full knowledge of its meaning and without duress. (Annexure-I & J).

2.10 CARTEL FORMATION

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

2.11 FRAUD PREVENTION POLICY

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

BHEL website <https://bhel.com/bhel-fraud-prevention-policy-0> and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.

2.12 ORDER OF PRECEDENCE

In the event of any ambiguity or conflict between the contract Documents, the order of precedence shall be in the order below: Contract agreement with its Amendments/

- a. Clarifications/Corrigenda/Errata etc. issued in respect of the tender documents by BHEL
- b. Price Bid
- c. Technical Specifications (TCC) (Annexure- 1 to 17)
- d. BOQ specifications
- e. Special Conditions of Contract (SCC)
- f. General Conditions of Contract (GCC)

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g. Forms /Annexures and Procedures

2.13 OTHER ISSUES

2.33.1 Value of Non-judicial Stamp Paper for Bank Guarantees and for Contract Agreement shall be not less than Rs 100/- unless otherwise required under relevant statutes.

2.33.2 In case of any conflict between the General Conditions of Contract and Special Conditions of Contract, provisions contained in the Special Conditions of Contract shall prevail.

2.33.3 Consortium Bidding - NOT APPLICABLE. However, during execution of Contract, if tie-up is required with financier for supplying equipment, shall be permitted

2.14 BENEFITS FOR MSE BIDDERS

Any Bidder falling under MSE category, shall furnish the following details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer.

Type under MSE	SC/ST Owned	Women Owned	Others (excluding SC/ ST & Women Owned)
Micro			
Small			

Note: - If the bidder does not furnish the above, offer shall be processed construing that the bidder is not falling under MSE category.

- a) MSE suppliers can avail the intended benefits in respect of the procurements related to the Goods and Services only (Definition of Goods and Services as enumerated by Govt. of India vide Office Memorandum F. No. 21(8)/2011-MA dtd. 09/11/2016 office of AS & DC, MSME) **only if they submit along with the offer, attested copies of either Udyam Registration Certificate or EM-II certificate having deemed validity (five years from the date of issue of acknowledgement in EM-II) or valid NSIC certificate or Udyog Aadhar Memorandum (UAM) & Acknowledgement or EM-II Certificate along with attested copy of a CA certificate where deemed validity of EM-II certificate of five years has expired applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the last date of Technical Bid submission. Non-submission of such documents will lead to consideration of their bids at par with other bidders. No benefits shall be applicable for this enquiry if the above required documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer. Documents submitted by the bidder may be verified by BHEL for**

rendering the applicable benefits. Purchase Preference shall be applicable as per GeM policy.

b) Items covered under subject tender are non-divisible items and both MSEs as well as Class-I local suppliers are eligible for purchase preference. Possible scenarios can be as under:

- (i) L-1 is "MSE Class-I local supplier" - Contract is awarded to L-1.
- (ii) L-1 is not "MSE Class-I local supplier" but the "MSE Class-I local supplier" falls within 15% margin of purchase preference. Purchase preference is to be given to lowest quoting "MSE Class-I local supplier". If lowest quoting "MSE Class-I local supplier" does not accept the L-1 rates, the next higher "MSE Class-I local supplier" falling within 15% margin of purchase preference is to be given purchase preference and so on.
- (iii) If conditions mentioned in sub paras (i) and (ii) above are not met i.e. L-1 is neither "MSE Class-I local supplier" nor "MSE Class-I local supplier" is eligible to take benefit of purchase preference, the contract is to be awarded/ purchase preference to be given in different possible scenarios as under:
 - A. L-1 is "MSE but non-Class-I local supplier" or "Non-MSE but Class-I local supplier" – Contract is to be awarded to L-1.
 - B. L-1 is "Non-MSE non-Class-I local supplier" - First purchase preference to be given to MSE as per PPP-MSE Order. If MSE not eligible/ does not accept - purchase preference to be given to Class-I Local supplier as per PPP-MI Order. If Class-I Local supplier also not eligible/ does not accept – contract to be awarded to L-1.

Note: The technical offer shall be evaluated only for those bidders who will be complying qualifying criteria. No exemption shall be given to MSME against above Eligibility Criteria (PQR). The bidder shall submit documents in support of possession of 'Qualifying Requirements' duly self-certified and stamped by the authorized signatory, indexed and properly linked in the format for PQR along with customer/issuing authority contact details for verification. In case BHEL requires any other documents/proofs, these shall be submitted immediately. The bidder shall produce original document for verification by BHEL, as required.

2.15 **POST PAYMENT AUDIT & TECHNICAL EXAMINATION OF WORK & BILLS:** BHEL reserves the right to carry out a post payment audit and technical examination of the work and final bill including all supporting vouchers, abstracts etc. and to enforce recovery of any sums becoming due as a result thereof in the manner provided into the proceeding sub-paragraph provided however, that no such recovery shall be enforced after three years of passing the final bill.

2.16 **RECOVERY FROM CONTRACTOR:** Whenever under the contract, any sum of money shall be recoverable from or payable by the contractor, the same may be deducted from any sum then due or which at any time thereafter may become due to the contractor under the contract or under any other contract with BHEL or from his security deposit, or the contractor shall pay the claim on demand without any terms & conditions.

- 2.17 **LIASONING WITH LOCAL AND STATE AUTHORITIES:** Contractor will co-ordinate with state and local authorities for the work being done by it, as needed.
- 2.18 **VERIFICATION OF AUTHENTICITY OF PQR DOCUMENTS:** BHEL reserves the right to verify credentials of the Bidder. BHEL also reserves the right to cross-check / verify the genuineness/ authenticity of the documents submitted by the bidder from the issuing Authority. At any stage, BHEL may also ask for original documents and bidder/ contractor has to submit the same. If at any stage, the document(s) submitted by bidder/ contractor is/ are found incorrect/ false, the necessary action will be taken by BHEL against the bidder/ contractor as per extant guidelines/ policies/ terms & conditions of this tender.
- 2.19 **CONFLICT OF INTEREST AMONG BIDDERS/AGENTS:** A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:
- a) they have controlling partner (s) in common; or
 - b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
 - c) they have the same legal representative/agent for purposes of this bid; or
 - d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder or
 - e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid or
 - f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:
 - 1. The principal manufacturer directly or through one Indian agent on his behalf and
 - 2. Indian/foreign agent on behalf of only one principal;or
 - g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid or
 - h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business”.

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For this procurement, Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017 & 28.05.2018 and subsequent orders issued by the respective Nodal Ministry shall be applicable even if issued after issue of this NIT but before finalization of contract / PO/WO against this NIT. In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and / or local content in respect of this procurement, same shall be applicable.

Public Procurement Preference to Make in India shall be applicable for Services as the contract shall be on financial lease basis. The entire solution's local content on total package basis shall be used in determining the preference under "Make in India" initiative.

2.20.1 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. 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.

Note: For this procurement, the local content to categorise a supplier as a Class I local supplier/Class II local supplier/ Non-local supplier and purchase preference to Class I local supplier, is as defined in public procurement (preference to Make In India, order 2017, dated 19.07.2024 issued by DPIIT. In case of subsequent orders issued by the nodal Ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part II bids against this NIT.

Raw materials, components etc. will not be sourced from any bidder representing countries sharing land borders with India, unless such a bidder is registered with the

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Competent Authority in India. Contractor would be bound by the guidelines of GoI being issued time to time, in this regard.

2.21 **NEWNESS CERTIFICATE** All equipment supplied and installed at the stipulated locations shall be NEW and conforming to the contract technical specifications. Contractor shall provide the certificate of newness of the equipment along with the equipment at the time of supply.

2.22 **ETHICAL STANDARD**

Bidders are expected to observe the highest standard of ethics during the procurement and execution of this Contract. In pursuit of this policy, the Purchaser will reject a proposal for award if it finds out that the Bidder being considered for award has engaged in corrupt or fraudulent practices in competing for the Contract. For the purposes of this provision, the terms set forth below are defined as follows:

- a) "Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action in the procurement process or in Contract execution; and
- b) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process including collusive practices designed to establish bid prices at artificial, non-competitive levels to deprive the Purchaser of the benefits of competition;
- c) By signing the Bid Forwarding Letter, the Bidder represents that for the software they supply, they / software provider are the owner of the Intellectual Property Rights in the software. Willful misrepresentation of these facts shall be considered a fraudulent practice without prejudice to other remedies that the Purchaser may take.

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SECTION III

SPECIAL CONDITIONS OF CONTRACT

3.1 Back-to-back guarantee: The contractor shall replace all faulty components with original and new parts of the OEM throughout the validity of the contract. If the faulty part is not available, the same shall be replaced with a higher configuration part of the OEM. The contractor shall ensure firmware/software updates & patches from the OEM throughout the validity of the contract.

1. The period of back-to-back guarantee for the entire solution will be for entire contract period along with the lease period.
2. The contractor will also have to produce a certificate (**Annexure-K**) from the principal OEM(s) for **back-to-back guarantee** for the complete contract period along with the lease period for all items

3.2 E-waste disposal

1. Contractor shall ensure full compliance to E-waste (Management and Handling) Rules issued by Government for products being supplied to BHEL
2. Contractor should ensure that either they or the producer of products supplied by them has required authorization from respective State Pollution Control Boards / Pollution Control Committees for implementing EPR (Extended Producer Responsibility) across the concerned state.

3.3 Terminal Charges: BHEL reserves the right to retain the hardware, software and other items supplied in this procurement at the end of the lease period on payment of Re. 1/- (Rupee One only). Maintenance of these equipment shall be with the contractor until the ownership is transferred to BHEL without any extra charges for a period of not exceeding 30 days from the last date of the contract period. If BHEL does not retain the equipment, the contractor shall dismantle all the equipment and move it away from BHEL's premises at contractor's cost.

3.4 Comprehensive Annual Maintenance Contract (CAMC): The CAMC charges of all equipment/systems (hardware/software) for the 6th and 7th year (after the lease period of five years) shall be quoted by all the bidders. The man power requirement & other conditions during 6th/7th year shall remain same as that of during lease period. If BHEL proposes CAMC with the contractor after lease period, then separate order will be placed on yearly basis after the payment of the terminal charges, if any, to the contractor and obtaining ownership of the equipment by BHEL.

The CAMC charge quoted will not be considered for tender evaluation i.e. evaluation of L1 offer through RA. However, BHEL reserves the right to negotiate with L1 contractor for AMC charges.

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3.5 RFID/SMART Card shall be laminated and colour-coded as per the type of user. Smart card shall be supplied with One (1) meter lanyard (with BHEL logo pre-printed at defined distance intervals) and a solid / rigid plastic card holder with slots for clip or lanyard with Card Holder. The colour of the lanyard to be different for BHEL employees and non-employees. Colour code for smart card and lanyard shall be intimated along with the work order.

3.6 Nodal Officer:

3.6.1 The Nodal Officers will be the point of contact for facilitating site visits and clarification regarding the project during bidding process.

3.6.2 They shall also co-ordinate with the concerned authority at unit for timely issuance of site clearance / order for the initiation of the project at their unit.

3.7 RECOVERY POINT OBJECTIVE (RPO) and RECOVERY TIME OBJECTIVE (RTO):

3.7.1 RTO, RPO should be as per prevailing BHEL ISMS policy.

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SECTION-IV
SCOPE OF WORK

4.1 The Scope of the job is to provide a Turnkey Solution that includes but not limited to Supply, installation, testing, commissioning, training and integration of all the hardware, software and accessories/equipment etc. required for the successful completion of the Attendance & Access Control System. This also includes all IT network, civil & electrical related works required for the project.

4.1.1 The Bidder shall specify item wise compliance as per Technical Specification (Annexure 1 to 17) in line with the desired requirements.

4.1.2 The Contractor shall submit the proposed plan to execute the entire project before start of work. Contractor shall constitute a project implementation team headed by the project manager. This team will work with BHEL team to formulate the project implementation plan. This plan shall be ready before the product delivery for faster execution of the project.

4.1.3 The contractor shall keep all equipment intact in BHEL premises without any change in place of installation during the contract period along with the lease period and if any change required then contractor must obtain permission from BHEL.

4.1.4 All Biometric Readers will be connected to BHEL communication network at the edge switch level.

4.1.5 All required hardware and software for the system shall be supplied, installed and commissioned by the contractor. It includes but not limited to

- a. Maintenance of Biometric Readers with Power supply adopter, Connectivity, laying of UTP cables from edge level switches.
- b. Maintenance of storage & Servers after informing DTG - IT dept.

4.1.6 Supply of Electrical & UTP Cables, Connectors and other accessories required will be contractor's responsibility and both network cable and electrical cable laying will be in the contractor's scope. These accessories shall be of reputed brand (ISI mark & ISO Certified wherever applicable as per safety & security guidelines). The contractor has to comply the specification for structured cabling

4.1.7 Laying of all the power/network/Fiber communication cables for Biometrics system shall be through suitable size PVC conduit indoor as well as outdoor. Contractor to install standard cable route markers for outdoor cables

4.1.8 The power and network cables should be completely concealed and not available for access to users

4.1.9 BHEL shall provide point for power supply of 230V AC \pm 10% & nearest switch port for network connectivity. The Bidder shall lay Power and Data cable (UTP), in

different lengths as required, using suitable clamps & in suitable conduits (PVC or GI pipes) wherever required

- 4.1.10 Movement inside factory, including lifting to requisite floor is responsibility of Contractor.
- 4.1.11 The system to be accessible to all users based on their access rights over the web/mobile app after proper authentication mechanism as per respective BHEL unit policy. The Software to be user-friendly & web/mobile app based so that the administrator / operator / user can access the software console from any location within BHEL Network or Outside BHEL
- 4.1.12 Supply, installation & configuration all other necessary hardware, software & manpower that are not explicitly mentioned in the tender but are required to full-fill the intended specifications and to make the total system successfully operational shall be in the cope of contractor without any extra cost to BHEL
- 4.1.13 Complete documentation of the system (both hardware and software) should be provided by contractor
- 4.1.14 Contractor to maintain confidentiality of data and services being provided by BHEL
- 4.1.15 Contractor shall take necessary precautions to ensure that there is no damage to existing facilities in any form. Cost of damage, if any by action of contractor will be debited to him
- 4.1.16 Contractor shall provide seamless connectivity for additional Biometric Readers on need basis for future expansion
- 4.1.17 System to have provision for users to register complaints regarding malfunctioning of equipment / services.
- 4.1.18 Contractor shall furnish the monthly/quarterly uptime/downtime reports from their database for all equipment/services.
- 4.1.19 Comprehensive maintenance for entire contract period along with lease period after the successful commissioning of all the equipment.
- 4.1.20 Contractor shall submit escalation matrix with complete contact details to BHEL up to L3 level. Any update in matrix shall be updated to BHEL from time to time. Post Go-Live, Contractor shall assign a dedicated account manager for the project to BHEL. A quarterly meeting or as and when required by BHEL, shall be planned for discussion on performance and issues.

4.2 SERVERS:

- 4.2.1 The Contractor shall Supply, Install, Integrate, commission and carry out necessary test of Servers (HCI solution), Storage, Load Balancer, TOR & Management Switches, Backup Solution and other related items including Operating Systems & other software at Data Center (DC) at BHEL-Hyderabad &

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Disaster Recovery (DR) Site at BHEL-Haridwar as per technical specifications (Annexure 1 to 5) & requirements of this tender.

4.2.2 Installation of Server

- a) Installing servers in server racks using supplied rack mounting accessories
- b) Installation of HBA (if required)
- c) RAID Configuration
- d) Node creation as per specification
- e) Perform Power on Self-Test
- f) Creation of Virtual Machines (VM) as per solution requirements
- g) Installation of operating system
- h) Partitioning of disk (wherever required and asked for)
- i) Installation of Anti-virus
- j) Connecting device to Network
- k) Perform system & verification test
- l) Server User Acceptance Testing based on agreed terms

4.2.3 The complete solution to be configured in high availability mode between DC & DR. In case of failure of services at DC, automatic switchover of all the services to DR should happen.

4.2.4 The contractor shall test & demonstrate the following scenarios as part of the installation and commissioning:

- a) Fail-over test of a Partition or a Server
- b) Failover of clustered partitions with the applications and their automatic restoration
- c) Clustering, High availability features
- d) The cluster solution should integrate both the server and storage. There should not be any manual intervention required during the fail-over process
- e) The failover and failback should happen automatically
- f) In the event of a single partition failure, only the corresponding resources of the failed partition including storage should failover to the secondary site. Other partitions should remain functional without any disruption to the service in the primary site
- g) Synchronous data replication between DC & DR
- h) Backup and Restore as defined in the technical specifications
- i) Any other scenario not covered above but envisaged in the BCP plan

If the Contractor fails to demonstrate these scenarios, supplied equipment will be rejected without any cost implication to BHEL.

4.2.5 Post installation and commissioning activities:

Contractor's maintenance engineer shall carry out preventive maintenance of all equipment at DC & DR once in a month and shall submit report of activity to BHEL.

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4.3 HARDWARE

The Contractor shall Supply, Install, Integrate, commission and carry out necessary tests of all the hardware items as mentioned in Hardware BoQ (**Annexure 18**) and as per technical specifications (**Annexure 7 to 17**) & requirements of this tender. These items are to be supplied/installed at BHEL Units as per work order and on receipt of site clearance of the respective unit.

4.3.1 Enrollment Unit (Annexure-7): Enrollment Unit (to be set up as per BoQ at different BHEL Units) shall be used for various administrative function like creating / deleting system operators and managing their profiles, hardware management, smart card programming / preparation, capture template for all types of readers, card enrollment, card/user modification, system configurations, photo badging & smart card printing, system archiving etc.

- a) Each enrollment unit shall be set up as per technical specifications (**Annexure-7**) and shall include all the relevant software necessary for smooth functioning of entire unit
- b) Contractor should maintain sufficient number of cartridges to prepare Smart Cards as mentioned in the tender scope for the entire contact period along with the lease period.
- c) The system should not allow duplicate registration of users and should be capable of recalling the saved details of already registered users based on face recognition within the same or any other BHEL location

4.3.2 Facial Recognition Devices (As per Annexure 8 & 9): High End Facial Sensor Recognition Device for Attendance Recording & Access Control

- a) Reader shall be manufactured using the latest and most accurate state of the art biometric technology like Auto Face detection, Fake Face Detection, Auto Push, real time face recognition, multi-threading and shall support high speed processing
- b) It should be capable of authenticating users of different heights. It must be capable of detecting and authenticating the face either through device capability or inbuilt LED light in extreme dark/ daylight environment
- c) System should be intelligent enough to accept only live faces and prevent security breach by a face in a recorded video, live stream, a photograph or any other means
- d) The readers should function in 100% offline mode without dependency on network both at the gates and work places. The biometric validation should be done within the reader in 100% offline mode

e) Monthly test of face-reader should be done by contractor, including battery capacity check by disconnecting the main power line. If the

battery backup is not as per the technical specifications, battery is to be replaced by contractor without any extra cost to BHEL.

- f) **Mounting:** The readers to be mounted on SS Pedestal/ MS pole (stand) / wall for ease of operation and accessibility as per BHEL requirement without any extra cost
- g) There shall be provisions for transferring the data through USB port in such rare case that administration deems it fit to get the data using external device

4.3.3 Turnstile / Boom Barrier / Swing Barriers:

- a) The turnstile (**Annexure-10**) / Boom barrier (**Annexure-11**) / Swing barrier (**Annexure- 16**) should be compatible with readers and should get unlocked after successful validation. In all other situations/conditions, the turnstile / boom barrier / swing barrier should be in locked position only. In case of emergency/power failure, they should be in unlocked position.

4.3.4 Tower light (Annexure-12)

Should support integration with all types of reader as mentioned for all gate access device. Should be mountable on top of above-mentioned readers/ Reader Stand

4.3.5 EM Lock (Annexure-17)

As per technical specifications of Annexure-17

4.4 SOFTWARE / APPLICATIONS (Annexure-6):

4.4.1 ACCESS CONTROL SYSTEM:

4.4.1.1 The software shall be used for access management of the following categories of personnel:

- a) Employees
- b) Contract Labour
- c) Apprentice Trainee
- d) Vendor
- e) Service Provider
- f) Any other Visitor

4.4.1.2 The software shall store the biometrics details of all registered users in the device itself and use the same for validating entry / exit of any person into the premises. That is to say, the software shall be integrated with the Face Reader installed at the location and validate any face access attempt through its database of registered users.

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- 4.4.1.3 The software shall integrate with the Face Reader hardware at the location and be capable of fetching data of entry / exit of any person using the same. The software shall also be capable of classifying the entry/exits into one of the categories based on registered users and biometrics
- 4.4.1.4 The software shall be capable of providing real time detail of no. of personnel inside the location premises under the above categories and allow for generating and downloading such reports as per the requirements. The Software/ Platform shall be capable of generating real time, on demand attendance reports
- 4.4.1.5 The Contractor shall be responsible for complete integration of the deployed Software / Platform with all the hardware deployed under this scope of work. The solution provided shall include an integrated end-to-end service of hardware devices, software solution and network architecture to support the same
- 4.4.1.6 The Software/Platform should also have the option for Excel upload of punch data to capture details, wherever applicable.
- 4.4.1.7 The Software / Platform shall be fully expandable & futuristic with an open architecture which shall enable any future integration with other associated systems such as SAP etc. currently in use or that may be deployed in the future by the establishment.
- 4.4.1.8 The software to provide the option to restrict entries in real time to inactive/ terminated/ retired/ suspended or any other user (as per BHEL requirement) on the attendance readers as well as access control readers.
- 4.4.1.9 For the special key code operations i.e. 01 to XX (wherever applicable), the reader should validate whether the employee has permission to avail that particular special movement (Entry/Exit) at that moment and accordingly accept or reject the request
- 4.4.1.10 Proposed software to have complete audit trail capabilities
- 4.4.1.11 Any modification/customisation to the existing software to be carried out by contractor without any additional cost implication

4.4.2 ATTENDANCE MANAGEMENT SYSTEM (ANNEXURE-6)

- 4.4.2.1 The software shall be used for attendance management of all users. The software shall store the biometrics details of all registered users in the device itself and use the same for validating attendance of any user at designated reader(s). That is to say, the software shall be integrated with the Face Reader installed at the location / work place and validate any face attendance attempt through its database of registered users

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- 4.4.2.2 The software shall integrate with the Face Reader hardware at the location/work place and be capable of fetching data of any person using the same. The software shall also be capable of classifying the entry/exits into one of the categories based on registered users and biometrics.
- 4.4.2.3 The software shall be capable of providing real time detail of no. of personnel inside the location/workplaces under the above categories and allow for generating and downloading such reports as per the requirements. The Software/ Platform shall be capable of generating real time, on demand attendance reports.
- 4.4.2.4 The software to be configured as per unit-wise specific/different business rules (**Annexure-L**). Attendance data interface API to be provided by Contractor for various requirements like payroll processing etc. as per the requirement.
- 4.4.2.5 Management Information Reports to be available in the proposed software (**Annexure-M**). Provision to develop additional reports to be made available in the software. Role-based (Employee, Manager, HR, IT, Time Office, Unit/HR Heads, etc.) dashboards and reports to be made available for analysis (**Annexure-B**).
- 4.4.2.6 Proposed software to have complete audit trail capabilities
- 4.4.2.7 Any modification/customisation to the existing software to be carried out by contractor without any additional cost implication.
- 4.4.2.8 The Software/Platform should also have the option for Excel upload of punch data to capture details, wherever applicable.

4.4.3 VISITOR MANAGEMENT SYSTEM (Annexure-6):

- 4.4.3.1 Visitor Management System (VMS) shall record the entry/exit to the location premises of the establishment by specific visitors and provide documentation of visitor's whereabouts. VMS shall also be part of overall software solution for Visitor Management and Visitor Pass system that records and monitors the arrivals and departures of the organization's visitors.
- 4.4.3.2 Integration with external API for sending SMS notification, as per Unit requirement.
- 4.4.3.3 Provision for Visitor Registration (RFID card details, personal details, area/official to be visited, nature of visit, etc) with advanced/real-time approvals by BHEL employees. Provision to update access privilege and authorizations of visitors.

4.4.3.4 Digital Photos and Biometric of visitors shall be captured in the system.

The system should capture the details of the visitor organization,

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purpose of visit, location of visit, details of employee whom the visitor wants to meet and request for appointment.

4.4.3.5 The system shall allow for an approval workflow wherein the requested employee shall approve the appointment to allow the visitor to enter the premises. The system shall also allow the employee to configure an appointment time which can be later in the same day or for some future date. Visitor will get an OTP at the registered mobile number once the visit is approved along with the details of time and location for appointment.

4.4.3.6 Any modification/customisation to the existing software to be carried out by contractor without any additional cost implication.

4.4.4 MEAL BOOKING & CANTEEN ACCESS SOFTWARE (ANNEXURE-6):

4.4.4.1 Contractor shall integrate canteen management software with turnstiles and Biometric Access control-based system, as per requirement of the BHEL Unit. Contractor shall provide provision for customising the software so as to cater to different types of users & available canteens. Facility to maintain various type of masters for Menu, rates, categorization of employees, canteen types, Meal timings

4.4.4.2 Provision for booking meals in advance to be made in the online system/mobile app for all users. Solution should be able to handle multiple counters with different meal rates

4.4.4.3 Online Dashboard to monitor Daily / weekly/ monthly analysis of meal taken (summary and detailed), Canteen expenditure, Meal planning report and options to add / deduct meals from individuals.

4.4.4.4 Provides salary-debit facility for employees in credit scheme, for canteen facilities used via Integration with existing SAP based payroll system.

4.4.4.5 Any modification/customisation to the existing software to be carried out by contractor without any additional cost implication.

4.5 MANPOWER:

All deployed manpower should be the direct employees of the contractor. BHEL reserves the right to interview the proposed manpower and if not found suitable, the candidature may be rejected by BHEL.

4.5.1 Manpower during Implementation

The contractor shall complete Installation and configuration of the solution at respective BHEL Units as per scope of work within stipulated time as per project timelines. The contractor shall deploy adequate manpower with required skill sets for timely completion of activities.

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4.5.2 Post implementation Manpower

Once the solution is implemented and accepted by BHEL, manpower to be provided as per the details mentioned below:

4.5.2.1 Resident Engineers for DC & DR

Two persons (1 for DC at BHEL Hyderabad and 1 for DR at BHEL Haridwar) with relevant expertise as mentioned below shall be deployed for management of solution by the contractor for entire contract period along with lease period.

S No	Resource	Relevant qualification and experience	Proof
1	Resident Engineer (2 No.)	<ul style="list-style-type: none">Resident engineer should have a minimum qualification of BSC/BCATo have minimum experience of 2 years in management of HCI, system administration of Linux/Windows Servers, backup solutions and the DB provided by bidder as part of solution.	Contractor must submit following documents of the proposed manpower for this project: 1.CV's duly certified by authorized signatory 2.Qualification certificate 3.Experience certificate from the respective employer(s)

Post Implementation Activities by Resident engineer (RE)

- RE shall regularly monitor all equipment at DC & DR and shall be first level support of any issue arising in the setup.
- RE should resolve day to day system administration issues arising in the application and DB servers. In case he is not able to resolve the issue at his level, he shall escalate the issue as per escalation matrix.
- RE shall conduct standard maintenance activities like service packs, updates and upgrades without impact on business. Any update requiring system downtime, Contractor will share the downtime window with BHEL for approval. Once approved the downtime to be carried out in that time frame. In case of failure, the system is to revert to the same state without any defects.
- RE shall manage changes in configuration of servers, bug identification, root cause analysis, bug fixing, bug testing and deployment.
- RE to ensure resolution of any hardware and software issue, failure, breakdown, upgrade, or in any way the hardware/software is not in working condition etc. RE will log a call and the same shall be tracked as per the SLA section.

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- vi. RE shall manage the HCI setup at DC and DR and shall ensure uptime of all the devices in the setup as per SLA.
- vii. RE shall carry out the activities as per Business Continuity Plan.
- viii. RE shall take the backup as per BHEL backup policy.

4.5.2.2 Software Engineers at Corporate Office (line item 03 of Centralised Software/Application of DR BoQ)

03 persons with relevant expertise as mentioned below shall be deployed for management of software/applications for entire contract period along with lease period. The deployment of these engineers may be in a consolidated or a staggered manner, as per the requirement of BHEL.

S No	Resource	Relevant qualification and experience	Proof
1	Software Engineer (3 No.)	<ul style="list-style-type: none"> Software engineer should have a minimum qualification of BE/ B.Tech / MCA To have minimum experience of 2 years in the programming of the platform, database used by the contractor in the development of software applications. At least 01 person should have minimum 01-year work experience of SAP ABAP. 	<p>Contractor must submit following documents of the proposed manpower for this project:</p> <ol style="list-style-type: none"> 1. CVs duly certified by authorized signatory 2. Qualification certificate 3. Experience certificate from the respective employer(s)

Responsibilities of Software Engineer:

Maintenance personnel viz. Software Engineers (as per BoQ but not limited to) shall be stationed at BHEL corporate office during the entire contract period along with the lease period, for upkeep, maintenance, development, modifications and integration of the software /applications implemented as per Technical Specifications.

4.5.2.3 Hardware Engineers at different BHEL Units ((line item 02 of Centralised Software/Application of DR BoQ & hardware BoQ item no 4.1)

30 persons with relevant expertise as mentioned below shall be deployed for management of hardware for entire contract period along with lease period. The deployment of these engineers will be in a staggered manner as per go-live of each Unit.

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S.No	Resource	Relevant qualification and experience	Proof
1	Hardware Engineer (30 No.)	<ul style="list-style-type: none"> Hardware engineer should have a minimum qualification of ITI / Diploma. To have minimum experience of 5 years if ITI & 2 years if Diploma holder, in maintaining biometric devices. 	<p>Contractor must submit following documents of the proposed manpower for this project:</p> <p>5.3 CVs duly certified by authorized signatory</p> <p>52. Qualification certificate</p> <p>3. Experience certificate from the respective employer(s)</p>

Responsibilities of Hardware Engineer:

Configuration & maintenance of all hardware devices, during the entire contract period along with the lease period, installed in BHEL Unit related to the biometric project. Scheduled maintenance (monthly basis) to be planned so as to ensure 24X7 availability of the system & submission of the report to BHEL. Maintain breakdown records for the hardware devices. Monitoring the central device control application for breakdowns and taking corrective action. Enrolment of a new user & card printing for the users. Template upload to the reader & data download from the reader, as per the requirement.

4.7 BUSINESS CONTINUITY PLAN (BCP)

Documented Business Continuity Plan (BCP) should be in place and BCP testing to be carried out as per BHEL ISMS BCP Policy. All the necessary resources, software, program, etc. required to carry out the Business Continuity Plan shall be included in the scope of supply.

4.8 TRAINING

4.8.1 Contractor shall provide following training at BHEL premise on deployed HCI.

- Certification Level Training for a minimum period of 5 days in HCI operations, System Administration in HCI, virtualization etc. to at least 2 BHEL officials.
- Boarding and lodging of the training faculty will be the responsibility of contractor.

4.8.2 Training to be provided by the contractor to user department (at units of BHEL) on the overall workflow of the developed application and backend administration at no extra cost as per BHEL requirement.

4.8.3 Contractor shall be responsible for training to all administrators, users and other stakeholders. Trainings would be role specific covering all aspects.

4.8.4 Administrator Training to cover, among other things:

- Use of software.

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- b) Master data maintenance / use as per requirement.
- c) Back-end and front-end maintenance and modification requirement.
- d) Database maintenance requirement.

4.8.5 Additionally, all user at different locations shall be trained with the use of software through their own logins and access.

4.8.6 The successful contractor will prepare detailed User Guide and SOPs for using and operating the software system and same to be submitted to all locations.

4.9 LEASE PERIOD MAINTENANCE:

Maintenance shall cover the following:

- a) Maintenance service shall cover services, spares, repairs and replacements necessary to keep the equipment in good working order on reasonable use of the equipment during the entire contract period along with lease period.
- b) Periodic maintenance check should be carried out to keep the equipment in good working conditions. Maintenance will include all plastic and/or rubber parts, UPS, batteries etc
- c) Repair / Replacement of faulty / defective equipment and other supplied items inclusive of all types of spare parts etc. The contractor should provide 24x7 support for the equipment. Any component/equipment failed shall be replaced/replenished within 4 hours on all days of the week.
- d) The contractor shall maintain required spares, at least 5% of each equipment like Biometric Devices, Card Printers, Turnstiles, Batteries, Cables, and Connectors etc. to maintain the specified uptime.
- e) Installation / Re-Installation / Configuration of System software and other supplied software. All System Patches, Upgrades, Service Packs, etc. of the OS and all other Software supplied by the OEM must be installed and updated free of cost during entire contract period along with lease period
- f) Additions/Improvements/Changes in the software due to changes in existing Business Rules as per respective BHEL unit, to be done free of cost during entire contract period along with lease period
- g) Any additional requirements to be supplied at the same rate during the entire contract period along with lease period.

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4.10. SHIFTING OF READERS TO NEW LOCATION / SHIFTING OF TURNSTILE ALONG WITH READER TO NEW LOCATION

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Aforesaid shifting means shifting of readers/ turnstile along with reader outside the BHEL campus where it was originally installed. The entire requisite works like

dismantling of equipment, packing, transportation, transit insurance and installation at the new location shall be the responsibility of the Contractor.

For said shifting, payment will be made as per line item no 8 & 9 of **Part B - Outright purchase of Hardware BoQ**

Installation of equipment at new location will be on mutually agreed time and time taken beyond that period will be treated as downtime.

Shifting of equipment from one location to another within the same BHEL campus shall be done without any extra cost to BHEL. However, for cases within the same BHEL campus wherein shifting of readers involves major Civil/electrical/ network related work and working at height (EOT Crane) for cabling payment as per line item no 8 & 9 of **Part B - Outright purchase of Hardware BoQ** shall be made.

4.11 CIVIL & ELECTRICAL WORK (INDICATIVE BUT NOT LIMITED TO):

- a) The infrastructure required to connect the readers / other equipment with the network infrastructure via the network room or nearest available points through cable (concealed) / router shall be in the scope of the contractor's responsibility.
- b) Ferruling /labelling of cables /wires/passive networking for easy identification, Supply of all cable laying accessories including MS conduits, PVC pipes, supporting structures, clamps, identification tags, ferules etc. required for laying of cables shall be within the scope of contractor.
- c) Any civil work required for delivering the proposed solution as per the required specifications and service levels shall be within the scope of contractor.
- d) Civil works such as chipping/ cutting of floors for making grooves, making holes/opening through walls, ceilings or floors, drilling of holes through steel structures and frames, grouting of frames, hooks on walls/ceiling etc. required for execution of work. After erection, surface shall be made good by plastering/painting to their original shape & finish.
- e) The contractor shall be required to assess the locations for the best suited solution for network coverage at the expected locations and make provisions accordingly. The contractor shall be responsible for designing the network architecture solution proposed to be implemented at the locations and get the same approved by respective BHEL unit before deployment.
- f) Coordinating with the third-party network provider currently providing network services in the corporation. Any required customization / tapping/ cabling work (concealed) required to enable usage of existing network shall be in the scope of the contractor's responsibility.

4.12 PARALLEL RUN (AS PER UNIT REQUIREMENT):

- a) BHEL will facilitate contractor to understand the existing system and to configure the new system so as to ensure smooth transition
- b) The existing Biometric System equipment as available in BHEL units & new touchless Biometric System equipment will be used simultaneously for some

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period of time (as per unit requirement)

- c) During this period swipes will be captured in both of the systems at selected locations
- d) The punch-data captured in the new biometric system has to be moved to the Tables of existing Biometric System using either DB trigger / batch processing
- e) The attendance processing can be done as usual from existing Biometric System during the parallel run
- f) The existing Biometric System will be phased out subsequently

4.13 POST IMPLEMENTATION ACTIVITIES BY CONTRACTOR:

- a) Contractor will carry out maintenance and service support of deployed solution during entire contract period along with lease period
- b) Contractor shall adhere to SLA parameters as mentioned in this Tender.
- c) Contractor to support in ticket resolution and technical assistance/discussion wherever required for issues reported by BHEL for issues in hardware problems. Contractor shall troubleshoot and resolve the issues reported by BHEL.
- d) Contractor must provide and install software upgrades, updates, software enhancements during this period at no extra cost to BHEL within two (2) weeks from the date of release.
- e) Contractor must install any critical security patch with prior approval from BHEL on urgent basis with proper implementation and rollback plan.
- f) Contractor shall update user manuals for any changes in the solution on a regular basis.
- g) Contractor shall provide training on changes in deployed solution to designated members of BHEL team.
- h) Escalation matrix with contact details for resolution of issues in the solution shall be provided by the Contractor. The same may be updated and communicated to BHEL as and when any change occurs in the matrix. In case of any escalated issue which cannot be sorted out through correspondence, on-site support of the expert shall be provided at no extra cost to BHEL.
- i) BHEL conducts necessary Vulnerability Assessment & Network Penetration Testing on the system and observations will be shared with the Contractor in a periodic manner. The Contractor shall mitigate vulnerabilities within specified time as decided by the BHEL IT team
- j) Contractor shall be responsible for both planned and unplanned shutdowns. In case of a planned shutdown preferably in off hours, Contractor needs to get approval from BHEL team and convey well in advance of the system downtime. The downtime window will be conveyed by Contractor and scheduled maintenance will be carried out during that time period only. Contractor will up the system, with business as usual conditions, within the downtime window. Contractor shall ensure availability of OEM support during scheduled downtime including off hours.
- k) The arrangement for substitution for resident engineer on leave or training should also be made.
- l) The Contractor will arrange suitable resident engineer in case their deployed resident engineer is not available for more than 2 working days. If the Contractor fails to deploy the resident engineer within allotted timeframe then the

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Contractor will be liable to pay the penalty as per SLA clause until the time suitable replacement arranged

- m) If the service of deployed resident engineer is not as per the norms and BHEL feels that the work of deployed resident engineer is not satisfactory then the Contractor will replace the resident engineer within seven days with written confirmation to the concerned Department.

4.14 COMPLAINT REDRESSAL SYSTEM

To maintain the Service Level Agreement (SLA) & downtime calculation, Contractor should develop and maintain online system for registration, monitoring and redressal of all complaints during the contract period along with the lease period.

A Suggestive minimum required service shall cover:

- a) Complaint logging directly by User through an on-line system (complaint tracking system)
- b) The system to indicate non-functioning of the equipment viz. Biometric Reader, Turnstile etc
- c) The system to give time taken for rectification of the equipment along with reason for failure
- d) The uptime will be certified by concerned authorities.


4.15 PAN BHEL IMPLEMENTATION:

The implementation shall be in 02 phases as given below:

Phase I: Work order/Site Clearance by respective BHEL Units shall be issued within 07 months from issue of Work order by Corporate Office. Timeline for go-live of Phase I for each Unit shall be 07 months, post the resource mobilisation period, from the date of issue of Work order/Site Clearance by respective Units.

Phase -II: Work order/Site Clearance by respective BHEL Units shall be issued within 05 months (after initial 07 months). Timeline for go-live of Phase II for each Unit shall be 05 months, post the resource mobilisation period, from the date of issue of Work order/Site Clearance by respective Units.

Resource Mobilisation Period: of 01 month in each phase for each location

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Phase Wise Details of All units:

S.No.	Phase	Locations covered in each phase
1	Phase-I	Delhi/NCR based offices (including PS-NR-Noida & its Sites); HEP-Bhopal; HPEP & PE&SD-Hyderabad; Corp. R&D-Hyderabad; CFFP & HEEP-Haridwar; EDN-Bangalore; ISG & SBD-Bangalore; EMRP-Mumbai; ROD & SSBG-Mumbai; ROD & SSBG -Bhubaneswar
2	Phase-II	BAP-Ranipet; CFP-Rudrapur; FSIP-Jagdishpur; HERP-Varanasi; HPVP-Vizag; PPPU-Thirumayam; IVP-Goindwal; TP-Jhansi; HPBP & SSTP-Trichy; PS-ER -Kolkata (& Sites); PS-SR-Chennai (& Sites); PS-WR-Nagpur (& Sites)

The comprehensive list of sites/locations is as per Annexure-A.

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SECTION-V
COMMERCIAL TERMS & CONDITIONS

5.1 PAYMENT TERMS:

The payment of lease charges will be made on quarterly basis after completion of each quarter and submission of invoices(s) in triplicate along with all statutory/relevant documents (like Lease Agreement, SD in form of BG or FD etc., PF & ESI receipts, as applicable, for all hardware & software engineers deployed for the said contract, proof of payment of salary in bank account statement, salary slip, attendance records, e-invoice with IRN & QR Code along with GST deposited etc.

5.1.1 Payment monitoring on milestone basis:

- a) Outright purchase items: Payments for outright purchase items (as per actuals) to be processed by respective BHEL Unit (including Regions/Divisions) after their successful go live.
- b) Lease items:
 - b.1 Payment for Server Hardware & database License of BoQ (Line Items 1 to 7) of DC & DR shall be processed by Corporate Office after successful Go-live of at least 01 Major Unit (Bhopal/Haridwar/Delhi-NCR/Bangalore/Hyderabad) of Phase-I.
 - b.2 Payment for software engineers (BoQ for DR, Centralized Software/Application, Line Item 3) shall be processed, as per actuals, at Corporate Office after successful Go-live of at least 01 Major Unit (Bhopal/Haridwar/Delhi-NCR/Bangalore/Hyderabad) of Phase-I.
 - b.3 Software: The payment for software (BoQ for DR, Centralized Software/Application, Line Item 1) will be done by Corporate Office proportionally according to the manpower strength of each unit (**Annexure - N**) after go-live of each unit post receipt of clearance from the respective unit. Clearance from respective Unit shall be obtained one time and thereafter, clearance from Corporate office shall be given with subsequent bills related to payment of software.

Note: Quarter I: April to June

Quarter II: July to September

Quarter III: October to December

Quarter IV: January to March

In case, if any unit goes live in between the aforesaid quarters, then pro-rata payment against the raised invoice for the quarter shall be processed for that unit at the end of the quarter and further billing for said unit shall be clubbed with billing of previously gone live units in a single consolidated invoice.

- c) Payments for all other lease items (not covered in Point No 2) and hardware engineers to be processed by respective BHEL Unit; as per actuals, after successful go live.

The contractor should be able to support the Project site and the equipment for entire contract period along with the lease period from the date of commissioning. All Software Updates including Database updates shall be

provided during the entire contract period along with the lease period at no extra cost. Any enhancement / improvements of business rules shall be carried out during the entire contract period along with the lease period, without prejudice to any other terms and conditions whatsoever in the contract, absolute right over the data captured by the vendor lies with BHEL and vendor shall not claim any right over such data. Vendor shall give unrestricted access to the entire data captured in the system and also facilitate to interpret data for ultimate use. Access to Server, Source code and system documentation should be provided to BHEL. Declaration for aforesaid Software Updates including Database updates shall be provided by contractor with each related bill.

5.1.2 Following documents (Two sets) to be submitted for claiming Quarterly Payments:

A. In the First Quarter

- i. Copy of Bipartite Lease Agreement
- ii. Copy of Insurance valid for atleast 1 year.
- iii. OEM Warranty certificate for the entire contract period.
- iv. Newness Certificate of items/equipments;
- v. Bifurcation of lease amount for all items amount as "Principle amount, Interest amount and maintenance amount) shall be submitted.
- vi. Proof of Delivery / Installation Certificates signed by BHEL Coordinator.
- vii. Uptime Certificate signed by BHEL Coordinator for the subject quarter
- viii. E-Invoice with QR code & IRN number.
- ix. System documentation related to hardware and software.
- x. Receipt of deposit/ challan copy for PF & ESI of hardware/software engineers and other statutory requirements, proof of payment of salary in bank account statement & salary slip, as applicable.
- xi. Proof of submission of security deposit

B. All Subsequent Quarters:

- i. Uptime Certificate with calculation of downtime and recovery amount (if any.) signed by BHEL Coordinator for the subject quarter
- ii. E-Invoice with QR code & IRN number.
- iii. Receipt of deposit/ challan copy for PF & ESI of hardware/software engineers and other statutory requirements, as applicable.

C. Annually:

- i. Copy of Renewal of Insurance valid for the next one year.

In addition to above, checklist requirement of the unit for bill processing shall be shared by the respective Unit along with the site clearance instructions for SITC. Same shall be adhered to by the vendor.

5.1.3 No Advance Payment or the payment for mobilization of work will be made to the Contractor.

5.1.4 Payment shall be made within 45 Days for MSEs, 60 days for Medium Enterprises, 90 days for Non MSME from the day of receipt of complete bill. Any clarification sought by respective BHEL Unit, pertaining to respective bill, must be clarified by Contractor at the earliest otherwise the delay in payment will be attributed to the Contractor.

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Aforesaid timelines shall be applicable from the day on which the last clarification/queries/document sought by BHEL and has been settled/submitted by the Contractor.

5.1.5 Contractors shall not be entitled to any interest with respect to any money, which may be due to him by BHEL.

- i. The Contractor will have to intimate the bank account number, PAN card copy, bank mandate copy, and other details of the bank to enable BHEL to credit the payments into the account.
- ii. Any tax incurred on purchase of materials by the contractor in respect of this contract shall be treated as included in the charges and BHEL will not entertain any additional claim whatsoever in this respect.
- iii. While claiming the payment, the contractor must certify on the bill that the payment being claimed is strictly within the terms of the contract and all the obligations on his part for claiming this payment have been fulfilled as required under the contract.

Note: Full rates for the work done shall be allowed only if the quantum of work has been done as per the specifications stipulated in the contract. If the work is not executed as per the stipulated specifications, BHEL may ask the contractor to redo the work according to the required specifications, without any extra cost. However, where this is not considered necessary 'OR' where the part work is done due to factors like non-availability of material to be supplied by BHEL 'OR' non-availability of fronts 'OR' non-availability of drawings, fraction payment against full rate, as is considered reasonable, may be allowed with due regard for the work remaining to be done. BHEL decision in this regard will be final and binding on the contractor.

5.2 TAXES & DUTIES:

5.2.1 The Bill generated by the Contractor should include the following confirmations from the contractor:

- a) Certified that the Goods and Services Tax (GST) charged on this Bill is not more than what is payable under the provision of the relevant Act or the Rules made there under.
- b) Certified that the goods on which GST has been charged have not been exempted under the GST Act or the rules made there under and the charges on account of GST on these goods are correct under the provisions of that Act or the Rules made there under.
- c) Certified that the contractor is registered with above indicated GSTIN as dealer in the State where in their Billing address is located for the purpose of GST.

5.2.2 Contractor shall comply with all the necessary statutory compliances including but not limited to providing GST invoices or other documentation as per GST Law relating to the supply of Goods or Services, uploading the details of the invoices, payment of taxes, timely filing of valid statutory returns for the tax period in the GST portal etc.

- 5.2.3 In case the Input Tax Credit of GST is denied or demand is recovered from BHEL on account of any act/ omission of the Contractor in this regard, the Contractor shall be liable in respect of all claims of tax, penalty and / or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. BHEL shall have the right to recover such amount from any payments due to the Contractor or from Performance Security, or any other legal recourse from the said Contractor. If any tax is required to be paid by the Contractor in pursuance of any demand from tax authorities, on account of Contractor's suppression of facts, fraud or willful misstatement of facts while offering the products or submitting the bids, then the same shall not be passed on to BHEL through debit notes or Invoices or Supplementary Invoices and the contractor shall be solely liable for payment of the same.
- 5.2.4 To enable BHEL to avail GST Input tax credit, Contractor shall submit GST compliant tax invoice containing all the particulars as stipulated under Invoice Rules of GST Law. Payment shall be made to the Contractor only after submission of GST complaint Tax invoice. The Contractor shall raise GST compliant invoice affixing GSTIN of BHEL's unit availing the works.
- 5.2.5 BHEL reserves the right to protect its interest against any loss on account of availability of GST credit.
- 5.2.6 GSTIN of respective BHEL Unit will be provided to the Contractor along with the site clearance instructions/ order issued by respective Unit for Supply Installation , Testing & Commissioning (SITC).
- 5.2.7 Any new/change in statutory levy as and when made applicable by the Government shall become applicable against documentary evidence.
- 5.2.8 Payment to the Contractor will be subject to TDS as per rules in force from time to time. The Tax Deduction at Source (TDS) shall be done as per the provisions of Income Tax Act & GST, as amended from time to time and a certificate to this effect shall be provided to the Contractor by BHEL.
- 5.2.9 Applicable GST shall also be recoverable from the Contractor in case of LD recovery/penalty on account of breach of terms of contract/ any penalty for the contract.
- 5.2.10 Invoice submitted should be in the format as specified under GST Laws viz. all details as mentioned in Invoice Rules like GSTIN registration number, invoice number, quantity, rate, value, taxes with nomenclature - CGST, SGST, IGST mentioned separately, HSN (Harmonized System of Nomenclature) Code / SAC (Services Accounting Code) Code etc.

- 5.2.11 The Contractor has to give an undertaking that GST as mentioned in the invoice has been/will be paid and also file returns as per respective extant rule.
- 5.2.12 GST amount shall be released only after confirmation from GST portal that such invoice has been declared in GSTR-1 return filed by contractor and is available in GSTR-2B of BHEL within the stipulated time for the relevant period and tax amount thereon has been paid by contractor to Govt. within the stipulated time period as per GST Law.
- 5.2.13 In case GST credit is delayed/ denied to BHEL due to **non/ delayed receipt of services/ goods and /or tax invoice** or expiry of the timeline prescribed in GST Law for availing such ITC, or any other reasons not attributable to BHEL, GST amount shall be recoverable from the contractor along with interest levied/ leviable on BHEL.

5.3 LD for DELAY:

- 5.3.1 Penalty will be levied in case of delays @ 0.5 % per week of delay on undelivered portion of the respective Unit, subject to a maximum of 10% of total order value of that Unit.

Delivery, for penalty purposes, shall mean completion of installation & commissioning.

- For server hardware and allied infrastructure at DC & DR, Corporate Office will levy penalty @ 0.5 % per week of delay on undelivered portion, subject to a maximum of 10% of total order value of the same.
 - For delay on software development for a Unit, Corporate Office will levy penalty @ 0.5 % per week subject to a maximum of 10% of proportional value for the unit as per manpower strength of the unit (**Annexure-N**).
 - For the centralized access control & attendance software, concerned Unit will provide the completion certificate after confirming the functionality of the system.
 - This penalty will be deducted from the first quarter rental charges. In case the penalty amount to be deducted is more than the first quarter rental charges, the same will be adjusted from the consecutive quarter.
- 5.3.2 In case of delay in providing site clearance from BHEL side due to reasons beyond its control, suitable delivery extension will be provided.

5.4 COMPENSATION CLAUSE:

- 5.4.1 "BHEL shall recover the amount of compensation paid to victim(s) by BHEL towards loss of life / permanent disability due to an accident which is attributable to the negligence of contractor, agency or firm or any of its employees as detailed below.
- Victim: Any person who suffers permanent disablement or dies in an accident as defined below.

- b) Accident: Any death or permanent disability resulting solely and directly from any unintended and unforeseen injurious occurrence caused during the manufacturing/ operation and works incidental thereto at BHEL factories/ offices and precincts thereof, project execution, erection and commissioning, services, repairs and maintenance, trouble shooting, serving, overhaul, renovation and retrofitting, trial operation, performance guarantee testing undertaken by the company or during any works / during working at BHEL Units/ Offices/ townships and premises/ Project Sites.
- c) Compensation in respect of each of the victims:
- (i) In the event of death or permanent disability resulting from Loss of both limbs: ₹10,00,000/- (Rupees Ten Lakhs)
- (ii) In the event of other permanent disability: ₹7,00,000/- (Rupees Seven Lakhs)
- d) Permanent Disablement: A disablement that is classified as a permanent total disablement under the proviso to Section 2 (I) of the Employee's Compensation Act, 1923."

- 5.4.2 The Contractor shall Indemnify and keep BHEL indemnified against any loss/claim which is brought against BHEL on account of any negligence of the contractor or his worker, while carrying out the works under the contract.
- 5.4.3 NOTWITHSTANDING ANYTHING ABOVE, BHEL shall recover from the contractor for any loss suffered by BHEL due to any negligence of the contractor or his worker, while carrying out the worker under the contract.
- 5.4.4 All amounts, including the losses / damages / penalties / compensations etc., resulting from non-compliance with the terms of Contract, payable by Contractor to BHEL under the Terms of the Contract will be recovered from the outstanding payments to Contractor either under this Contract or any other Contract with BHEL or from Security Deposit or from both. In case this amount is insufficient for such recoveries, the contractor shall make good the balance amount by actual payment. In addition, BHEL will recover the said amounts through its sister concerns, from the payments due to the Contractor in any of the Units of BHEL located in any part of India.

5.5 DOWNTIME CALCULATION

- i. **Service Level Agreement (SLA):** Contractor shall be responsible for maintaining a minimum uptime of 99.9% for Critical components and 98% for the remaining components & deployed manpower on monthly basis.
- ii. Critical components include servers, software application & face readers.

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iii. Penalty for SLA Non-conformance

The downtime will be calculated on minutes per month on 24 hours' basis. While making the payment at the end of each quarter the downtime recovery shall be made and payment will be released accordingly. However, the payment will be made only after the system is restored.

iv. The deductions will be made as per the following formula:

Deduction (D) = (downtime in minutes (d) X rental per minute (r) X multiplication factor (f))

i. For Critical Components:

Where Multiplication Factor is given below

For Uptime ≥ 99.90 Multiplication Factor is 0.00

For Uptime between 99.90 and ≥ 98.00 , Multiplication Factor is 2.00

For Uptime between 98.00 and ≥ 97.00 , Multiplication Factor is 3.00

For Uptime below 97.00, Multiplication Factor is 5.00

ii. For Remaining Components:

Where Multiplication Factor is given below

For Uptime ≥ 98.00 Multiplication Factor is 0.00

For Uptime between 98.00 and ≥ 97.00 , Multiplication Factor is 2.00

For Uptime between 97.00 and ≥ 96.00 , Multiplication Factor is 3.00

For Uptime below 96.00, Multiplication Factor is 5.00

iii. For Manpower:

Contractor shall arrange for substitution for hardware/software engineers on leave or absence. At any point of time, the number of hardware/software engineers deployed in a particular location shall be maintained.

In case the same is not maintained, then a penalty as per below formula shall be levied on the contractor:

Deduction (D) = (absence in days (d) X rate per day (r) X multiplication factor (f))

Where Multiplication Factor is given below

For Availability ≥ 98.00 Multiplication Factor is 0.00

For Availability between 98.00 and ≥ 95.00 , Multiplication Factor is 2.00

For Availability between 95.00 and ≥ 90.00 , Multiplication Factor is 3.00

For Availability below 90.00, Multiplication Factor is 5.00.

For resident engineers at DC & DR, for penalty calculation, rate per day will be considered as @₹2000/- per day per RE.

v. **ADDITIONAL CLAUSE:**

- I. Scheduled maintenance time should not be more than one hour per month and BHEL should be informed at least 48 hours in advance and subsequent approval / acceptance should be taken from BHEL.
- II. If the uptime for equipment falls below 99.9% for critical items & 98% for the remaining items, continuously for 3 months, the equipment shall have to be replaced by the Contractor, without any extra charge.
- III. If the uptime falls below 95% continuously for 3 months, BHEL reserves the right to terminate the contract, without any further cost implication to BHEL.
- IV. The downtime will be recorded at item level. Even in case of failure of a component in an item, the deduction will apply to the whole item. If the failure of an item results in major service outage or affects the services provided by other items also, then the deduction will apply to all items affected by the failure.

vi. **PENAL PROVISIONS FOR FALSE SELF-DECLARATION OF MII, IN CASE ON CONTRACT MORE THAN RS 10 CRS.**

For contracts valuing more than 10 Crores, local content (in cases of self-certification submitted by bidders at the time of tendering) will be re-verified during execution of contract by Cost/ Chartered Accountant, and in case of defaults, penalty of 10% of the contract value shall be imposed. However, contract once awarded shall not be terminated on this account. This is over and above other penalties mentioned elsewhere in the tender.

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SECTION-VI

6.0 PRE-QUALIFICATION REQUIREMENT (PQR)

SL No	Description
1	Bid Qualification Criteria:
	The detailed bid qualification criteria for shortlisting vendors for the subject procurement shall be as follows:
1.1	Technical Criteria
1.1.1	Technical Capability:
	<p>Bidder can be either:</p> <p>a. Bidder may be a Face reader cum Controller manufacturer having either -</p> <p>their own proprietary software application</p> <p>OR</p> <p>having agreement/ tie-up/ consent with Software Solution provider</p> <p>OR</p> <p>b. Bidder may be a Software Solution provider having their own proprietary software application, who will procure Face Reader cum Controller and other hardware & associated software items from other Original Equipment Manufacturer supported by a valid Manufacturer's Authorization Form (Annexure-O) on OEM's letterhead duly signed and stamped by OEM's authorized signatory</p> <p>OR</p> <p>c. Bidder may be a System Integrator who will have agreement/ tie-up/ consent with Software Solution provider and procure Face Reader cum Controller and other hardware & associated software items from Original Equipment Manufacturer supported by a valid Manufacturer's Authorization Form (Annexure-O) on OEM's letter head duly signed and stamped by OEM's authorized signatory</p>
	Documents required in support of aforesaid technical capability:
1.1.1.1	Bidder may be a Face Reader cum Controller manufacturer having either - their own proprietary software application or having agreement/ tie-up/ consent with Software Solution provider
a	GST/Excise documents including quarterly returns OR Factory license OR Pollution Control Board certificate OR NSIC certificate OR IPR/Patent/Copyright certificate or any other statutory document; clearly indicating that the bidder is a manufacturer of Face Reader cum Controller manufacturer.
b	In case equipment manufacturer is having their own proprietary software application, Bidder to submit documentary proof regarding ownership of software.

c	In case software is sourced from software solution provider, the bidder should own customization rights or should have source code ownership for the software procured or should be capable of delivering desired services under its various modules through a tie-up agreement with software solution provider. Copy of Software license & Tie- Up agreement to be submitted in this regard.
d	Back-to-back guarantee (specific to the tender) from owner / proprietor of the software solution clearly stating that the proprietor/owner of the Software solution shall fulfil the contractual obligations for software development/ application/ customization/technical support/service as required to successfully deliver the services as detailed under the scope of work for entire contract period along with the lease period. Further, in case of failure of the bidder, the proprietor/ owner of the Software Solution shall assume all obligations under the contract pertaining to the items in their purview. Back-to-Back Guarantee shall be on Software Solution provider's letterhead (As per Annexure-K) duly signed and stamped by authorized signatory.
e	<p>In case the bidder is an exclusive manufacturer of Face Reader cum Controller, he shall be required to furnish "Original Equipment Manufacturer (OEM's) authorization form and Back-to-Back guarantee for other hardware & associated software items as the case may be, in the prescribed format, from a manufacturer from whom the other devices (for which the bidder is not an OEM) shall be procured. (Annexure-O & Annexure K, on OEMs letterhead duly signed and stamped by authorized signatory of OEM.)</p> <p>For example: If bidder is manufacturer of Face Reader cum Controller only, bidder need to submit an OEM authorization form & Back-to-Back guarantee (Annexure K) from manufacturer of Barriers, Turnstile, Server etc.</p> <p>The documents as per 1.1.1.1 above shall specify that the bidder is a manufacturer of Face Reader cum Controller manufacturer. In case, the tender item details are not mentioned in any of the above documents, a certificate from TPIA (after factory inspection) stating that Bidder is a manufacturer of the tendered item to be submitted. For this purpose, bidder shall engage a TPIA who is registered under "NABCB accredited bodies as per requirement of ISO/IEC17020 as Type A" in QCI NABCB.</p>
1.1.1.2	Bidder may be a Software Solution provider having their own proprietary software application, who will procure Face Reader cum Controller and other hardware & associated software items from other Original Equipment Manufacturer supported by a valid Manufacturer's Authorization Form (Annexure -O) on OEM's letterhead duly signed and stamped by authorized signatory.
a	<p>Original Equipment Manufacturer (OEM's) authorization form(Annexure-O) and Back to back guarantee (Annexure K) (specific to the tender) between the bidder & Original Equipment Manufacturer of Face Reader cum Controller manufacturer and other hardware & associated software items for the complete contract period along with Lease period shall be provided by the Head Office of the Equipment Manufacturer and not the branch offices, clearly stating that the Manufacturer shall fulfil the contractual obligations for Supply, Service and Warranty of the tendered item in case of failure of the bidder and Manufacturer shall assume all obligations under the contract pertaining to the items in their purview. (Annexure-O & Annexure K should be on OEMs letterhead duly signed and stamped by authorized signatory.)</p> <p>The bidder can enter into tie-ups separately with equipment manufacturer for other hardware & associated software items and Face Reader cum Controller</p>

	or can enter into a tie-up with a single equipment manufacturer, manufacturing other hardware & associated software items and Face Reader cum Controller. Accordingly, Original Equipment Manufacturer (OEM's) authorization form and Back to back guarantee (specific to the tender) will be required from all the respective manufacturers in this regard. (Annexure-O & Annexure K should be on OEMs letterhead duly signed and stamped by authorized signatory.)
b	<p>GST/Excise documents including quarterly returns OR Factory license OR Pollution Control Board certificate OR NSIC certificate OR IPR/Patent/Copyright certificate or any other statutory document of the manufacturer of hardware devices; clearly indicating that the OEM is a manufacturer of Face Reader cum Controller manufacturer and other hardware items.</p> <p>The documents as above shall specify that OEM is a manufacturer of Face Reader cum Controller manufacturer. In case, the tender item details are not mentioned in any of the above documents, a certificate from TPIA (after factory inspection) stating that Bidder is a manufacturer of the tendered item to be submitted. For this purpose, bidder shall engage a TPIA who is registered under "NABCB accredited bodies as per requirement of ISO/IEC17020 as Type A" in QCI NABCB.</p>
c	Bidder should be owner of a proprietary software solution and should own customization rights and/or source code ownership for the software solution capable of delivering desired services under its various modules. Bidder to submit documentary proof regarding ownership of software.
1.1.1.3	Bidder may be a System Integrator who will have agreement/ tie-up/ consent with Software Solution provider and procure Face Reader cum Controller and other hardware devices from Original Equipment Manufacturer supported by a valid Manufacturer's Authorization Form (MAF) on OEM's letterhead duly signed and stamped by OEM's authorized signatory. (Annexure-O)
a	<p>Original Equipment Manufacturer (OEM's) authorization form and Back to back guarantee (specific to the tender) between the Bidder & Manufacturer of Face Reader cum Controller manufacturer and hardware devices for the complete contract period along with Lease period shall be provided by the Head Office of Equipment Manufacturer and not the branch offices, clearly stating that the manufacturer shall fulfil the contractual obligations for Supply, Service and Warranty of the tendered item in case of failure of the bidder and manufacturer shall assume all obligations under the contract pertaining to the items in their purview. (Annexure-O & Annexure - K should be on OEMs letterhead duly signed and stamped by authorized signatory.)</p> <p>The bidder can enter into tie-ups separately with equipment manufacturer for hardware devices and Face Reader cum Controller or can enter into a tie-up with a single equipment manufacturer, manufacturing all hardware devices and Face Reader cum Controller. Accordingly, Original Equipment Manufacturer (OEM's) authorization form and Back to back guarantee (specific to the tender) will be required from all the manufacturers in this regard. (Annexure-O and Annexure K on OEMs letterhead duly signed and stamped by authorized signatory.)</p>
b	GST/Excise documents including quarterly returns OR Factory license OR Pollution Control Board certificate OR NSIC certificate OR IPR/Patent/Copyright certificate or any other statutory document of the manufacturer of hardware devices; clearly indicating that the party is a manufacturer of Face Reader cum Controller manufacturer and other

	<p>hardware items.</p> <p>The documents as above shall specify that OEM is a manufacturer of Face Reader cum Controller manufacturer. In case, the tender item details are not mentioned in any of the above documents, a certificate from TPIA (after factory inspection) stating that bidder is a manufacturer of the tendered item to be submitted. For this purpose, bidder shall engage a TPIA who is registered under "NABCB accredited bodies as per requirement of ISO/IEC17020 as Type A" in QCI NABCB.</p>
c	<p>Bidder should own customization rights or should have source code ownership for the software procured or should be capable of delivering desired services under its various modules through a tie-up agreement with software solution provider. Copy of Software license & Tie- Up agreement to be submitted in this regard.</p>
d	<p>Back-to-back guarantee (specific to the tender) from owner / proprietor of the software solution clearly stating that the proprietor/owner of the Software solution shall fulfil the contractual obligations for software development/ application/ customization/technical support/service as required to successfully deliver the services as detailed under the scope of work for entire contract period along with the lease period. Back to Back Guarantee (Annexure -K) shall be on Software Solution Provider letterhead duly signed and stamped by authorized signatory.</p>
1.1.2	<p>Similar work experience:</p>
	<p>The Bidder shall have experience of having successfully completed similar works or satisfactorily executed similar works for minimum one-year period in a running project, during last 7 years, ending on last day of the month previous to the one in which tender is invited in any one of the following (including GST).</p> <p>The Work order of the project should be in the name of the bidder. The order copies of above-mentioned projects & completion/ experience certificate along with the offer is to be submitted as per Annexure -P. Verification of genuineness of PQR documents shall be obtained by BHEL from the respective customer. The value of the works completed (proof of completion to be submitted) should be as follows:</p>
	<p>i. One similar work of total value not less than INR 9.69 Crore</p> <p>OR</p> <p>ii. Two similar work of total value not less than INR 6.05 Crore</p> <p>OR</p> <p>iii. Three similar work of total value not less than INR 4.84 Crore</p> <p>Definition of Similar Work/s:</p> <p>Similar works shall be defined as: Supply, installation, testing, commissioning and maintenance of Biometric based Access Control & Attendance Management System (including server hardware, networking) and /or Barriers/turnstile covering a minimum of:</p> <p>i) One similar work of total 6750 Users for Central/ State Govt./ PSUs/</p>

	<p>Public/ Private Limited Companies</p> <p>OR</p> <p>ii) Two similar work of total 4500 Users for Central/ State Govt./ PSUs/ Public/ Private Limited Companies</p> <p>OR</p> <p>iii) Three similar work of total 2250 Users for Central/ State Govt./ PSUs/ Public/ Private Limited Companies.</p> <p>The bidder shall be required to submit work order and performance certificate.</p>
1.1.3	<p>Documents Verification:</p> <p>The certificate confirming the criteria as per points 1.1.1 & 1.1.2 above and all the documents submitted thereof, from TPIAs which are accredited under "NABCB accredited bodies as per requirement of ISO/IEC 17020 as Type "A" in QCI's NABCB website (nabcb.qci.org.in/accreditation/reg_bod_inspection_bodies.php) as on due date of bid submission", at no extra cost to BHEL. The verification and certification should necessarily include comment "Verified from originals", with name and contact details (contact number and e-mail ID) of the certifying officer, TPIA name with the address of TPIA branch undertaking the certification.</p>
1.2	<p>Average Annual Financial turnover of the firm for last 3 Financial years up-to 31st March 2024 must be at least Rs. 18.17 Crores.</p> <p>Following Documentary proof must be submitted as proof of Average Annual Turnover:</p> <p>1) Audited Profit & Loss Account and Balance Sheet must be submitted as proof of Average Annual Turnover. The financial statements must be signed by the authorised signatory and the auditor. Auditors seal, Name, firm name, Membership No., FRN No., UDIN and the capacity in which he is signing (Proprietor/Partner), must be mentioned on the Profit & Loss A/c and Balance Sheet.</p> <p>2) In case of proprietorship and partnership where Audited Profit & Loss A/c and Balance Sheet is not available, TAX audit report /GST audit report/CA certificate certifying turnover for the required financial years must be submitted, which must be on his letter head mentioning his and his firm name, membership number, FRN no, UDIN, capacity in which he is signing (Proprietor/Partner), date and place of signing.</p>
1.3	<p>Statutory Requirements: Details like P.F. Account No., PAN No. allotted by the concerned authority, documents like GSTIN etc. are all to be furnished along with offer. In case any of the above statutory provisions are not applicable, the same shall be supported by certificates / documents.</p>
1.4	<p>OEM of Biometric Readers and other hardware shall have Technical Assistance / Service Centers in India. Details of the same shall be furnished as part of PQR.</p>
1.5	<p>Bidder should not be in the delist category or under hold for business dealings or is under ban for business dealings with any Unit/ Division/Office of BHEL.</p>

1.6	The bidder should not be insolvent. The bidder should submit a bank solvency certificate for not less than Rs. 18.17 Crores. The solvency certificate should not be older than 01 year from the date of issue of NIT. (Annexure- Q along with Insolvency Certificate from Bank)
1.7	Only Class I & Class II local suppliers are eligible to bid in this tender. For this procurement, the local content to categorise a supplier as a Class I local supplier/Class II local supplier/ Non-local supplier and purchase preference to Class I local supplier, is as defined in public procurement (preference to Make In India, order 2017, dated 19.07.2024 issued by DPIIT. In case of subsequent orders issued by the nodal Ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part II bids against this NIT. Raw materials, components etc. will not be sourced from any bidder representing countries sharing land borders with India, unless such a bidder is registered with the Competent Authority in India. Contractor would be bound by the guidelines of Govt being issued time to time, in this regard. (Bidder need to submit Annexure- R in this regard)

Note:

1. No bidder including MSE, Start Ups shall be given EMD submission waiver, Exemption for Turnover & Work experience.
2. Manufacturer's Authorization Form (Annexure-O) & Back to Back Guarantee (Annexure-K) shall be submitted for all items (as the case may be) except items mentioned in outright purchase head of BOQ.
3. Bifurcation of lease amount for all lease items as "Principle amount, Interest amount and maintenance amount) shall be submitted by successful bidder/contractor immediately after reverse auction/before submission of first bill.

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SECTION-VII
DOCUMENTS TO BE SUBMITTED BY BIDDER

7.0 The bidders should submit following documents in support of possessing qualifying requirements as under, duly certified and stamped by their authorized signatory:

- 7.1 To calculate the “Average Annual Financial Turnover” of the bidder, the bidder should submit Audited Copy of Balance Sheet, Profits & loss Account Statements and Copy of acknowledgements of IT return of last 3 financial years, ending 31st March’ 2024, as supporting/required documents against S. No. 1.2 of PQR.

Note: In case of unavailability of Audited Copy of Balance Sheet and Profits & loss Account Statements for any of the last 03 Financial Years, CA certificate for the same shall be furnished. {“Average Annual Financial Turnover” will be equal to the arithmetic sum of the annual turnover of the last 03 Financial Years, divided by 03}

- 7.2 Copies of work orders / award letters / agreements / MOUs along with “Completion / Performance Certificate” of the similar works executed by the bidder during last 07 (seven) years ending on 30th November, 2024 as supporting documents against S. No. 1.1.2 of PQR.

Details of the work orders / award letters / agreements / MOUs along with “Completion / Performance Certificate” shall also be duly filled in Annexure-P

- 7.3 Copy of PAN, GSTIN, PF certificate as supporting documents against S. No. 1.3 of PQR.
- 7.4 Signed & Stamped copy of UDYAM / MSE Certificate (if applicable and bidder want to have purchase preference)
- 7.5 Signed & Stamped copy of Annexure 1 to 17 (Technical Specifications);
- 7.6 Signed & Stamped copy of Annexure-18 (Bill of Quantities);
- 7.7 Signed & Stamped copy of Annexure -A: Details of BHEL units and sites for project
- 7.8 Signed & Stamped copy of Annexure -B: Role based dashboards
- 7.9 Signed & Stamped copy of Annexure-C: Integrity Pact
- 7.10 Signed & Stamped copy of Annexure-D: Unit wise Nodal Officers
- 7.11 Signed & Stamped copy of Annexure-E: Site Visit Confirmation
- 7.12 Signed & Stamped copy of Annexure-G: Power of Attorney

- 7.13 Signed & Stamped copy of **Annexure-H**: BG format in lieu of EMD submission
- 7.14 Signed & Stamped copy of **Annexure-I**: Non-Disclosure Agreement
- 7.15 Signed & Stamped copy of **Annexure-J**: Non-Disclosure Certificate
- 7.16 Signed & Stamped copy of **Annexure-K**: Back to back guarantee
- 7.17 Signed & Stamped copy of **Annexure-L**: Business Rules
- 7.18 Signed & Stamped copy of **Annexure-M**: MIRs
- 7.19 Signed & Stamped copy of **Annexure-N**: Manpower Strength of each Unit
- 7.20 Signed & Stamped copy of **Annexure O**: Manufacturers Authorisation Form
- 7.21 Signed & Stamped copy of **Annexure P**: EXPERIENCE ORDER DETAILS
- 7.22 Signed & Stamped copy of **Annexure Q**: -Declaration Regarding Insolvency/ Liquidation/ Bankruptcy Proceedings
- 7.23 Signed & Stamped copy of **Annexure R**: -Public Procurement (Preference To Make In India)
- 7.24 Signed & Stamped copy of **Annexure S**: Bank Account Details for E -payment
- 7.25 Signed & Stamped copy of **Annexure T**: Bidder's General Information
- 7.26 Signed & Stamped copy of **Annexure U**: Offer Forwarding Letter / Tender Submission Letter
- 7.27 Signed & Stamped copy of **Annexure V**: Declaration by Authorised Signatory of Bidder
- 7.28 Signed & Stamped copy of **Annexure W**: -Certificate of No Deviation
- 7.29 Signed & Stamped copy of **Annexure X.**: -Declaration for Relation In BHEL
- 7.30 Signed & Stamped copy of **Annexure Y**: -Form for Extension of Validity of Bank Guarantee
- 7.31 Signed & Stamped copy of **Annexure Z**: Compliance to Restrictions Under Rule 144 (Xi) Of GFR 2017
- 7.32 Signed & Stamped copy of **Annexure ZZ**: -Indemnity Bond
- 7.33 Signed & Stamped copy of **Annexure XI**: Un-priced bid format duly signed by the bidder shall be submitted along with technical bid by mentioning 'Q' in the column where quote is to be offered by the party.

- 7.34 Signed & Stamped copy of Annexure XII: CHECK LIST
- 7.35 Signed & Stamped copy of Annexure XIII: List of Consortium Banks
- 7.36 Signed & Stamped copy of Annexure XIV: HSE Guidelines
- 7.37 Signed & Stamped copy of Annexure XV: Price Bid Format (In separate envelope)

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SECTION-VIII

PROCEDURE FOR SUBMISSION OF TENDER

8.0 The tender is to be submitted as required in two parts in separate sealed covers prominently superscripted as Part-1 “Techno-commercial Bid” & Part-2 “Price Bid” and also indicating the tender number and due date & time as mentioned in the tender enquiry; on each of the covers.

ENVELOPE 1: EMD as per relevant clause of NIT

ENVELOPE 2: *Envelope of Part-I “Techno-commercial Bid” shall contain documents required in Section-VI & VII above; It should not contain price-Bid.*

ENVELOPE-3: *Part-II “Price Bid” shall contain Price-Bid format (Annexure-XV) only.*

These three separate covers/envelopes 1,2 and 3 shall together be enclosed in FOURTH Envelope and this sealed cover shall be superscripted with tender number & due date.

8.1 **PRICE BID:** Envelope 3 shall contain Price-Bid only and should not contain any technical details and / or Commercial Terms & Conditions. Any technical details and / or Commercial Terms & Conditions, if found in this part shall be ignored as the same are supposed to be contained in Part-I only as indicated above. This part shall be submitted separately & not be submitted along with technical bid (Part-I bid). The bidder must ensure that Price bid is submitted in the format available on portal.

8.2 Bidders who qualify in Technical Bid (Part-1) & POC will only be considered for further. Those who techno-commercially qualified shall be considered further for reverse auction. BHEL will finalize successful bidder by conducting Reverse auction (Part-II). Date of conducting Reverse Auction will be intimated separately to the techno-commercially qualified Bidders.

8.3 Tender submitted by the bidders should strictly be in accordance with the tender terms & condition enclosed herewith.

8.4 Bidders are requested to note that they should necessarily submit their financial bid (price bid) in the format provided and no other format is acceptable and liable to be rejected. The BoQ & price bid have been given in the standard formats with the tender document.

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ANNEXURE- 1 TO 17 DETAILS

Sl. No.	ANNEXURE	DESCRIPTION
1	Annexure 1	HCI Solution for Data Centre/ Data Recovery Requirements
2	Annexure 2	Database
3	Annexure 3	Load Balancer
4	Annexure 4	TOR & Management Switches
5	Annexure 5	Backup Solution
6	Annexure 6	Centralized Software
7	Annexure 7	Enrollment Unit
8	Annexure 8	Common Technical Specifications of Facial Recognition Device
9	Annexure 9	Facial Recognition Device
10	Annexure 10	Turnstile
11	Annexure 11	Boom Barrier
12	Annexure 12	Tower Lights
13	Annexure 13	Smart Card
14	Annexure 14	Miscellaneous Items
15	Annexure 15	Installation and Commissioning
16	Annexure 16	Auto Swing Barriers
17	Annexure 17	EM Lock


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ANNEXURE-1

1.1 HCI Solution for Data Centre Requirements

SR NO	Characteristic	Specification	Compliance
	Make & Model	to be specified by vendor	
1	Hyper-Converged Infrastructure	Proposed solution must be based on converged IT infrastructure platform that integrates storage, computer, networking, hypervisor, real-time deduplication, compression, and optimization along with high availability, powerful data management, data protection, and disaster recovery capabilities in a standard x86 server building block	
2	HCI Nodes	Minimum 3 Nodes Configuration with HCI Software Solution with N+1 nodes ensure high availability for achieving usable resources across cluster in the event of 1 physical node failure.	
3	CPU	Latest generation Intel Xeon/AMD EPYC processor with minimum 20-cores per processor with minimum base frequency 2.00GHz	
4	Processors	Minimum 2 Processors per node	
5	Cache	30 MB Cache or higher	
6	Memory	Minimum 128 GB per node	
7	Network Interface	Minimum 10G Ethernet Card - In Redundant Mode. No Single Point of Failure Minimum 4*10G Ethernet Ports per node.	
8	Graphics	Integrated Graphics Controller with 64 MB embedded video SDRAM	
9	Storage	Minimum 20 TB usable storage capacity for complete HCI solution. Also, Virtual server Instance Data Deduplication and compression feature to be available across the virtualization cluster.	
10	System Cooling/Fan	4x 80 mm heavy duty fans with PWM fan speed controls. Each node to have dedicated non-shared dual-PSU's with redundant fan.	
11	PCI Slots	Minimum of 6 * PCI Express Expansion Slots per node should be supported	
12	HBA	All FC adapters to be min. 8Gbps and in Redundant Mode	
13	Operating Enviroment	Op Temp Range: 50° to 77°F (10° to 25°C) Non-Op Temp Range: -40° to 158°F (-40° to 70°C) Op Humidity Range (non-condensing): 8% to 90% Non-Op Humidity Range: 5% to 95%	
14	Chassis type	Rack	
15	Supported Operating System	The following operating systems should be supported on the server:- Latest version of Microsoft Windows Server/Linux-preconfigured, with requisite enterprise licenses	

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SR NO	Characteristic	Specification	Compliance
16	Clustering	Required Clustering Services/Software for supplied OS	
17	Remote Facility	<p>1. Offered Hyper-converge solution shall support VM-centric management through a single pane of glass via the virtualization manager of given hypervisor.</p> <p>2. Virtualization Manager of given Hypervisor shall be able to manage single or multiple clusters through single management console of hypervisor.</p> <p>3. Offered hyper-converge appliance shall have the ability to manage all aspects of the Hyper-convergence for all sites through Virtualization Manager of a given Hyper-Converge.</p> <p>4. Offered Hyper-converge shall be able to expose / connect to existing customer servers for hosting VMs and applications while taking advantage of the functionality of the solution</p> <p>5. Offered Hyper-converge shall be able to globally manage Backup Policies per Datastore or per VM and shall be able to control all of them directly through virtualization manager of given hypervisor.</p> <p>6. Hyper-converge solution should have single upgrade management console to simplify upgrade of Hyper-converge Software, hypervisor and ability to roll back upgrades.</p>	
18	System Management Software	A systems management software capable of handling both OEM and non-OEM clients should be available with the HCI Solution.	
19	Pre-Failure Notifications	Pre-Failure alerts covering processor, memory, HDD, Power Supplies and Fans	
20	Guest VM OS	Latest version of Microsoft Server OS/Enterprise Linux with back to back support from OEM for the entire contract period and all the required licenses from day 1.	
21	Software Licenses	Bidder to provide all the licenses for managing HCI Solution, monitoring of server health, Databases, VM Operating Systems and any other application deployed from day 1	
22	Security	Bidder shall be responsible for periodic Vulnerability Assessment, Penetration Testing and Server hardening of all the associated servers and applications.	
23	Patches and upgrades	Bidder shall be responsible to apply OS/Service pack/Patch upgrades periodically/as and when available in all the associated servers, operating systems, databases and applications. Highest priority is to be given to critical patches and to be applied immediately on release.	

SR NO	Characteristic	Specification	Compliance
24	Capacity Augmentation	Bidder shall support for incorporating/integrating any additional server node, provided by BHEL, in the existing infrastructure	
25	Redundancy & Business Continuity	(a) Proposed solution should have replication software to DR site. Licenses for applicable VMs replication should be made available. If any additional hardware, software or/and licenses are required for this functionality, these should be provided by the bidder at no additional cost to BHEL. (b) Replication should be possible locally (within same datacentre) and/or remote site (between DC & DR). (c) Third party Replication software (not from appliance OEM) are acceptable, however, these should integrate with the hypervisor.	
26	Virtualization	1. Latest version of Industry standard Hypervisor to be provided for all the nodes.2. Virtualization software shall provide a virtualization layer that sits directly on the bare metal server hardware with no dependence on a general-purpose OS for greater reliability and security.3. Hypervisor layer should support features like snapshots / cloning of individual virtual machines, non-disruptive Scale-Up & Scale-Out to grow capacity and/or performance whenever required. It should provide ease of use wizard for snapshot scheduling and instant batch cloning of Virtual machines.4. Virtualization software should provide visibility into storage throughput and latency of hosts and virtual machines that can help in troubleshooting storage performance issues. 5. Virtualization management software should support user role and permission assignment.6. Virtualization management software console shall maintain a record of significant configuration changes and the administrator who initiated them.7. Virtualization management software should have integrated Physical Host and Virtual Machine performance monitoring.8. The solution shall provide the ability to create new virtual machines from scratch or based on templates (created from fully configured virtual machines or ISO images).9. The solution shall provide a centralized interface from which virtual machine across data centre can be configured, moved, monitored and administered.10. Virtualization software shall be able to dynamically allocate and balance computing capacity across collections of hardware resources aggregated	

SR NO	Characteristic	Specification	Compliance
		into one unified resource pool with optional control over movement of virtual machines like restricting or moving VMs to run on selected physical hosts.11. Hypervisor software should support Virtual Machine image like Virtual disk format, OVF, RAW(.img, .raw),ISO.12. Should provide the ability to thin provision disks to avoid allocating all storage space upfront. Full monitoring capabilities & alerts to prevent from accidentally running out of physical storage space should be there.13. Hypervisor must support IPv4, IPv6 and dual stack configuration.14. Virtualization software should be offered with all above features & all the required licenses for operating the offered HCI cluster using a single console.	
27	Support Warranty &	OEM's Premium 24x7 support for the entire contract period should include remote and onsite support, labour, parts warranty.	

1.2 HCI Solution for Data Recovery Requirements

All the resources, as envisaged in DC, shall be applicable for DR as well along with periodic sync with DC.


In case of disruption at DC, the services to be automatically shifted to DR node

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ANNEXURE-2

2. Database

		Compliance
Database	Latest version of Enterprise class Oracle/Microsoft SQL	
Licenses	The bidder shall provide all required database licenses for this deployment at DC and DR. All the licenses required for proper running of the setup shall be provided from Day 1.	
OEM Support	OEM's Premium 24x7 support for the entire contract period should include remote and onsite support, labour, parts warranty.	


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ANNEXURE-3

3. Load Balancer

SR NO	Characteristic	Specification	Compliance
	Make & Model	to be specified by vendor	
1	Solution	ADC Solution for HCI to optimize the availability, performance and security of cloud services and enterprise applications while reducing cost and complexity in the data center. ADC to be deployed in HA in DC and DR.	
2	Application Performance	Dynamic detect - Client connection persistence - Connection multiplexing - TCP buffering - IEEE 802.3ad link aggregation	
3	SSL Acceleration	Hardware SSL processing - SSLv3 and TLSv1 - 4096-bit maximum cipher key size (RSA or ECC) - End-to-end security (Server-side SSL communication) - SSL session reuse and timeout control - Cipher strength reduction - Customizable cipher suite order - Customizable SSL error pages - Sharable to multiple SLB services - SSL selfcheck - Server name indication (SNI)	
4	Platform and performance	1. ADC to have 3Gbps of L7 throughput scalable to 10Gbps with license upgrade. 2. ADC to handle upto 6000 SSL TPS 3. ADC to have Minimum L7 Concurrent connections: 1.5M for 30,000 Users.	
5	Compression	Hardware or software accelerated - Virtualized compression - Inline HTTP processing - Compresses HTML, XML, Java scripts and CSS - Compresses Microsoft file formats (DOC, XLS, PPT) and PDF	
6	Caching	Virtualized, memory-based cache - HTTP 1.1 compliant, policy-based cache	

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SR NO	Characteristic	Specification	Compliance
7	Application Security	Hardened OS - Secure access only, access control based on client certificate; information and access method - Customer configurable SSL/TLS version; cipher suite and minimum cipher strength - Tamper-proof key and certificate protection; ADC should support WAF feature on same ADC OS version through license upgrade; Proxy-based firewall; TCP syn-flood protection; Flash and surge event protection; DoS protection; HTTP access method control; URL filtering; HTTP/DNS cache for mitigating DDoS; Deep application data inspection for dealing with attacks such as SQL injection and cross-site scripting; Detects and responds to known application vulnerabilities; Programmable to deal with future threats	
8	Secure Application Access	AAA support for Security Assertion Markup Language (SAML), LDAP, RADIUS and Open Authorization (OAuth) protocols - Supports definition of multiple AAA methods for multifactor authentication - Supports web single sign-on (SSO) and web single logoff (SLO) - Serves as a SAML SP (service provider) - Supports restriction on number of sessions, session timeout and session reuse	


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SR NO	Characteristic	Specification	Compliance
9	Client Server Management, Auth and Authorization	<p>CSR and private key generation - Self-signed certificate support - Import certificate and private key - Import certificate format - Extensive certificate support - Certificate backup and restore - Wildcard certificate support - Server Name Indication (SNI) Turbo client certificate verification - Root and intermediate CA import - Basic client certificate verification - Certificate chain support - Certificate revocation list (HTTP, FTP, LDAP) - Online certificate status protocol (OCSP, HTTP/HTTPS) - Certificatebased access control - Inside SSL server, two-way certificates</p>	
10	Application Integration	<p>Parse client certificate field information with different language/encoding - Pass individual field/group and field/customer format to back-end applications - HTTP header, URL and cookie - Integrated with proxy rewrite - Detailed SSL statistics</p>	
11	System Management	<p>Centralized cluster management - Secure CLI, WebUI and SSH remote management - XML-RPC for integration with 3rd party management and monitoring - SNMP V2/V3 and private MIBs - Syslog (UDP or TCP) - Administrator and operator account management - E-mail, paging and alerting capability - Multiple configuration files and unit configuration synchronization - Online troubleshooting - Real-time monitoring - Role-based administration control - HTTP/2 support - Top 10 statistics for users of IP, TCP, UDP and ICMP traffic</p>	
12	Support Warranty &	<p>OEM's Premium 24x7 support for the entire contract period should include remote and onsite support, labour, parts warranty.</p>	

ANNEXURE-4

4. TOR & Management Switches

SR NO	Characteristic	Specification	Compliance
	Make & Model	To be specified by vendor	
1	Solution Requirements	Managed Switches for Implementation of HCI Solution and part of HCI Infrastructure and configuration, quantity should be as per requirement of solution	
2	TOR Switch	Form factor: 1U Fiber Ports: Minimum 24 x 10G SFP+ HA Mode: Switches to be configured in High Availability mode All the required SFP modules for connecting TOR switch to HCI nodes to be provided by the bidder	
3	Management Switch	This switch will be used for configuring management interface of HCI and TOR switch nodes. Formfactor: 1U Copper Port: 24 x 1G Base-T Fiber Ports: 02 x 1G SFP	
4	Support & Warranty	OEM's Premium 24x7 support for the entire contract period should include remote and onsite support, labour, parts warranty.	
5	Connectivity	All the cables required for connecting switches to be provided by bidder.	

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ANNEXURE-5 Backup Solution

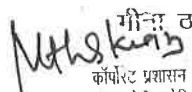
5.1 Disk based backup

SR NO	Characteristic	Specification	Compliance
1	Hardware	<p>Processor: 01 x Intel Xeon/AMD EPYC with 16 Cores</p> <p>Memory: 02 x 32GB RDIMM (Total: 64 GB)</p> <p>Storage: 02 x 1TB SSD RAID1 - For OS and Software 10 x 12TB HDD RAID 5 + HS - For Backup Repository</p> <p>Network I/O: 02 x 10G Base-T</p> <p>Power Supply: 02 x Power Supply</p> <p>HBA: Minimum 8 Gbps FC connectivity with Tape Library</p>	
2	Backup Software	<p>Latest version of compatible backup software with requisite licenses</p> <p>The software to handle both disk based backup as well as tape library based backup</p> <p>Backup success/failure email intimation</p> <p>Backups to be configured as per prevailing BHEL backup policy</p> <p>Restore testing is to be carried out as per prevailing BHEL backup policy</p>	
3	OS	Latest version Windows Server/Linux - with requisite licenses from day 1	
4	Cables Accessories	& all necessary cables - FC, power & accessories should be supplied	
5	Support Warranty	& OEM's Premium 24x7 support for the entire contract period should include remote and onsite support, labour, parts warranty.	

5.2 Tape Library based backup

S. No.	Parameters / Feature	Detailed Specifications	Compliance
1	Make		
2	Model		
3	Tape library	Proposed Tape Library shall be from the industry leading OEMs.	
4	Capacity	2 Nos. of LTO9 tape drives with minimum 40 cartridge slots	
5	Connectivity	Minimum 8 Gbps FC connectivity with Backup Server	
6	Management	Web Based Management	

S. No.	Parameters / Feature	Detailed Specifications	Compliance
7	Scalability	4 Drives and 100 slots	
8	Performance	Minimum 300 MB/s per drive	
9	Redundancy	No single point of failure including Power Supply, FAN etc.	
10	Cartridge Tapes	Barcode labels, 60 Nos. of Cartridge Tapes along with 2 nos. of cleaning Tapes	
11	Mounting	Tape Library must be rack mounted. Rack mounting kits and accessories should be supplied.	
12	Cables & Accessories	all necessary cables - FC, power & accessories should be supplied	
13	Support Warranty &	OEM's Premium 24x7 support for the entire contract period should include remote and onsite support, labour, parts warranty.	


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ANNEXURE-6
Centralized Software

6.1 Time & Attendance Recording Software

Sl no.	BHEL Specification	Compliance (Yes/No)
1	The Time & Attendance recording software to be developed and deployed by the vendor with the provision to configure unit-wise specific/different business rules.	
2	Configuration of time & attendance rules (Annexure-16) for the units/locations as per Annexure-14 added at a later stage to the centralized setup or modification to the existing rules, to be carried out by vendor without any additional cost implication.	
3	Attendance data interface API to be provided by vendor for various requirements like payroll processing etc. as per specifications mentioned in 1.5	
4	Management Information Reports to be available in the proposed Time & Attendance recording software as per Annexure-13. Provision to develop additional reports to be made available in the software.	
5	Role-based (Employee, Manager, HR, IT, Time Office, Unit/HR Heads, etc.) dashboards and reports to be made available for analysis. Sample templates are available at Annexure-15	
6	The key components include (not limited to): <ul style="list-style-type: none"> - Time Management linked to Biometric devices providing real-time visibility to workforce - Leave management - Absence Management - Clock-in and Clock-out Management - Scheduling, Shift Management - Provisions for adhoc hierarchical reporting - Overtime Calculation - Late Night Shift Allowances - Holiday Management - Employee-wise weekly offs - Compensatory Off 	
7	The software to have the capability to record attendance regularizations by employees. After approval by competent authority as per extant business rules, schedules and timesheet of employees to be updated.	
8	Proposed software to have complete audit trail capabilities of changes made to employee's shift, attendance, regularization, access records etc. including information on who made the changes and when	

Sl no.	BHEL Specification	Compliance (Yes/No)
9	The software to provide the option to restrict entries to inactive/ terminated/ retired/ suspended employees on the attendance readers as well as access control readers. Software to check deduplication (already enrolled as a different entity) & Blacklist/ suspended person.	
10	Provision for time-based escalations or reminder notifications for a given task in the approval process	
11	Provision to create unlimited shift patterns like AB, ABC, BAC, CAB etc.	
12	Provide the ability to schedule shifts that cross multiple days (e.g. start at 6:00 p.m. on day one and complete at 2:00 a.m. on day two).	
13	Provision to create shift patterns of varying durations like weekly, monthly, fortnightly, daily or any other Adhoc duration	
14	Provision to schedule shift patterns to be automatically repeated, or rolled forward to future weeks	

6.2 Access Control Software

Sl no.	BHEL Specification	Compliance (Yes/No)
1	The Access control software to capture employee Biometric punch data transactions alongwith facial log both for in-swipe and out-swipe and transfer the data to server for further processing. Vendor to integrate all access control devices at the gates with access control software.	
2	Configuration of access control rules (Annexure-15) for the units/locations as per Annexure-13 added at a later stage to the centralized setup or modification to the existing rules, to be carried out by vendor without any additional cost implication. There should be provision to increase or decrease threshold value in facial device to control FAR situation (if occurs)	
3	Software to support central monitoring and control. If communication to the central control fails, readers shall continue providing access based on the predefined security configuration. Until communication is regained, all event logs and alarms shall be stored locally (based on reader / controller capacity). These events shall be sent to the central server when the communication is regained	
4	Local and global Anti Pass back feature to be available.	

Sl no.	BHEL Specification	Compliance (Yes/No)
5	Each user to be validated / invalidated for a given period by setting the start date and end date.	
6	It shall be possible to assign one or more access groups for each user.	
7	The system to support all the different combinations of identification modes for users as defined in specification of all access control devices	
8	Software to support central monitoring and control. Provision to provide rights to Unit-level administrator to add/delete/modify/update records (shifts, access, reports, etc.) pertaining to their own unit.	

6.3 Meal Booking & Canteen Access Software

Sl. no.	BHEL Specification	Compliance (Yes/No)
1	Vendor shall integrate canteen management software with turnstiles and Biometric Access control based system. The Application would be developed and deployed by the vendor in the Application server. Any modification/customisation to the existing software to be carried out by vendor without any additional cost implication.	
2	Vendor shall provide provision for customising the software so as to cater to different types of users & available canteens.	
3	Provision for booking meals in advance to be made in the online system/mobile app for all users.	
4	Online Dashboard to monitor Daily / weekly/ monthly analysis of meal taken (summary and detailed), Canteen expenditure, Meal planning report and options to add / deduct meals from individuals.	
5	Canteen wise / shift wise meal analysis and reconciliation	
6	Solution should be able to handle multiple counters with different meal rates	
7	Provides salary-debit facility for employees in credit scheme, for canteen facilities used via Integration with existing SAP based payroll system	
8	Facility to maintain various type of masters for Menu, rates, categorization of employees, canteen types, Meal timings	
9	Online dashboard for employees to monitor their daily meal consumptions and allied details	

6.4 Visitor Management Software

Sl. no.	BHEL Specification	Compliance (Yes/No)
1	Integrated with ACS and RFID cards	
2	Software to be accessible from desktop/laptop and to have access to printer and webcam (provided by BHEL)	
3	Provision for Visitor Registration (RFID card details, personal details, area/official to be visited, nature of visit, etc) with advanced/real-time approvals by BHEL employees	
4	Software and hardware controlled entry & exit building wise and floor wise. Provision to update access privilege and authorizations of visitors.	
5	Rule engine for visitor entry / exit, total hours, access location and time	
6	Frequent visitor, regular visitor, VIP visitors, also clear bifurcation of domestic and international visitors	
7	Quick gate pass generation facility for regular and frequent visitor	
8	Provision for single / multiple entry in a day or in multiple days	
9	VMS shall be installed on application server and will be accessible from PCs installed at BHEL Premises.	
10	Retention of visitor details and access details for a period of minimum 2 years	
11	Provision for printing visitor slip	
12	Evacuation management and alerts and notification to all visitors	
13	Security consideration for visitor data, all visitor data to be encrypted	

6.5 API specifications

Sl. no.	BHEL Specification	Compliance (Yes/No)
	Vendor to provide APIs meeting the following requirements not limited to:	
1	Access time and attendance data unit-wise, employee-wise, cadre-wise, grade-wise, shift-wise, date-wise, etc.	
2	Read, add, modify, delimit employee data	
3	Read, modify employee shift, weekly-off, compensatory-off, holiday calendar, leave data etc.	
4	Read, modify, delimit/revoke user access privileges	
5	Assign, transfer & revoke biometric templates to reader/group of readers	

6	Read/check status of readers/devices/machines	
7	Access employee biometric template in raw format	
8	Provides salary-debit facility for employees in credit scheme, for canteen facilities used via Integration with existing SAP based payroll system	

6.6 Device Control Application

Sl no	BHEL Specification	Compliance (Yes/No)
1	The software should have a central management module to remotely manage all the attendance and access control readers/devices/machines deployed across all the locations.	
2	The software to check the status of the readers / controllers on regular intervals.	
3	Provision to add & integrate new readers/devices to the existing setup.	
4	Assign, transfer & revoke devices to one or multiple groups	

6.7 Common Points for Centralized Software

Sl no.	BHEL Specification	Compliance (Yes/No)
1	The software developed shall conform to the latest cyber-security norms.	
2	All data over the network between the reader/ controller and the server to be encrypted and secured through SSL.	
3	Transmissions from the web-based application are to be kept secure through SSL	
4	All software/firmware/security upgrades to be downloadable through the network to the reader / controller.	
5	There can be multiple operators/administrators with hierarchical controls. System to be accessible only after valid authentication.	
6	Remediations of the non-conformities identified in Vulnerability Assessment/Penetration testing of the solution conducted by BHEL/Vendor/Third Party at periodic intervals to be addressed immediately by the vendor.	

Sl no.	BHEL Specification	Compliance (Yes/No)
7	The system to be accessible to all users based on their rights over the web/ mobile app by entering a user id and password. The Software to be user-friendly & web/ mobile app based so that the administrator / operator / user can access the software console from any location within BHEL Network or Outside BHEL via mobile app. The customized mobile app has to be provided by vendor to provide data like punch records, unauthorized absence, leave data etc. to employees.	
8	To support report scheduling and delivery of scheduled reports either through e-mail or file system share. Auto mailer for reporting based on users rights and roles	
9	To support Visualization tools such as maps, gauges, and charts, indicators. Graphical Reports (like bar charts, pie charts) to be available.	
10	Provision for giving selective user rights	
11	All reports to support export to external files (device) in known formats like MS Excel, CSV, PDF etc.	
12	Provision to send customized reports by selecting fields and by entering customized messages to a select group/department/individual using email	
13	That part of the software including reporting module developed using BHEL Business rules will be property of BHEL. System documentation should be provided and any changes should be updated accordingly. This Software along with source code, customization code / objects / libraries shall be handed over to BHEL.	
14	There should not be any transaction data loss	
15	The data archival and back up shall be part of the system architecture and process.	
16	The software shall support a fault tolerant server i.e. in the event of a server failure, the system shall automatically switch over to HA node from the primary node without impeding the operation of the software.	

Sl no.	BHEL Specification	Compliance (Yes/No)
17	The software to support an import utility that provides importing of user information into the attendance database from BHEL database	
18	The software to do bulk user addition	
19	The software to store user information along with photographs for each user.	
20	The software to allow data to be imported or exported in real time or as a batch operation.	

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ANNEXURE 7

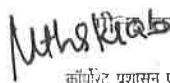
7. Technical Specifications of Enrollment Unit

Sl no.	Description	BHEL Specification	Compliance (Yes / No)
	Make & Model	To be specified by Vendor.....	
1	Usage	Enrollment station shall be used for various administrative function like creating / deleting system operators and managing their profiles / passwords, hardware management, smart card programming / preparation, capture template for all types of readers, card enrollment, card/user modification, system configurations, photo badging & smart card printing, system archiving etc.	
2	Requirements	Each enrollment station shall include a laptop (as per Point no.11), imaging printer, facial recognition enrollment kit, smart card encoder/programmer, HD Quality digital photo camera (as per Point no.10) along with photography setup & photo card preparation module, relevant software.	
3		It should be possible to import previously captured images	
4		Facial pattern template per employee shall be registered and stored in system	
5	Encoder/ Programmer Card Compatibility	Mifare or HiD iClass-has been mentioned in the smart card unit	
5.1	Card Encoding Time	Less than 5 seconds	
6	Communication Interface	High speed USB 3.0 or better	
7	Frequency	Minimum 13.56 MHz	
8	Facial Recognition template capture	Camera	
8.1	Capture formats	Facial image templates	
8.2	Facial Recognition Enrollment time	< 10 secs	
9	Card Preview and Printing	Vendor should be able to print the card on the printer after image has been accessed and layout selected. It should have print preview option before printing	

Sl no.	Description	BHEL Specification	Compliance (Yes / No)
9.1	Card Printer	High Definition - Dye Sublimation / Resin Thermal transfer; 300 dpi Print Resolution; 16.7 million colour or better; Print Speed 30 seconds/card for CMYKO (Cyan, Magenta, Yellow, Black, Overlay) printing; Washable, Replaceable card cleaning rollers; CR80 (2.125" H x 3.375" W) Card Stock; Print within 2mm of Card Edge; Card Hopper Feeder with Minimum 100 Card Capacity; Simultaneous Dual Sided Lamination; Capable of buffering cards queued for printing	
9.2	Print Cartridges	Sufficient number of cartridges to prepare Smart Cards as mentioned in the tender scope	
10	Camera Enrolment	for HD Quality (1920 x 1080 or higher) Digital Camera	
11	Laptop	1. X-86 Architecture Based, 64-Bit Supported Microprocessor with minimum 8 cores and 12 Threads, base frequency of 1.7 Ghz or higher, turbo boost of 4.2Ghz or higher, 15W TDP (or lower). 2. 12MB Cache or Higher 3. Matching Chipset for the quoted Processor 4. On-board Graphics feature compatible with supplied OS 5. Minimum 16 GB RAM 3200MHz SDRAM upgradeable to 32 GB. 6. 512 GB PCIe NVMe SSD M.2 Hard Drive or higher 7. Minimum 14" high definition anti-glare LED back lit Screen 8. Spill proof/Resistant, backlit keyboard with full size keys 9. Integrated High definition audio with integrated speakers and volume control (Hardware/Software). Single audio jack (single pin) for connecting ear phones and mic 10. Integrated 100/1000 Mbps port 11. Integrated Wi-Fi 6, supporting industry standard IEEE 802.11ax + Bluetooth 5.0 or higher 12. Minimum 2 x USB 3.1 Ports, 1 x Type C, Stereo headphone/ microphone combo jack, 1 x HDMI Port. 1 x RJ - 45 13. Minimum 3-cell battery capable of providing 6 hours or more backup in standard business environment, ACPI Compliant.	

Sl no.	Description	BHEL Specification	Compliance (Yes / No)
		<p>14. OEM AC Adaptor suitable for 230V supply</p> <p>15. Should come pre-installed with Windows 11 Professional Edition or latest version with 64bit latest service pack. The latest system drivers should be available on OEM's website for the entire contract period.</p> <p>16. OEM carry bag to be supplied.</p> <p>17. Certification: (a) OS Certification from Microsoft</p> <p>(b) For OEM: ISO 9001 (Latest version)</p> <p>18. OEM warranty including battery (labour, parts, on-site) for the entire contract period</p>	
12	Body Type	The system to be Impact resistant, scratch resistant, weather durable and corrosion free.	
13	Stand	Proper stand shall be provided to mount the camera on LCD including universal clips for Monitor and laptop	
14	Signature Pad & Pen	Digital Signature Pad & Pen along with compatible software for digitizing employee signature, USB Interface	
15	Unicode Compatibility	System should be Unicode compatible so that entries/printing can be made in Hindi also	
16		Photography, facial recognition enrollment, card preparation and lanyard with Card Holder shall be in the scope of successful bidder	

Sl no.	Description	BHEL Specification	Compliance (Yes / No)
17	Data Transfer	The system should have facility of transferring the data to central server for storage and retrieval and report generation	
18	Certifications	CE, FCC, RoHS, BIS	
19	Enrollment Application	Smart UI / UX for Enrollment and Registration Application, Step wise enrollment process and biometric login facility for Operators, Capable to Enroll Employee, Visitor, Contractor Staff etc in single application and Operator can use based on rights given to various desk	
20	Image Quality	High Quality image in dry, wet and dirt conditions. The software should accept images with high quality levels , or accept best of five attempts.	


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ANNEXURE 8

8. Common Technical Specifications of Facial Recognition Device

Sr No.	Description	BHEL Specification	Remarks	Compliance (Yes/No)
1	Make & Model	To be specified by Vendor.....		
2	Authentication Modes	Facial Recognition/ Card / Facial Recognition + card		
3	Authentication Method	1:1 and 1: N		
4	Device Type	Facial recognition reader with Smart Card Reader		
5	Camera	Dual Camera (Color & IR) ,2MP Surveillance Grade		
6	Camera Sensor Operation	It should be capable of authenticating users of different heights. It must be capable of detecting and authenticating the face either through device capability or inbuilt LED light in extreme dark/ daylight environment.		
7	Live Face Detection Method	System should be intelligent enough to accept only live faces and prevent security breach by a face in a recorded video, live stream, a photograph or any other means.		
8	Face Authentication Distance	50-120 cm with Auto face detection, Wide angle detection for users of different heights		
9	Processor	Minimum ARM Cortex/Intel/AMD Quad Core, 64-Bit, 1.4GHz Processor release year should on or after 2021		
10	RAM	Minimum LP-DDR4, Min 2 GB (5000 Face templates), minimum 4 GB(15000 Face templates)		
11	FAR / FRR	<0.001% FAR (False acceptance ratio) ; <0.01% FRR (False rejection ratio)		
12	Graphical Display	Backlit graphical LCD or advanced display of minimum Resolution: 880 x 620 Pixel and size of min 3.5" IPS Display with Capacitive Touch Panel or higher to show user details or any other information but not limited to name of employee, staff number, photo, punch time , Network connectivity, Device ID & IP etc.		
13	Transaction Storage	Min 2,50,000 transactions (Each transaction consists of date, time, card number, key code, error code, device mode, reader number, slno, facial log etc.).		
14	Card Reader	Card reader shall be capable of reading the selected card technologies (HID iClass / Mifare within 13.56 MHz range). The protocol of data from the reader shall be an open format and non-proprietary. There should be provision to increase or decrease threshold value of matching facial data in facial device to control FAR situation (if occurs)		
15	Card Read Range	within 50 mm		
16	Body Type	Minimum Requirement is IP 65 Protection.		

Sr No.	Description	BHEL Specification	Remarks	Compliance (Yes/No)
		The system has to be Impact resistant, scratch resistant, weather durable and corrosion free. Canopy/shed type enclosures are to be provided wherever required.		
17	Mounting	The readers to be mounted on SS Pedestal/ MS pole (stand) / wall for ease of operation and accessibility.		
18	Spares	Sufficient spares to be maintained to meet contingencies to maintain uptime. Fault of one reader should not affect the operations of other readers in the network.		
19	Quality	Reader shall be manufactured using the latest and most accurate state of the art biometric technology like Auto Face detection, Fake Face Detection, Auto Push, real time face recognition, multi-threading and shall support high speed processing.		
20	Seamless operation	Template uploading from Central server shall not affect the normal working of Reader.		
21	Communication with Server	Reader should communicate with central server using TCP/IP protocol over Ethernet or Internet, 10/100 Mbps or higher auto sensing Ethernet with DHCP, SSL, IPv4 and IPv6 Support (Optional)		
22	Fault Detection	In the event of reader failure / malfunction / tempering, it shall be capable of being detected by the server and appropriate alarms shall be generated at workstations/ server. Fault of one reader should not affect the operations of other readers in the network. Also mail to ADMIN/ Superuser shall be triggered		
23	A/V Indicators	It shall be capable to provide a unique tone (70 db) and / or tonal sequence for various status conditions such as attendance marked / denied, access granted / denied, reader power condition etc and clear visual LED indications (Multi-color) shall be provided for various status conditions		
24	Centralised Monitoring	It should be possible to configure, manage and diagnose multiple geographically dispersed readers from a central desktop application without custom programming		
25	Clock	Shall have built-in RTC (real time clock) Calendar. Should be able to sync the clock with the central server / NTP server.		
26	Power	Shall have built-in or external power supply required for internal operations. Should be able to work with 220-240V single phase power supply		

Sr No.	Description	BHEL Specification	Remarks	Compliance (Yes/No)
27	Battery Backup Battery Refresh	SMF (Sealed Maintenance Free) Batteries for backup of min. 4 hours. Should be able to control EM locks. 01 EM lock should be provided by the vendor. Lithium battery to maintain data in RAM and supply power for the on-board RTC etc. The bidder shall compulsorily replace all the batteries after 3 years and as and when the batteries get faulty during the entire lease period		
28	Environmental	Device shall have working temperature range of 0 to 50 degree C and humidity range of 10% to 80% RH non-condensing		
29	Availability of Data	The solution should be able to download punch information of employees from the readers in auto-push real-time mode. There should be no batch process required. Also, if required in case of LAN network failure, Power outage or any other possible interruption in DB Server etc., communications with server should be performed at regularly scheduled intervals or preset times, or on an "on demand" or "when available" basis.		
30	Software / Firmware Updates	Software/Firmware updates should be possible through network/communication Port and Software/Firmware updates to be provided free of cost during lease period.		
31	Replacement	Should be of Plug and Play Type. Should be possible to replace the faulty reader/ sensor or camera module without needing to reprogram the control unit.		
32	Biometric Modalities	The device should support Face+Mifare card/HID iClass card based solution The reader, face detection cameras, battery or any other components are to be enclosed in the same unit		
33	ESD	>=1 kV. (All the devices should be properly earthed).		
34	Certifications	CE, FCC, RoHS, BIS		
35	Communication Interface	Relay, TCP/IP, RS485, USB (Optional)		
36	Integration with Tower Lights	The Tower lights being procured should be installed with these Readers and should indicate "GREEN" colour for access granted and "RED" colour for access denied		
36	Data Security	Minimum AES 128 bit data encryption		
37	Make in India	Yes		
38	Operating system	Linux / Android		

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Sr No.	Description	BHEL Specification	Remarks	Compliance (Yes/No)
39	Bi-directional access	Provision to use same reader for both IN as well as OUT in multi-shift environment on 24x7 basis i.e. in same workplace there may be different shifts going on and logic to be built based on shift timings of a particular employee / group of employees		
40	Functionality in offline modes	The readers should function in 100% offline mode without dependency on network both at the gates and work places. The biometric validation should be done within the reader in 100% offline mode. When the employee faces the reader, reader authenticates the templates with already available templates in the reader's memory and accordingly decision is made. Access (IN/OUT) movements should be provided only after validation of business rules even in offline mode (no network).It should be able to send all events once connectivity is re-established (employees must be able to punch- in/ out for shift or lunch break during offline condition). Should work on First-In-First-Out mode.		
41	Reader Dump	There should be a facility for getting reader dump (of all the transaction data) online directly, by-passing the management software with proper authentication (username/password).		
42	MAC Address	MAC (Media Access Control) addresses of the quoted devices should be registered in the name of OEM		

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ANNEXURE - 9
Facial Recognition Device

9.1 Type I : Technical Specifications of Wall Mount Facial Recognition Device

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Make & Model	To be specified by Vendor.....	
2	Device	High End Standalone Wall Mount Facial Recognition Device for Attendance Recording	
3	Users Storage	Min. 5000	
4	Card Authentication Time	(1:5000) <2 secs	

Face Recognition Reader

Refer Annexure 8 for Facial Recognition Device technical specification

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Authentication Time for face recognition	(1:5000) <2 secs	
2	User Turnaround Time for face recognition	Less than 3 Second per user (1:5000) including capture, matching and audio / visual validation	

9.2 Type -II Technical Specifications - Facial Recognition Device for Access Control at Gates

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Make & Model	To be specified by Vendor.....	
2	Device	High End Standalone Facial Recognition Device for Gate Access Recording	
3	Users Storage	Each machine individually should be capable of storing employee information/ employee profile/ master data (Min 15,000 users) for local validation.	

Face Recognition Reader

Refer Annexure 8 for Facial Recognition Device technical specification

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Authentication Time for face recognition	(1:15000) <2 secs	
2	User Turnaround Time for face recognition	Less than 3 Second per user (1:15000) including capture, matching and audio / visual validation	

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9.3 Type - III Technical Specifications - Portable Facial Recognition Device with Wi-Fi connectivity (For Access Control at Gates Emergency/ sudden breakdown situation & for Suspend employees)

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Make & Model	To be specified by Vendor.....	
2	Device	High End Standalone Wall Mount Facial Recognition Device for Attendance Recording for Breakdown	
3	Communication Interface	USB, 2 I/O inputs, relay, Wiegand	
		TCP/IP using RJ45 and in-build Wi-Fi	
		Device should support IEEE 802.11a/b/g/n compatible networks with Security	

Face Recognition Reader

Annexure 8 for Facial Recognition Device technical specification

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Authentication Time for face recognition	(1:15000) <2 secs	
2	User Turnaround Time for face recognition	Less than 3 Second per user (1:5000) including capture, matching and audio / visual validation	

9.4 Type - IV - Facial Recognition Device reader with cellular connectivity and RFID card reader (For locations in Township where LAN connection is not available)

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Make & Model	To be specified by Vendor.....	
2	Device	High End Standalone Wall Mount Facial Recognition Device with cellular connectivity for Attendance Recording	
3	Communication Interface	It should support cellular connectivity for wireless communication with application server web interface through https protocol. USB, Min. 1 nos. I/O inputs, relay, Wiegand TCP/IP using RJ45, Cellular Connectivity	

Face Recognition Reader

Annexure 8 for Facial Recognition Device technical specification

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Authentication Time for face recognition	(1:5000) <2 secs	

2	User Turnaround Time for face recognition	Less than 3 Second per user (1:5000) including capture, matching and audio / visual validation	
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9.5 Type-V- Technical Specifications - Face recognition reader with card reader (Access Control at Gates) and Keypad

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Make & Model	To be specified by Vendor.....	
2	Device	High End Standalone Wall Mount Facial Integration Recognition Device for Gate Access Recording	
3	Users Storage	Each machine individually should be capable of storing employee information/ employee profile/ master data (Min 15,000 users) for local validation.	
4	Reader Special Key Functionality	For the special key code operations i.e. 01 to XX, the reader will validate whether the employee has permission to avail that particular special movement at that moment and accordingly accept or reject the request. The complete details and logic for validation of the special movements 01 to XX will be a part of HR business rules.	

Face Recognition Reader

Refer Annexure 8 for Facial Recognition Device technical specification

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Authentication Time for face recognition	(1:15000) <2 secs	
2	User Turnaround Time for face recognition	Less than 3 Second per user (1:20000) including capture, matching and audio / visual validation	

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ANNEXURE-10
Turnstile

10. Technical Specifications of Turnstile

Sr No.	Description	BHEL Specification	Compliance (Yes/No)	Vendor's Remarks
1	Make & Model	Please Specify		
2	Tripod Turnstile	Three Cylindrical Arms of Stainless Steel		
3		Motorized drive mechanism (Motorized with either Servo Motor or Direct Drive Technology (Electro Mechanical and Only Mechanical are not accepted) 100% duty cycle high performance high torque motorised drive system providing bi-directional control of pedestrian passage in excess of 10 million maintenance free cycles of operation or a minimum of 7 years in a pedestrian gate application, integrated resolver for precise positioning feedback, high output torque for fast acceleration and deceleration. The above has to be certified by OEM on his letter head. Tripod should perform with Normally Close condition. References of vendor sites where the proposed model is working for last 4 years or more should be provided.		
		Stainless steel SS304; ; stainless steel face panel for mounting of peripheral components such as card readers, etc		
4		Mechanism to have Rotating Speed Adjustable/ Configurable		
5		Allows only one user to enter at a time.		
6		The tripod arms should not have the sharp ends to catch clothing		

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Sr No.	Description	BHEL Specification	Compliance (Yes/No)	Vendor's Remarks
7	Rotation	Rotate 120 Deg and Stop. Rotate 3 x 120 degree pivot arms and stop/locked in normal position. It should not get locked in improper position. The turnstile should get unlocked for rotation by user only after successful validation. In all other situations/conditions, the turnstiles should be in locked position only and user should not be able to rotate the turnstile. In case the turnstiles gets locked in improper position (other than home position), an alternate mechanism should be provided physically at the turnstile housing to bring to home position.		
8	Operation	Bi Directional Super smooth arm movements with minimal force and no kickback for utmost safety - will not spring forward at end of travel (i.e. hit child in back of head) Forced entry/exit and impact detection Card readers/keypad mounting plates standard (Flush Mounted) - The power and network cables connected to readers should be completely concealed and not available for access to users. Card readers/keypad mounting plates standard (Flush Mounted) - The power and network cables connected to readers should be completely concealed and not available for access to users. High speed, noise free and maintenance free operation The turnstiles should have drop arm feature during emergency situations Easy to program controller for common lane configurations Adjustable hold and open time		
9	Walk way	515 mm passage width + 50 mm clearance		
10	Integration	Should be integrable / configurable with the Gate Access Face & Palm Type -III Reader		

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Sr No.	Description	BHEL Specification	Compliance (Yes/No)	Vendor's Remarks
11	Fail Safe Mode / Fail Lock Mode	Fail safe Mode: In the event of power failure or switched off, tripod arms will be free to rotate in either direction/should drop and allow free passage for both directions Fail Locked mode: Tripod arms can be locked in case of power failure or switched off		
12	Anchoring	Turnstile Bolted to the floor using anchor bolt		
13		Dust proof body covering the mechanical system ensuring long life.		
14	Safety	The gates are electrically insulated to avoid electrical shock. (complete body of turnstile should be earthed)		
15	Locking	Locking mechanism to prevent tripod rotating in the opposite direction once it has travelled 25 degree past the rest position.		
16	Seamless operations	Self-centering mechanism should be smooth. No hydraulic damper or mechanical limit switch should be used		
17	Security	Positive action lock to prevent two passage at one time.		
18	Certification	CE Certified against Electrical & EMC Safety		
19	Height of rotor arm from ground	Min 840mm. Total system height and length of rotating arm shall be suitable according to walkway dimension.		
20	Opening Time	< 2 secs		
21	Protection Level	IP 54, TUV/BIS certificate for IP rating to be submitted		
22	Temperature	0 to 50 degree C		
23	Humidity	Humidity: 10% to 80% (non-condensing)		
24	Power	220-240 VAC Single phase @50Hz		
25	Quality	The case work must be of corrosion resistant stainless steel grade 316/304		
26	Housing Dimension (L X W X H)	(1200-1300) x (220-260) x (1000- 1050) mm approximately.		

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Sr No.	Description	BHEL Specification	Compliance (Yes/No)	Vendor's Remarks
27	Construction	One standard width dual pedestal housing with minimum 400mm arm length, 3 x 120 degree pivot arms, high performance high torque Motorised drive system designed for an excess of 10 million maintenance free cycles of operation, 100% duty cycle, 0.5s open/close time, minimum 30 persons per minute. Should have lane indicator: Dust proof body covering the mechanical system ensuring long life. Semi-Outdoor. To be installed under a canopy / RCC structure		
28	Controller	Motor Controller using the latest Micro processor technology allowing for very accurate control of torque, speed, acceleration and deceleration parameters of the motor in any position resulting in highly dynamic operation; extremely fast reactions in abnormal situations such as impact detection or forced entry/exit attempts; closed loop operation for precise positioning; ramping up and ramping down configuration; fully adjustable speed; resolver input for position feedback; LED indicators for operation and error diagnostics		
29	Performance Requirement	MCBF (Mean Cycles Before Failure)- 10 Mil Cycles. MTTR (Mean Time To Repair/Rectify)- 30 Minutes. For the above 2 points, references of vendor sites where the proposed model is working for last 7 years or more should be provided.		

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ANNEXURE -11
Boom Barrier

11.1 Technical Specifications of 6m Boom Barrier

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Make & Model	To be specified by Vendor.....	
2	Lane width	Max. 6.0 m	
3	Opening/closing time	maximum 6 sec, TUV/BIS certificate for open/close time to be submitted	
4	Power consumption	Maximum 150 W	
5	Voltage	AC110V or AC220V, 50/60 Hz	
6	Duty cycle	100%	
7	Housing dimensions (W x D x H)	(300-350) x (280-360) x (900-1100)mm	
8	Enclosure rating	IP 54, TUV/BIS certificate for IP rating to be submitted	
9	Temperature range	-5 °C to +50 °C or better range	
10	Integrated 2-channel detector for induction loops	Standard	
11	Modular expansion of control system	Freely expandable	
12	Variable I/O assignment	Standard	
13	No. of digital inputs	8	
14	No. of relays/digital outputs	6/4	
15	Input with test for safety light barrier/ Laser scanner	1	
16	Selectable closing speed	Standard	
17	Barrier Weight	Minimum 40 Kg (except Boom)	
18	Built-in delay auto-closing and reverse on obstacle in case of resistance	Yes	
19	Certifications	CE Certified against Electrical & EMC Safety	

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11.2 Technical Specifications of 4m Boom Barrier

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Make & Model	To be specified by Vendor.....	
2	Lane width	Max. 4.0 m	
3	Opening/closing time	maximum 5 sec TUV/BIS certificate for open/close time to be submitted	
4	Power consumption	Maximum 120 W	
5	Voltage	AC110V or AC220V, 50/60 Hz	
6	Duty cycle	100%	
7	Housing dimensions (W x D x H)	(300-350) x (280-360) x (900-1100)mm	
8	Enclosure rating	IP 54, TUV/BIS certificate for IP rating to be submitted	
9	Temperature range	-5 °C to +50 °C or better range	
10	Integrated 2-channel detector for induction loops	Standard	
11	Modular expansion of control system	Freely expandable	
12	Variable I/O assignment	Standard	
13	No. of digital inputs	8	
14	No. of relays/digital outputs	6/4	
15	Input with test for safety light barrier/ Laser scanner	1	
16	Selectable closing speed	Standard	
17	Barrier Weight	Minimum 35 Kg (except Boom)	
18	Built-in delay auto-closing and reverse on obstacle in case of resistance	Yes	
19	Certifications	CE Certified against Electrical & EMC Safety	

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11.3 Technical Specifications of 1m Boom Barrier

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Make & Model	To be specified by Vendor.....	
2	Lane width	Max. 1.0 m	
3	Opening/closing time	maximum 5 sec TUV/BIS certificate for open/close time to be submitted	
4	Power consumption	Maximum 100 W	
5	Voltage	AC110V or AC220V, 50/60 Hz	
6	Duty cycle	100%	
7	Housing dimensions (W x D x H)	(300-350) x (280-360) x (900-1100)mm	
8	Enclosure rating	IP 54, TUV/BIS certificate for IP rating to be submitted	
9	Temperature range	-5 °C to +50 °C or better range	
10	Integrated 2-channel detector for induction loops	Standard	
11	Modular expansion of control system	Freely expandable	
12	Variable I/O assignment	Standard	
13	No. of digital inputs	8	
14	No. of relays/digital outputs	6/4	
15	Input with test for safety light barrier/ Laser scanner	1	
16	Selectable closing speed	Standard	
17	Barrier Weight	Minimum 30 Kg (except Boom)	
18	Built-in delay auto-closing and reverse on obstacle in case of resistance	Yes	
19	Certifications	CE Certified against Electrical & EMC Safety	

ANNEXURE - 12
Tower Lights

12. Technical Specifications of Tower Lights

Sr No.	Description	BHEL Specification	Compliance (Yes/No)
1	Make & Model	To be specified by Vendor.....	
2		2-in-1, Tower Light	
3	Integration	Should support integration with Type III, IV, V based reader as mentioned for all gate access device.	
4	Mounting	Should be mountable on top of above mentioned readers/ scanners/ Reader Stand	
5	Light Source/Lamp Style	LED based light	
6	Operating Temperature	0 to 50 Degree C	
7	Rating	IP65	
8	Quality	Vibration resistant	
9		configurable to steady or flashing mode	
10	Requirement	Pre-wired and pre-assembled with min 100mm pole (excluding height of Light)	
11	Diameter of Light	Min 80 mm	
12	Height of Light	Min 60 mm	
13	Light Colors	Red and Green in the same lens	
14		LED Lamp, Pipe Mount Base and Flasher	
15	Certification	CE & UL / BIS Compliant	

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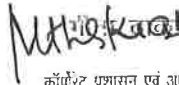
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ANNEXURE -13
Smart Card

13. Technical Specifications of Employee Smart Cards

Sr No.	Description	BHEL Specification	Compliance (Yes/No)	Vendor's Remarks
1	Make & Model	To be specified by Vendor.....		
2	Memory	Card shall have minimum 4 KB memory and to be compatible with Mifare or HID iClass platform for storing and accessing data items		
3	Quality	Card shall be laminated and color coded as per the type of user. Colour fading and card damage due to inferior quality lamination shall be replaced by vendor.		
4	Encryption	Shall support DES, TDES, 3KT DES & AES cryptography. Data inside the card shall be secured with minimum 64 bit encryption so that data can't be modified or accessed until the card and the reader have completed mutual authentication		
5	Material	Card shall be durable, made of PVC and meet ISO 7810 standard for length, width, thickness and construction. Card shall be resistant to alcohol, Fuel, sweat etc. It should be capable of direct two sided dye-sublimation or thermal transfer printing so that cardholder information / images, instructions shall be printed directly onto card.		
6	Standard Compliance	Compliance to ISO/IEC 14443A		
7	Frequency	Contactless smart chip operating at 13.56 MHz		
8	Others	Smart card shall be supplied with 1 meter lanyard (with BHEL logo preprinted at defined distance intervals) and a solid / rigid plastic card holder with slots for clip or lanyard with Card Holder		

Sr No.	Description	BHEL Specification	Compliance (Yes/No)	Vendor's Remarks
9	Warranty	Card shall be warranted against defect in material and workmanship for lifetime		
10	Environmental	Temperature 0 to 50 degree C; 10% to 80% RH non-condensing		
11	Additional Cards	Additional cards along with preparation, if any will be on the same rates		
12	Distance Recognition of	The card can be used as proximity card within a distance of 50 mm from surface of the reader.		
13	Operation	Compatible with swing barrier gates & EM locks		
14	Multiple Access	The same card should permit user to enter different work premises as per requirement		

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ANNEXURE -14

14. Technical Specifications of Miscellaneous Items

Description			Compliance (Yes/No)	Vendor's Remarks
14.1. Specifications of UTP (Unshielded twisted pair) Cable / RJ45 Connectors				
Make	To be specified by Vendor.....			
1	Cat 6	Should meet minimum Category 6 requirements		
2	Type of Conductors	4 Pair 23 AWG Conductors		
3	Frequency	Characterized to 250 MHz		
4	Standards	TIA/EIA 568B, ISO Class E 11801-2002		
5	Gigabit Requirements	Should meet or exceed Gigabit Ethernet Requirements at 100 mtrs		
6	Connectors	Compatible with cable		
7	Length of the cable	As per the requirement		
8	Qty. of the connector	As per the requirement		
14.2. Specifications of PVC Conduit				
Make	To be specified by Vendor.....			
1	1" PVC Pipe, Medium Strength. ISI Mark			
2	Length of the conduit pipe	As per the requirement		
14.3. Specifications of MS Conduit Pipe				
Make	To be specified by Vendor.....			
1	1" MS Pipe, Medium Strength, ISI Mark, Minimum Wall Thickness 1.6mm			
2	Length of the conduit pipe	As per the requirement		
14.4. Specifications of Power Cable				
Make	To be specified by Vendor.....			
1	3 Core Multi-strand Flexible Copper Power Cable of size 1.5 Sqmm Suitable for Connecting readers / controllers / barriers			
2	Length of the cable	As per the requirement		

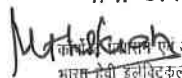
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ANNEXURE-15

15.1. Installation and Commissioning

Sl. no.	Description	BHEL Specification	Compliance (Yes/No)
1	Installation and commissioning	Project installation is in the scope of vendor ATP (Acceptance Test Plan) is in the scope of BHEL Commencement of contract period will be after ATP	
2	Manpower	Maintenance personnel viz. Hardware Engineers and Software Engineers (as per BoQ) shall be stationed at BHEL locations during contract period, for upkeep and maintenance of the equipment and for developing and maintaining the attendance recording, access control and canteen management systems and for Adhoc Management Information Reports generation.	


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ANNEXURE-16

16. Auto Swing Barriers

16.1 Auto Swing Barriers 1-Lane PWD

Sl no.	Description	BHEL Specification	Compliance (Yes/No)
1	Automatic Swing Barriers Gates (1 lane) and make it compatible with Face recognition Devices (and through RFID card also) physically handicapped (PH) compatible	1. Material : Stainless Steel Grade 304 and scratch proof / laminated acrylic flap 2. Dimension (Range) : (L) - 1200 - 1500 mm (W) - 180 - 200 mm (H) - 980 - 1100 mm 3. Flap Size : 425 mm - 450 mm 4. For Access width - 900 mm 5. Compatible with Face recognition device (access control) 6. Swing direction : Two ways 7. Pass rate : 20 - 30 person / minute 8. SOFTWARE CONTROLLED ENTRY & EXIT 9. PROVISION FOR MANUAL KEY (EMERGENCY) 10. In case of emergency/power failure, swings should be fully open 11. Make In India 12. LED indicator for entry & no entry 13. Mean Cycle between failure (MCBF) : Minimum 50,00,000 14. Power Supply : 230 Volt / 50 Hz	

16.2 Auto Swing Barriers 2-Lane PWD

Sl no.	Description	BHEL Specification	Compliance (Yes/No)
1	Automatic Swing Barriers Gates (2 / Multi lane) and make it compatible with Face recognition Devices (and through RFID card also) and physically handicapped (PH) compatible	1. Material: Stainless Steel Grade 304 and scratch proof / laminated acrylic flap 2. Dimension (Range): (L) - 1200 - 1500 mm (W) - 180 - 200 mm (H) - 980 - 1100 mm 3. Flap Size: 250 mm - 300 mm & 425 mm - 450 mm 4. For Access width - 600 mm on one side and 900 mm on second side 5. Compatible with Face recognition device (access control) 6. Swing direction: Two ways 7. Pass rate: 20 - 30 person / minute 8. SOFTWARE CONTROLLED ENTRY & EXIT 9. PROVISION FOR MANUAL KEY (EMERGENCY) 10. In case of emergency/power failure, swings should be fully open 11. Make In India 12. LED indicator for entry & no entry 13. Mean Cycle between failure (MCBF):	

	Minimum 14. Power Supply: 230 Volt / 50 Hz	50,00,000
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16.3 Auto Swing Barriers 1-Lane

Sl no.	Description	BHEL Specification	Compliance (Yes/No)
1	Automatic Swing Barriers Gates (1 lane) and make it compatible with Face recognition Devices (and through RFID card also)	1. Material : Stainless Steel Grade 304 and scratch proof / laminated acrylic flap 2. Dimension (Range): (L) - 1200 - 1500 mm (W) - 180 - 200 mm (H) - 980 - 1100 mm 3. Flap Size: 250 mm - 300 mm 4. For Access width - 600 mm 5. Compatible with Face recognition device (access control) 6. Swing direction: Two ways 7. Pass rate: 20 - 30 person / minute 8. SOFTWARE CONTROLLED ENTRY & EXIT 9. PROVISION FOR MANUAL KEY (EMERGENCY) 10. In case of emergency/power failure, swings should be fully open 11. Make In India 12. LED indicator for entry & no entry 13. Mean Cycle between failure (MCBF) : Minimum 50,00,000 14. Power Supply : 230 Volt / 50 Hz	

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16.4 Auto Swing Barriers 2-Lane

Sl no.	Description	BHEL Specification	Compliance (Yes/No)
1	Automatic Swing Barriers Gates (2 / Multi lane) and make it compatible with Face recognition Devices (and through RFID card also)	1. Material: Stainless Steel Grade 304 and scratch proof / laminated acrylic flap 2. Dimension (Range): (L) - 1200 - 1500 mm (W) - 180 - 200 mm (H) - 980 - 1100 mm 3. Flap Size: 250 mm - 300 mm & 250 mm - 300 mm 4. For Access width - 600 mm on both sides 5. Compatible with Face recognition device (access control) 6. Swing direction: Two ways 7. Pass rate: 20 - 30 person / minute 8. SOFTWARE CONTROLLED ENTRY & EXIT 9. PROVISION FOR MANUAL KEY (EMERGENCY) 10. In case of emergency/power failure, swings should be fully open 11. Make In India 12. LED indicator for entry & no entry 13. Mean Cycle between failure (MCBF) : Minimum 50,00,000 14. Power Supply : 230 Volt / 50 Hz	

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ANNEXURE-17

17. EM Lock

Sl no.	Description	BHEL Specification	Compliance (Yes/No)
1	EM locks for Door Access Control (Double Door) and make it compatible with Face recognition Devices (and through RFID card also)	1. Holding Force: minimum 300 kg 2. operating temp.: -10 to 50-degree C 3. Compatible with face recognition device (access control) 4. Make In India	
2	EM locks for Door Access Control (Single Door) and make it compatible with Face recognition Devices (and through RFID card also)	1. Holding Force: minimum 300 kg 2. operating temp.: -10 to 50-degree C 3. Compatible with face recognition device (access control) 4. Make in India	
3	Door Buzzer for access-controlled doors compatible with EM locks	1. Compatible with EM locks 2. Make In India	

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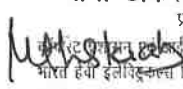
ANNEXURE-18 (BILL of QUANTITIES)

CENTRALIZED INFRASTRUCTURE AND SOFTWARE SERVICES BOQ for Disaster Recovery Site(DR)			
S. No	ITEM NAME	Unit	Qty
		A	B
CENTRALIZED SERVER SYSTEM			
1	HCI Solution	LOT	1
2	TOR Switch	NOS	2
3	Management Switch	NOS	1
4	Load Balancer	NOS	1
5	x86 backup server with backup software	NOS	1
6	Tape Library with Tapes	NOS	1
7	Database License(s)	Lot	1
CENTRALIZED SOFTWARE/APPLICATION			
1	Centralized Time & Attendance Recording, Access control Sof Visitor management system, Meal Booking & Canteen Access Sof Device Control Application, API services	Lot	1
2	Operating cost for Manpower {30 Hardware Engineers at location for 05 years (60 months)} Various locations mentio Hardware BOQ item no. 4.1	Lot	1
3	Operating cost for Manpower {(03 Software Engineers at Dell Corporate Office for 05 years (60 months))}	Lot	1

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CENTRALIZED INFRASTRUCTURE AND SOFTWARE SERVICES BUDGETARY BOQ for Data Centre (DC)

S. No	Item name	Unit	Qty
		A	B
CENTRALIZED SERVER SYSTEM			
1	HCI Solution	LOT	1
2	TOR Switch	NOS	2
3	Management Switch	NOS	1
4	Load Balancer	NOS	1
5	x86 backup server with backup software	NOS	1
6	Tape Library with Tapes	NOS	1
7	Database License(s)	Lot	1

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HARDWARE BOQ for all Locations

S. No	Item name	Unit	HEP BHOPAL	HPEP PESD HYDERABAD	Delhi/ NCR (including ASSCP)	BAP, RANIPET	CFP RUDRAPUR	Corp R&D HYDERABAD	FSIP JAGDISHPUR	HERP VARANASI	HPBP & SSTP TRICHY
1	Enrollment Unit as per Annexure - 7 (computer unit/ laptop, imaging printer, facial recognition enrollment kit, smart card encoder/programmer, HD Quality digital photo camera (as per Point no.10 of Annexure 7) along with photography setup & photo card preparation module, relevant software)	NOS	2	2	3	2	1	2	1	2	2

S. No	Item name	Unit	HEP BHOPAL	HPEP PESD HYDERABAD	Delhi/ NCR (including ASSCP)	BAP, RANIPET	CFP RUDRAPUR	Corp R&D HYDERABAD	FSIP JAGDISHPUR	HERP VARANASI	HPBP & SSTP TRICHY
2	Access Control & Attendance recording unit										
2.1	Wall Mount Face recognition reader (Type I) with card reader, IP 65 protection, specifications as per 9.1 of Annexure 9 for workplace for 5000 user capacity	NOS	269	162	63	120	5	7	11	10	200
2.2	Face recognition reader (Type-II) with card reader, IP 65 protection, specifications as per 9.2 of Annexure 9 for Access control at gates for 15000 user capacity.	NOS	58			30	3		24		200
2.3	Face recognition reader (Type -V) with card reader and keypad, IP 65 protection, specifications as per Para 9.5 of Annexure-9 for Access control at gates for 15000 user capacity.	NOS		136							

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S. No	Item name	Unit	HEP BHOPAL	HPEP PESD HYDERABAD	Delhi/ NCR (including ASSCP)	BAP, RANIPET	CFP RUDRAPUR	Corp R&D HYDERABAD	FSIP JAGDISHPUR	HERP VARANASI	HPBP & SSTP TRICHY
3.1	Turnstile as per Annexure 10	NOS	10	67		10	1		8		
3.2	Boom Barrier 6mtr as per 11.1 of Annexure 11	NOS				8	2	3			10
3.3	Boom Barrier 4 mtr as per 11.2 of Annexure 11	NOS	12								
3.4	Boom Barrier 1 mtr as per 11.3 of Annexure 11	NOS									
	Automatic Swing Barriers Gates (2 lane for physically handicapped (PH) compatible) compatible with Face recognition with Anti Tail gating system as per 16.2 of Annexure - 16	NOS			5				1		

S. No	Item name	Unit	HEP BHOPAL	HPEP PESD HYDERABAD	Delhi/ NCR (including ASSCP)	BAP, RANIPET	CFP RUDRAPUR	Corp R&D HYDERABAD	FSIP JAGDISHPUR	HERP VARANASI	HPBP & SSTP TRICHY
3.6	Automatic Swing Barriers Gates (1 lane for physically handicapped (PH) compatible) compatible with Face recognition with Anti Tail gating system as per 16.1 Annexure - 16	NOS			7	3			1	2	
3.7	Automatic Swing Barriers Gates (2 lane) (Able to work in both directions i.e. IN & OUT) and make it compatible with Face recognition Devices (and through RFID card also) with Anti Tail gating system as per 16.4 of Annexure - 16	NOS			3	0			5		
3.8	Automatic Swing Barriers Gates (1 lane) (Able to work in both directions i.e. IN & OUT) and make it compatible with Face recognition Devices (and through RFID card also) as per 16.3 of Annexure - 16	NOS			13		1		17	2	

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S. No	Item name	Unit	HEP BHOPAL	HPEP PESD HYDERABAD	Delhi/ NCR (including ASSCP)	BAP, RANIPET	CFP RUDRAPUR	Corp R&D HYDERABAD	FSIP JAGDISHPUR	HERP VARANASI	HPBP & SSTP TRICHY
4	Manpower Cost										
4.1	Operating cost for Manpower (PROPOSED)	LOT (Hardware & Software Engineer Engrs)	3	4	3	3	1	1	1	1	2
Part B - Outright purchase (These charges should be valid for entire contract period)											
	Smart Cards	NOS	30000	12000	10000	5000	500	1000	380	500	20000
	UTP Cable	METER	15000	15000	3000	5000	1000	2000	600	305	2100
	RJ 45 connectors	NOS	1000	1000	300	500	60	500	110	400	400
	PVC Conduit	METER	7000	7000	3000	2000	400	2000	300	1600	1000
	MS Pipe	METER	100	100	150	1000	600	500		400	
	Power Cable	METER	1500	1500	1500	2000	1000	1000	600	800	700

S. No	Item name	Unit	HEP BHOPAL	HPEP PESD HYDERABAD	Delhi/ NCR (including ASSCP)	BAP, RANIPET	CFP RUDRAPUR	Corp R&D HYDERABAD	FSIP JAGDISHPUR	HERP VARANASI	HPBP & SSTP TRICHY
7	Installation commissioning, including civil & electrical work at all locations/ Training charges	LOT	1	1	7	1	1	1	1		
8	Shifting of readers to new location	NOS	50	30	10	5		15			
9	Shifting of turnstile along with reader to new location	NOS	10	10	7	0		5			
10	EM locks for Door Access Control (Double Door) compatible with Face recognition Devices (and RFID also)	NOS			4	2					5
	EM locks for Door Access Control (Single Door) compatible with Face recognition Devices (and RFID also)	NOS			1	2		2			
	Door Buzzer compatible with EM lock	NOS			6	4					5

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S. No	Item name	Unit	HEP BHOPAL	HPEP PESD HYDERABAD	Delhi/ NCR (including ASSCP)	BAP, RANIPET	CFP RUDRAPUR	Corp R&D HYDERABAD	FSIP JAGDISHPUR	HERP VARANASI	HPBP & SSTP TRICHY
13	Transportation & Installation of readers to new location (for sites)	JOB			1						
14	Shifting of automatic swing barrier gates along with reader to new location	JOB			1	0		1			

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 भारत हीयर्स इलेक्ट्रिकल्स लिमिटेड / Bharat Heary Electricals Limited
 प्लॉट नं. 10049 / New Delhi-110049
 प्लॉट नं. 10049 / New Delhi-110049

S. No	Item name	Unit	HPVP Visakhapatnam	IVP Goindwal	PPPU Thirumayam	SBD & ISG Bangalore	EDN Bangalore	TP Jhansi	HEEP /CFFP Haridwar	PS-WR	PS-ER	PS-SR
1	Enrollment Unit as per Annexure - 2.1 (computer unit/ laptop, imaging printer, facial recognition enrollment kit, smart card encoder/programmer, HD Quality digital photo camera (as per Point no.10) along with photography setup & photo card preparation module, relevant software)	NOS	1	1	1	1	2	2	2	2	1	1
2	Access Control & Attendance recording unit											
2.1	Wall Mount Face recognition reader (Type I) with card reader, IP 65 protection, specifications as per Para- 2.3 of Annexure A for workplace for 5000 user capacity	NOS	15	6	32	3	54	40	178	26	20	22

Meena Thakran
MEENA THAKRAN
 प्राबलक / Manager

S. No	Item name	Unit	HPVP Visakhapatnam	IVP Goindwal	PPPU Thirumayam	SBD & ISG Bangalore	EDN Bangalore	TP Jhansi	HEEP /CFFP Haridwar	PS-WR	PS-ER	PS-SR
2.2	Face recognition reader (Type-II) with card reader, IP 65 protection, specifications as per Para 2.4 of Annexure A for Access control at gates for 15000 user capacity.	NOS	10			12		46	63			
2.3	Face recognition reader (Type-V) with card reader and keypad, IP 65 protection, specifications as per Para 2.7 of Annexure-A for Access control at gates for 15000 user capacity.	NOS										

श्री. अकरान / MEENA THAKRAN
 प्रबंधक / Manager

 निदेशक, आरक्षण / Corporate Admin. & ISMG
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 सी.एम.ई.एल. हाउस, सी.पी. कोर्ट / BHEL House, Sini Fort
 नई दिल्ली - 110049 / New Delhi-110049

S. No	Item name	Unit	HPVP Visakhapatnam	IVP Goindwal	PPPU Thirumayam	SBD & ISG Bangalore	EDN Bangalore	TP Jhansi	HEEP /CFFP Haridwar	PS-WR	PS-ER	PS-SR
2.4	Portable Face recognition reader (Type- III) with card reader & Wi-Fi For Access Control at Gates (Emergency/ sudden breakdown situation & for Suspend employees) with IP 65 protection, specifications as per Para - 2.5 of Annexure A for 15000	NOS			1	1						
2.5	Face recognition reader (Type-IV) with card reader & cellular connectivity, as per Para- 2.6 of Annexure A for locations in Township where LAN connection is not available for 5000 user capacity.	NOS		1	1	2	3		12	4		3
2.6	Tower Light (Red and Green LEDs) as per Para-5 of Annexure-A.	NOS	10	6		5	54	50	69			18

श्री. मेघनाथ/MEENA THAKKURAN

S. No	Item name	Unit	HPVP Visakhapatnam	IVP Goindwal	PPPU Thirumayam	SBD & ISG Bangalore	EDN Bangalore	TP Jhansi	HEEP /CFFP Haridwar	PS-WR	PS-ER	PS-SR
3.1	Turnstile as per Para-3 of Annexure A	NOS				11	25	16	19			
3.2	Boom Barrier 6mtr as per Para-4.1 of Annexure A	NOS	1	1		3	5	3				
3.3	Boom Barrier 4 mtr as per Para-4.2 of Annexure A	NOS							10			
3.4	Boom Barrier 1 mtr as per Para-4.3 of Annexure A	NOS							25			
3.5	Automatic Swing Barriers Gates (2 lane for physically handicapped (PH) compatible) compatible with Face recognition with Anti Tail gating system as per Annexure - 10.2	NOS										
3.6	Automatic Swing Barriers Gates (1 lane for physically handicapped (PH) compatible) compatible with Face recognition with Anti Tail gating system as per Annexure - 10.1	NOS						1				

मौल्य तालिका / MEENA THAKRAN

SITC of Biometric System & Attendance Recording at PAN INDIA Level Page 154 of 278

भारतीय रेलवे लिमिटेड / Bhaal Heavy Electricals Limited
 भारतीय रेलवे लिमिटेड, सीटी कॉर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

S. No	Item name	Unit	HPVP Visakhapatnam	IVP Goindwal	PPPU Thirumayam	SBD & ISG Bangalore	EDN Bangalore	TP Jhansi	HEEP /CFFP Haridwar	PS-WR	PS-ER	PS-SR
3.7	Automatic Swing Barriers Gates (2 lane) (able to work in both directions i.e. IN & OUT) and make it compatible with Face recognition Devices (and through RFID card also) with Anti Tail gating system as per Annexure - 10.4	NOS	4									
3.8	Automatic Swing Barriers Gates (1 lane) (able to work in both directions i.e. IN & OUT) and make it compatible with Face recognition Devices (and through RFID card also) as per Annexure - 10.3	NOS	2	2		1	2	5				
4	Manpower Cost											

प्रबंधक / MEENA THAKRAN

S. No	Item name	Unit	HPVP Visakhapatnam	IVP Goindwal	PPPU Thirumayam	SBD & ISG Bangalore	EDN Bangalore	TP Jhansi	HEEP /CFFP Haridwar	PS-WR	PS-ER	PS-SR
4.1	Operating cost for Manpower (PROPOSED)	LOT (Hardware & Software Engineer Engrs)	1	1	1	1	1	1	2	1	1	1
Part B - Outright purchase (These charges should be valid for entire contract period)												
1	Smart Cards	NOS	1200	500	1000	2000	4000	4000	20000	1100	1000	1000
2	UTP Cable	METER	3000	1000	500	3000	2000	2000	9150	2100	2000	2000
3	RJ 45 connectors	NOS	50	100	200	1000	500	500	450	150	150	110
4	PVC Conduit	METER	3000	500	500	500	500	2000	5500	2100	1000	2000
5	MS Pipe	METER	15	200	200	500	500	500	3000	350		500
6	Power Cable	METER	100	200	200	1500	1000	1000	3750	550		700

MEENA THAKRAN
प्रबन्धक / Manager

S. No	Item name	Unit	HPVP Visakhapatnam	IVP Goindwal	PPPU Thirumayam	SBD & ISG Bangalore	EDN Bangalore	TP Jhansi	HEEP /CFFP Haridwar	PS-WR	PS-ER	PS-SR
7	Installation commissioning, including civil & electrical work at all locations/ Training charges	LOT	1	1	1	1	1	1	1	2	2	2
8	Shifting of readers to new location	NOS						15	20			
9	Shifting of turnstile along with reader to new location	NOS						5				
10	EM locks for Door Access Control (Double Door) compatible with Face recognition Devices (and RFID also)	NOS										
11	EM locks for Door Access Control (Single Door) compatible with Face recognition Devices (and RFID also)	NOS	2		2			2				
12	Door Buzzer compatible with EM lock	NOS			2							

प्रबंधक / Manager
 श्रीमती मीना ठाकरान / MEENA THAKRAN

S. No	Item name	Unit	HPVP Visakhapatnam	IVP Goindwal	PPPU Thirumayam	SBD & ISG Bangalore	EDN Bangalore	TP Jhansi	HEEP /CFFP Haridwar	PS-WR	PS-ER	PS-SR
13	Transportation & Installation of readers to new location (for sites)	JOB								35	30	30
14	Shifting of automatic swing barrier gates along with reader to new location	JOB						1				

श्री. मेना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Corporate Admin. & ISMG
बी.एच.ई. हाउस, सी.पी. फोर्ट / BHEL House, Sini Fort
नई दिल्ली - 110049 / New Delhi-110049

ANNEXURE-A

DETAILS OF BHEL UNITS AND SITES FOR PROJECT

Tentative locations as on 01.12.2024

Bangalore	Mumbai	Vadodara
Barh	N.Chennai TPS	Varanasi
Bhilai	N.KaranpuraNTPC	Visakhapatnam
Bhopal	Nabinagar BRBCL	Vizag HPCL
Bhubaneswar	Nabinagar NPGCL	Yadadri TSGENCO
Bhusawal	Nagpur	
Chandigarh	New Delhi	
Chennai	Noida	
Dadri	Panki	
Ennore TANGEDCO	Patratu	
Goindwal	Ramagundam NTPC	
Haridwar	Ranipet	
Hyderabad	RAPP Kota NPCIL	
Jagdishpur	Rudrapur	
JamshedpurTATA	SagardighiWBPDC	
Jhansi	SAS Chennai	
Kahelgaon	Secunderabad	
Khurja	Singrauli	
Kolkata	Sipat FGD	
Korba NTPC	TalcherTPS NTPC	
Kudankulam	Thirumayam	
Lara STPP NTPC	Tiruchirappalli	
ManuguruTSGENCO	Tuticorin	
Mauda STTP NTPC	UdangudiTANGEDC	

BHEL Units vis-à-vis Tentative location as on 01.12.2024

PHASE -I

Unit/L ocation n	Cor pora te Offi ce	Inter natio nal Oper ation s Divn	Ind ust ry Sec tor	PS - Bus ine ss Gro up I	PS - Bus ine ss Gro up II	PS - Hea d Qua rter s	PS - Proje ct Engi neeri ng Mgm t.	PS - Tec hnic al Serv ices	PS- Spa res & Serv ices Bus	Regi onal Oper atio ns Divis ion	Trans missi on Busin ess Grou p	PS - Nor ther n Reg ion	Hea vy Elec tric al Plan t
------------------------	---------------------------------	--	--------------------------------	--	---	--------------------------------------	---	---	---	--	---	--	--

									ine ss				
Bangalore	✓			✓					✓	✓			
Barh												✓	
Bhilai													
Bhopal	✓				✓				✓				✓
Bhubaneswar									✓	✓			
Bhusawal													
Chandigarh									✓	✓		✓	
Chennai				✓					✓	✓	✓		✓
Dadri												✓	
Ennore TANGEDCO											✓		
Goindwal													
Haridwar	✓												
Hyderabad	✓			✓							✓		
Unit/Location	Corporate Office	International Operations Divn	Industry Sector	PS - Business Group I	PS - Business Group II	PS - Head Quarters	PS - Project Engineering Mgmt.	PS - Technical Services	PS - Spares & Services Business	Regional Operations Division	Transmission Business Group	PS - Northern Region	Heavy Electrical Plant
Jagdishpur													
Jamshedpur TATA													
Jhansi	✓												
Kahelgaon													

Khurja												✓	
Kolkata	✓								✓	✓	✓		✓
Korba NTPC													
Kudankulam													
Lara STPP NTPC													
Manuguru TSGENCO											✓		
Mauda STTP NTPC													
Mumbai									✓	✓			
N.Chennai TPS													
Unit/Location	Corporate Office	International Operations Divn	Industry Sector	PS - Business Group I	PS - Business Group II	PS - Head Quarters	PS - Project Engineering Mgmt.	PS - Technical Services	PS - Spares & Services Business	Regional Operations Division	Transmission Business Group	PS - Northern Region	Heavy Electrical Plant
N.Karnapura NTPC											✓		
Nabinagar BRBCL													
Nabinagar NPGCL													
Nagpur													
New Delhi	✓	✓	✓	✓	✓	✓				✓			
Noida	✓			✓	✓	✓	✓	✓	✓		✓	✓	
Panki											✓	✓	
Patratu											✓		

Ramagundam NTPC													
Ranipet													
RAPP Kota NPCIL											✓		
Unit/Location	Corporate Office	International Operations Divn	Industry Sector	PS - Business Group I	PS - Business Group II	PS - Head Quarters	PS - Project Engineering Mgmt.	PS - Technical Services	PS - Spares & Services Business	Regional Operations Division	Transmission Business Group	PS - Northern Region	Heavy Electrical Plant
Rudrapur													
Sagarighi WBPDC											✓		
SAS Chennai													
Secunderabad									✓	✓			
Singrauli												✓	
Sipat FGD													
Talcher TPS NTPC													
Thirumayam													
Tiruchirappalli	✓												
Tuticorin													
Udangudi TANGEDC											✓		
Vadodara									✓	✓	✓		
Varanasi												✓	

Unit/Locatio n	Cor pora te Offi ce	Inter natio nal Oper ation s Divn	Ind ust ry Sec tor	PS - Bus ine ss Gro up I	PS - Bus ine ss Gro up II	PS - Hea d Qua rter s	PS - Proje ct Engi neeri ng Mgm t.	PS - Tec hnic al Serv ices	PS- Spa res & Serv ices Bus ine ss	Regi onal Oper atio ns Divis ion	Trans missi on Busin ess Grou p	PS - Nor thern Regi on	Hea vy Elec tric al Plan t
Visakh apatna m													
Vizag HPCL											✓	✓	
Yadad ri TSGEN CO											✓		

Unit/Locat ion	Heavy Power Equipm ent Plant	Proje ct Engg & Syste ms Divn	Corpor ate Resear ch & Dev.	Centr al Foun dry Forge Plant	Heavy Electri cal Equip. Plant	Electro nics Division	Industr ial System s Group	Solar Busin ess Divisi on	Electri cal Mach. Repair Plant
Bangalore			✓			✓	✓	✓	
Barh							✓		
Bhilai							✓		
Bhopal									
Bhubanesw ar									
Bhusawal							✓		
Chandigarh									
Chennai									
Dadri									
Ennore TANGEDCO							✓		
Goindwal									
Haridwar				✓	✓				
Hyderabad	✓	✓	✓						
Jagdishpur									

Jamshedpur TATA									
Unit/Location	Heavy Power Equipment Plant	Project Engg & Systems Divn	Corporate Research & Dev.	Central Foundry Forge Plant	Heavy Electrical Equip. Plant	Electronics Division	Industrial Systems Group	Solar Business Division	Electrical Mach. Repair Plant
Jhansi									
Kahelgaon							✓		
Khurja									
Kolkata									
Korba NTPC						✓	✓		
Kudankulam									
Lara STPP NTPC									
Manuguru TSGENCO									
Mauda STTP NTPC									
Mumbai									✓
N.Chennai TPS									
N.Karanpura NTPC							✓		
Nabinagar BRBCL									
Nabinagar NPGCL									
Nagpur									
New Delhi									
Noida									
Unit/Location	Heavy Power Equipment Plant	Project Engg & Systems Divn	Corporate Research & Dev.	Central Foundry Forge Plant	Heavy Electrical Equip. Plant	Electronics Division	Industrial Systems Group	Solar Business Division	Electrical Mach. Repair Plant
Panki							✓		
Patratu							✓		

Ramagundam NTPC									
Ranipet									
RAPP Kota NPCIL									
Rudrapur									
Sagardighi WBPDC							✓	✓	
SAS Chennai									
Secunderabad									
Singrauli							✓		
Sipat FGD									
TalcherTPS NTPC							✓		
Thirumayam									
Tiruchirappalli									
Tuticorin							✓		
Udangudi TANGEDC							✓		
Unit/Location	Heavy Power Equipment Plant	Project Engg & Systems Divn	Corporate Research & Dev.	Central Foundry Forge Plant	Heavy Electrical Equip. Plant	Electronics Division	Industrial Systems Group	Solar Business Division	Electrical Mach. Repair Plant
Vadodara									
Varanasi									
Visakhapatnam									
Vizag HPCL									
Yadadri TSGENCO		✓					✓		

श्री. मेना ठाकरान / MEENA THAKRAN
 प्रबंधक / Manager
 निदेशक, प्रशासन एवं आईएसएमजी. / Corporate Admin. & ISMG
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 बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

PHASE -II

Unit/Location	Boiler Auxiliaries Plant	Component Fabrication Plant	Fab,Stamping & Insulator Plant	Heavy Equipment Repair Plant	High Pressure Boiler Plant	Seamless Steel Tube Plant	Heavy Plates & Vessels Plant	Industrial Valves Plant	Power Plant Piping Unit	PS - Eastern Region	PS - Southern Region	PS - Western Region	Transformer Plant
Bangalore													
Barh									✓				
Bhilai												✓	
Bhopal													✓
Bhubaneswar													
Bhusawal												✓	
Chandigarh													
Chennai					✓						✓		
Dadri													
Ennore TANGED CO											✓		
Goindwal								✓					
Haridwar													
Unit/Location	Boiler Auxiliaries Plant	Component Fabrication Plant	Fab,Stamping & Insulator Plant	Heavy Equipment Repair Plant	High Pressure Boiler Plant	Seamless Steel Tube Plant	Heavy Plates & Vessels Plant	Industrial Valves Plant	Power Plant Piping Unit	PS - Eastern Region	PS - Southern Region	PS - Western Region	Transformer Plant
Hyderabad													
Jagdishpur			✓										
Jamshe dpur TATA									✓				

Jhansi													✓
Kahelgaon										✓			
Khurja													
Kolkata										✓			
Korba NTPC												✓	
Kudankulam											✓		
Lara STPP NTPC										✓			
Manuguru TSGENC O												✓	
Mauda STTP NTPC												✓	
Mumbai					✓								
Unit/Location	Boiler Auxiliaries Plant	Component Fabrication Plant	Fab,Stamping & Insulator Plant	Heavy Equipment Repair Plant	High Pressure Boiler Plant	Seamless Steel Tube Plant	Heavy Plates & Vessels Plant	Industrial Valves Plant	Power Plant Piping Unit	PS - Eastern Region	PS - Southern Region	PS - Western Region	Transformer Plant
N.Chennai TPS											✓		
N.Karanpura NTPC										✓			
Nabinagar BRBCL										✓			
Nabinagar NPGCL										✓			
Nagpur												✓	
New Delhi					✓								
Noida													

Panki													
Patratu												/	
Ramagundam NTPC												/	
Ranipet	/												
Unit/Location	Boiler Auxiliaries Plant	Component Fabrication Plant	Fab,Stamping & Insulator Plant	Heavy Equipment Repair Plant	High Pressure Boiler Plant	Seamless Steel Tube Plant	Heavy Plates & Vessels Plant	Industrial Valves Plant	Power Plant Piping Unit	PS - Eastern Region	PS - Southern Region	PS - Western Region	Transformer Plant
RAPP Kota NPCIL													
Rudrapur		/											
Sagardighi WBPDC									/				
SAS Chennai										/			
Secunderabad										/			
Singrauli													
Sipat FGD											/		
Talcher TPS NTPC											/		
Thirumayam					/			/					
Tiruchirappalli					/	/		/		/			
Tuticorin										/			
Unit/Location	Boiler Auxiliaries Plant	Component Fabrication Plant	Fab,Stamping & Insulator Plant	Heavy Equipment Repair	High Pressure Boiler	Seamless Steel Tube	Heavy Plates & Ve	Industrial Valves Plant	Power Plant Pi	PS - Eastern Re	PS - Southern Region	PS - Western Region	Transformer Plant

				Plan t	Pla nt	Pla nt	sse ls Pla nt		pi ng Un it	gio n			
Udangu di TANGED C											✓		
Vadodar a												✓	
Varanas i				✓									
Visakha patnam							✓						
Vizag HPCL													
Yadadri TSGENC O											✓		

Meena Thakran

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager

प्रशासन एवं आईएसएमजी. / Corporate Admin. & ISMG
भारत भारी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
सीरी फोर्ट हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-B

ROLE BASED DASHBOARDS

Role Based Dashboards (indicative, not exhaustive)		
S.No.	Role	Authorization/Access/Dashboard
1	Super User	Complete system authorization
2	Unit-Level Admins (Hardware & Application)	Unit/Location specific system authorization
3	Time Officer (Overall & Departmental)	Unit/Location specific system authorization. Reports based on Shifts/ Depts/ Cadre/ Grade etc.
4	Unit Head, GM, HOD & HOS	Authorisation /reports for subordinates in the department/function Regularisation Approvals
5	Managers/ Reporting Officers	Authorisation /reports for subordinates Regularisation Approvals
6	Employees (Executives, Supervisors & Workmen)	Employee dashboard (Desktop/Mobile) to be made available with following real time details after proper authentication (not limited to): - Checking Roster/Shifts - Checking Attendance details - Checking Punch details - Checking Absence details - Attendance Regularization
7	Shift Co-ordinator	Tagging / Updating of Shifts Modifying the shifts
8	Contract Labour Cell	All reports pertaining to Contract Labour
9	Industrial Relations	Absence Records / Leave Records
10	Finance	Absence / Regularisations/ Shifts based manpower
11	CISF/Security	Card Printing report for employees/customer/Vendor/ trainee/ contract worker
12	Canteen Administrator	Meal Booking Report, Punch Data Report, Total Meal Booking Report, Canteen Wise Cash Collection, Cash Collection Report, Meal Booked Chart, Salary Deduction for Society & Staff, Meal Cancellation



मीना ठाकरान / MEENA THAKRAN

प्रबंधक / Manager

SITC of Biometric System & Attendance Recording at PAN INDIA Level Page 170 of 278

भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited

बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort

नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE -C INTEGRITY PACT

Between

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

And

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

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for

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

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

Section 1- Commitments of the Principal

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

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

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

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

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मीना थाकरान / MEENA THAKRAN
प्रबंधक / Manager

विवेक एडमिनिस्ट्रेशन प्राइवेट लिमिटेड / Corporate Admin. & ISMG
भारत भारी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

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

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

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

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

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

Section 4 - Compensation for Damages

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मीना ठाकरान / MEENA THAKRAN

प्रबंधक / Manager

कॉर्पोरेट एडमिन. & ISMG / Corporate Admin. & ISMG

भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited

बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort

नई दिल्ली- 110049 / New Delhi-110049

- 4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher.

Section 5 - Previous Transgression

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

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

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

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

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

Section 8 -Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/

Contractor(s) / Sub-contractor(s) with confidentiality in line with Non- disclosure agreement.

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

Section 9 - Pact Duration

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

Section 10 - Other Provisions

- 10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.
- 10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 10.5 Only those bidders / contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

For & On behalf of the Principal

(Office Seal)

Place-----

Date-----

Witness:-----


(Name & Address) -----

For & On behalf of the Bidder/ Contractor

(Office Seal)

Witness:-----

(Name & Address) -----



मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

**ANNEXURE -D
NODAL OFFICERS**

Phase	Unit/ Region/ Division	Nodal Officer Details
Phase -I	PS - Northern Region	Sh. Manoj Kumar Engineer,7408408803, manoj.kmr@bhel.in Sh. Chaman, Dy. Officer,8053217289, chaman@bhel.in
Phase -I	Regional Operations Division- Bhubaneshwar & PS-Spares & Services Business- Bhubaneshwar	Sh Arun Kumar Nayak, Dy. Officer,9437183660 , AMARKUMAR.NAYAK@BHEL.IN
Phase -I	Regional Operations Division-Mumbai & PS-Spares & Services Business- Mumbai	Sh. Sarin Hariraj Sondawale, Sr. Manager, 7499505309, sarin@bhel.in
Phase -I	Solar Business Division, Bangalore	Ms.Sharda Durga Parameshwaran, Manager , 9916414036, SHARDA.DURGA@BHEL.IN
Phase-II	Boiler Auxiliaries Plant ,Ranipet	Sh,M Kanagaraj , Sr Manager, 9443853110 , KANAGARAJ@BHEL.IN
Phase-II	Component Fabrication Plant, Rudrapur	Sh. Himanshu Martolia, Manager, 9634156780, himanshum@bhel.in Ms. Bhawna Srivastava, Dy Officer, 8006988488, bhawna@bhel.in
Phase-II	Fab,Stamping & Insulator Plant, Jagdishpur	Sh. Ramakant Verma, Manager, 9455112839, ramakant.verma@bhel.in Sh. Tabish , Dy. Manager, 9487237848, tabish@bhel.in
Phase-II	Heavy Equipment Repair Plant, Varanasi	Sh. Abhishek Srivastava, Dy. Manager, 9517211149, abhisheksrivastava@bhel.in
Phase-II	Heavy Plates & Vessels Plant, Vizag	Sh. V Veerababu, Sr. Manager, 9640378657, veeruv@bhel.in Sh. G Chandrashekar, Sr Manager, 9985315840, gcsmpa@bhel.in

Phase	Unit/ Region/ Division	Nodal Officer Details
Phase-II	High Pressure Boiler Plant, Trichy & Seamless Steel Tube Plant, Trichy	Sh. Emil Richard Singh, Sr Manager, 9486704587, emil@bhel.in Sh. D Srinivasan, Sr Engineer, 9282407897, dsvasan@bhel.in
Phase-II	Industrial Valves Plant, Goindwal	Sh. Pankaj Kumar, Executive, 7500212702, pankajsre@bhel.in Sh. Sachin Kumar Sharma, Manager, 9721527560, sachin.kumar@bhel.in
Phase-II	Power Plant Piping Unit, Thirumayam	Sh. N V Raja Vikram, Manager, 9443590398, nvrajavikram@bhel.in Sh. Deepu Thomas, Manager ,9489202805, dthomas@bhel.in
Phase-II	PS - Eastern Region	Sh. Abhishek Kumar Shaw, Sr. Manager, 9836369767, akshaw@bhel.in Ms. Anjana Kumari, Sr. Manager, 9490760271, anjana@bhel.in
Phase-II	PS - Southern Region	Sh. Karthikeyan P, Sr. Manager, 044-24589515, karthikeyan.p@bhel.in Ms. Simduja Venkatraman, Executive, 9167282670 , simduja@bhel.in
Phase-II	PS - Western Region	Ms. Priyanka Bargaiya, Executive, 7000010892, pbargaiya@bhel.in Sh. Subodh Chandra Pawar, Dy. Officer, 9425684820, subodhcp@bhel.in
Phase-II	Transformer Plant, Jhansi	Sh. Parvinder Singh, Engineer, 9651910122, Parvinder.singh@bhel.in


MEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited

बी.एच.ई.एल. हाउस, सी.पी. फोर्ट / BHEL House, Siri Fort

ANNEXURE -E

DECLARATION CONFIRMING KNOWLEDGE ABOUT SITE CONDITIONS

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration confirming knowledge about Site conditions

Ref: 1) Tender Enquiry No:

2) All other pertinent issues till date

I/We, _____ hereby declare and confirm that we have visited the Project Site as referred in BHEL Tender Specifications and acquired full knowledge and information about the Site conditions including Wage structure, Industrial Climate, the Law & Order and other conditions prevalent at and around the Site. We further confirm that the above information is true and correct and we shall not raise any claim of any nature due to lack of knowledge of Site conditions.

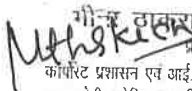
I/We, hereby offer to carry out work as detailed in above mentioned Tender Specification, in accordance with Terms & Conditions thereof.

Yours faithfully,

(Signature, Date & Seal of Authorized Representative of the Bidder)

Date:

Place:

 **मीना ठाकरान / MEENA THAKRAN**
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-F

FORMAT FOR SEEKING CLARIFICATION (PRE/BID QUERIES)

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Request for Clarification

Ref : 1) NIT/Tender Specification No:,
2) All other pertinent issues till date

Sl no	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's clarification
1				
2				
3				
4				
5				

Yours faithfully,

(Signature, date & seal of Authorized Representative of the Bidder)

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Corporate Admin. & ISMG
बी.एच.ई.एल हाउस, सीरी फोर्ट / Bharat Heavy Electricals Limited
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-G

POWER OF ATTORNEY for SUBMISSION OF TENDER

(To be typed on non-judicial stamp paper of minimum Rs. 100/- and Notarized)

KNOW ALL MEN BY THESE PRESENTS, that I/We do hereby make, nominate, constitute and appoint Mr., whose signature given below herewith to be true and lawful Attorney of M/s..... hereinafter called 'Company', for submitting Tender/entering into Contract and inter alia, sign, execute all papers and to do necessary lawful acts on behalf of Company with M/s Bharat Heavy Electricals Ltd, Central Procurement Cell (CPC), in connection with.....vide Tender Enquiry No: _____, dated _____.

And the Company do hereby agree to ratify and confirm all acts, deeds, things or proceedings as may be lawfully done by the said attorney and by or on behalf of the company and in the name of the company, by virtue of the powers conferred herein and the same shall be binding on the company and shall have full force and effect.

IN WITNESS WHEREOF, the common seal of the company has been hereunto affixed in the manner hereinafter appearing on the document.

Dated at _____, this _____ day of _____

Director/CMD/Partner/Proprietor

Signature of Mr. (Attorney)

Attested by: Director/CMD/Partner/Proprietor

Witness

Notary Public

Enclosed: Power of Attorney

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत भारी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE -H

PROFORMA OF BANK GUARANTEE FOR EARNEST MONEY
(On non-Judicial paper of appropriate value)

Bank Guarantee No.....

Date.....

To

(Employer's Name and Address)

.....

Dear Sirs,

In accordance with the terms and conditions of Invitation for Bids/Notice Inviting Tender No.....¹(Tender Conditions), M/s. having its registered office at² (hereinafter referred to as the 'Tenderer'), is submitting its bid for the work of.....³ invited by⁴.(name of the Employer) through its Unit at

The Tender Conditions provide that the Tenderer shall pay a sum of Rs as Earnest Money Deposit in the form therein mentioned. The form of payment of Earnest Money Deposit includes Bank Guarantee executed by a Scheduled Bank.

In lieu of the stipulations contained in the aforesaid Tender Conditions that an irrevocable and unconditional Bank Guarantee against Earnest Money Deposit for an amount of⁵ is required to be submitted by the Tenderer as a condition precedent for participation in the said Tender and the Tenderer having approached us for giving the said Guarantee,

we, the[Name & address of the Bank]

..... having our Registered Office at

.....(hereinafter referred to as the Bank) being the Guarantor under this Guarantee, hereby irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer without any demur, merely on your first demand any sum or sums of Rs.

.....⁵ (in words Rupees.....) without any reservation, protest, and recourse and without the beneficiary needing to prove or demonstrate reasons for its such demand.

Any such demand made on the Bank 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.

We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Vendor/Contractor/Vendors in any suit or proceeding pending before any Court or Tribunal, Arbitrator or any other authority, our liability under this present being absolute and unequivocal.

 MEENA THAKRAN
प्रबंधक / Manager
SITC of Biometric System & Attendance Recording at PAN INDIA Level Page 181 of 278
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
सी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment hereunder and the Tenderer shall have no claim against us for making such payment.

We Bank further agree that the Employer 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 Tender or to extend the time of submission of from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said Tenderer and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Tenderer or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said Tenderer or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Tenderer and notwithstanding any security or other guarantee that the Employer may have in relation to the Tenderer's liabilities.

This Guarantee shall be irrevocable and shall remain in force upto and including.....⁶ and shall be extended from time to time for such period as may be desired by the Employer.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Tenderer but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms hereof. However, unless a demand or claim under this Guarantee is made on us in writing on or before the⁷ we shall be discharged from all liabilities under this Guarantee.

This Bank Guarantee shall be governed, construed and interpreted in accordance with the laws of India.

Courts at shall alone have exclusive jurisdiction over any matter arising out of or in connection with this Bank Guarantee

We, Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

- a. The liability of the Bank under this Guarantee shall not exceed.....⁵
- b. This Guarantee shall be valid up to⁶
- c. Unless the Bank is served a written claim or demand on or before⁷ all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank

We, Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.

For and on behalf of
(Name of the Bank)

Date.....

SITC of Biometric System & Attendance Recording at PAN INDIA Level Page 182 of 278

मीना ठाकरान / MEENA THAKRAN

प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG

भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited

बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort

नई दिल्ली- 110049 / New Delhi-110049

Place of Issue.....

¹ Details of the Invitation to Bid/Notice Inviting

² Tender

³ Name and Address of the Tenderer

⁴ Details of the Work

⁵ Name of the Employer

⁶ BG Amount in words and Figures

⁷ Validity Date

⁸ Date of Expiry of Claim Period

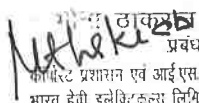
Notes:

1. Units are advised that expiry of claim period may be kept 3-6 months after validity date. It may be ensured that the same is in line with the agreement/ contract entered with the Vendor.
2. The BG should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Contractor/sub-contractor /vendor/ Bank issuing the guarantee.
3. In line with the GCC, SCC or contractual terms, Unit may carry out minor modifications in the Standard BG Formats. If required, such modifications may be carried out after taking up appropriately with the Unit/Region's Law Deptt.
4. **In Case of Bank Guarantees submitted by Foreign Vendors-**
 - a. **From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India)** can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e., Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.
 - b. **From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)**
 - b.1 In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by **any of the Consortium Banks only** will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter- Guarantee by Foreign Bank in favour of the Indian Bank's (BHEL's Consortium Bank) branch in India. It is advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne

by the Foreign Vendor. The tender stipulation should clearly specify these requirements.

b.2 In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at sl.no. b.1 will required to be followed.

b.3 The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time). The BG Format provided to them should clearly specify the same.

 **डा. मेना ठाकर / MEENA THAKRAN**
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं आईएसएमजी. / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
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नई दिल्ली- 110049 / New Delhi-110049

**ANNEXURE-I
NON-DISCLOSURE AGREEMENT**

THIS NON-DISCLOSURE AGREEMENT (this "Agreement") entered into on this day of, 20.. (the "Effective Date")

By and Between

Bharat Heavy Electricals Limited (a Public Sector Undertaking of Government of India), a company incorporated under the Companies Act, 1956 and having its registered office at having its registered office at "BHEL House", Siri Fort, New Delhi - 110 049, India (hereinafter referred to as "BHEL" of which the expression shall unless repugnant to the context or the meaning thereof be deemed to include its successors and permitted assigns) (hereinafter referred to as "BHEL"),

And

ABC, a Company incorporated under the laws of and having its registered office at (hereinafter referred to as "ABC").

The party who is receiving information would be referred as Receiving Party and the party who is disclosing information would be referred as Disclosing Party, as the context requires.

WHEREAS

The Disclosing Party and The Receiving Party wish to explore and discuss the potential of certain mutually advantageous business relationships for _____, for the purpose ofproducts in India ('the Purpose');

- (A) The Disclosing Party, in furtherance of such business relationship, will disclose certain information, including but not limited to, scientific, development, financial, marketing, sales or other proprietary information;
- (B) The Receiving Party and the Disclosing Party wish to protect and preserve the confidentiality of such information provided by the Disclosing Party to the Receiving Party by preventing its unauthorized disclosure and use, in accordance with the terms of this Agreement; and
- (C) The Receiving Party agrees to hold such information in strict confidence and not to disclose or to use, directly or indirectly, for any purpose other than the performance of this Agreement

NOW, THEREFORE and in consideration of the promises made herein, their mutual and individual interests, and other good and valuable consideration, the receipt and sufficiency of all of which is hereby acknowledged, the Parties agree as follows:

1. **PURPOSE:** Purpose to be mentioned here.
2. **DISCLOSING PARTY.** means a Party that discloses the confidential information to the other party under this agreement.

M. Thakran

MEENA THAKRAN
प्रबंधक / Manager

3. **RECEIVING PARTY** means a Party that receives the confidential information from the other party under this agreement.

4. **Confidential Information**

(a) Subject to the provisions of this Agreement, all information disclosed by the Disclosing Party to the Receiving Party, shall be deemed to be "Confidential Information" for the purposes of this Agreement.

(b) (i) It is clarified that Confidential Information shall include, but is not limited to, any trade secret, technique, strategy, component, concept, program, report, study, memorandum, correspondence, documentation, information, manual, record, data, technology, product, plan, design, procedure, method, invention, sample, notes, summaries, analyses, compilations and other writings, producing any such sample, medium, test data relating to any research project, work in progress, future development, engineering, manufacturing, marketing, pricing, billing, servicing, financing, personnel matter, its present or future products, sales, suppliers, clients, customers, employees, investors, or any other information which the Disclosing Party provides to the Receiving Party whether in oral, written, graphic or electronic form and whether or not such information is identified as such by an appropriate stamp or marking. The Confidential Information shall also include all reports, notes or other material prepared by the Receiving Party based on the Confidential Information and/ or any discussion thereon.

(ii) Confidential Information includes information disclosed by the Disclosing Party or by any individual, firm or corporation controlled by, controlling, or under the common control of the Disclosing Party.

(c) Confidential Information shall not include any information which the Receiving Party can demonstrate to the Disclosing Party:

- (1) is now, or has become, through no act or failure to act on the part of the Receiving Party, generally known or available to the public;
- (2) is known by the Receiving Party at the time of receiving such information as evidenced by its records;
- (3) is discovered/independently developed by the Receiving Party independent of any disclosures by the Disclosing Party; or
- (4) is hereafter furnished to the Receiving Party by a third party, as a matter of right and without restriction on disclosure.

(d) Notwithstanding any other provision of this Agreement, the Receiving Party shall be permitted to disclose Confidential Information if such disclosure is in response to a valid order of a court or other governmental body, provided, however, that the Receiving Party shall be required to give prior notice in writing to the Disclosing Party so that the Disclosing Party may seek an appropriate protective order including that the Confidential Information so disclosed be used only for the purposes for which the order was issued;

5. Disclosure

In consideration of the disclosure of Confidential Information by, the Recipient hereby agrees to:

- (a) Shall treat as confidential and safeguard all information disclosed and/or its Affiliates in connection
- (b) to hold the Confidential Information in strict confidence and to take all necessary precautions to protect such Confidential Information (including, without limitation, all precautions the Recipient employs with respect to its own confidential materials);
- (c) limit disclosure of any Confidential Information to its concerned directors, officers and employees, (collectively "Representatives") strictly only to who have a need to know such Confidential Information in connection with the Transaction between the parties to which this Agreement relates, and only for that purpose;
- (d) advise its Representatives of the proprietary nature of the Confidential Information and of the obligations set forth 2 in this Agreement and require in writing such Representatives to keep the Confidential Information confidential;
- (e) shall keep all Confidential Information strictly confidential by using a reasonable degree of care, but not less than the degree of care used by it in safeguarding its own confidential information;
- (f) not disclose any Confidential Information received by it to any third party; and
- (g) not to copy or reverse engineer any such Confidential Information.
- (h) not to use the Confidential Information for any purpose other than the Transaction.
- (i) not use the information for any scientific research or any other research.
- (j) Confidential information does not include information:
 - a. Which is generally available to the public other than as a result of a breach of this Agreement; or
 - b. Which is already in the possession of Recipient without restriction prior to any disclosure hereunder: or
 - c. Which is or has been lawfully disclosed to Recipient by someone who is free lawfully to disclose the same without confidentiality restrictions: or

Meena Thakran

MANAGER / MEENA THAKRAN
प्रबंधक / Manager

SITC of Biometric System & Attendance Recording at PAN INDIA Level Page 187 of 278

भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
सी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

- d. Which is independently developed by Recipient or its Affiliates and no Confidential information disclosed hereunder has been used directly or indirectly in such development; or
- e. Whose applicable period of confidentiality pursuant hereto, or such other period specifically agreed to in writing by the parties, has ended
- (k) This agreement is not intended to, and does not, oblige either party to enter into any further agreements or to proceed with the transaction, any possible relationship or other transaction. Recipient acknowledges that Discloser makes no representation or warranty whether express or implied, as to the accuracy or completeness of Confidential information, and Discloser disclaims any and all liability unless contained in any definitive agreement.

Each Party will comply with all applicable data protection laws and regulations. Where applicable in particular if one Party receives access to and processes personal data on behalf of the other party in connection with this Agreement and such processing agreement, the Parties will enter into any required data processing of other data protection agreement

6. Restriction on Use

- (a) The Receiving Party and its Representatives shall hold the Confidential Information received from the Disclosing Party in confidence, and shall not, directly or indirectly:
 - (i) disclose the Confidential Information to any third party; or
 - (ii) use the Confidential Information for any purpose other than the permitted Purpose.
- (b) The Receiving Party shall not use the Confidential Information for any purpose or in any manner, which would constitute a violation of any applicable laws or regulations, directly or indirectly.
- (c) The Confidential Information shall be the property of the Disclosing Party. No rights, licenses or interests including, but not limited to, trademarks, inventions, copyrights or patents are implied, transferred or granted in relation to the Confidential Information provided by the Disclosing Party to the Receiving Party under this Agreement.
- (d) The Receiving Party shall not reproduce the Confidential Information in any form except as needed for the Purpose of the Agreement as set out above or with the prior written consent of the Disclosing Party.
- (e) All the title and rights in the Confidential Information shall be reserved with the respective Discloser and/or its licensors and no rights or obligations other than those expressly set out in this Agreement are granted or to be implied from this Agreement. In particular no license is granted to the Recipient, directly or

indirectly, by this Agreement relating to any invention, discovery, patent, copyright or other industrial or intellectual property right now or in the future.

7. Protection of Confidential Information

- (a) The Receiving Party represents and warrants that it shall protect the Confidential Information received with utmost care and diligence.
- (b) All Confidential Information shall be promptly returned to the Disclosing Party after the Receiving Party's need for it has expired, or upon request of the Disclosing Party, and in any event, upon completion or termination of this Agreement.

8. No Further Warranties

The Confidential Information shall be disclosed on an "as is" basis only and without any warranties of any kind, including but not limited to, warranties of merchantability or fitness for a particular purpose.

9. No Further Business Arrangement

Nothing contained herein shall be construed to obligate either Party to enter into any further agreements with each other. This Agreement does not create any other business arrangement, including but not limited to any partnership, agency or joint venture, between the Parties.

10. Term

The term of this Agreement shall commence on the Effective Date and valid for the period of two (2) years. The Disclosing party shall have a right to terminate this Agreement by giving a written notice of 30 days to the Receiving Party. However, the Receiving Party obligation to protect and restrict the use of Confidential Information under this Agreement shall continue until such time as the Disclosing Party discloses it to the public or when it otherwise becomes part of the public domain through no action of the Receiving Party.

11. Injunctive remedy

The Recipient acknowledges that the Confidential Information to be disclosed hereunder is commercially sensitive of a unique and valuable character, and that the unauthorized dissemination of the Confidential Information would destroy or diminish the value of such information. The damages that would result from the unauthorized dissemination of the Confidential Information would be impossible to calculate. Therefore, Recipient hereby agrees that the affected Discloser shall be entitled to injunctive relief preventing the dissemination of any Confidential Information in violation of the terms hereof. Such injunctive relief shall be in addition to any other remedies available hereunder, whether at law or in equity. The affected Discloser shall be entitled to recover all its damages, costs and fees, including reasonable attorneys' fees, incurred in obtaining any such

relief. Further, in the event of litigation relating to this Agreement, the prevailing party shall be entitled to recover its reasonable attorney's fees and expenses.

12. Return of Confidential Information

Recipient shall immediately return and redeliver to the respective Discloser all tangible material embodying the Confidential Information provided hereunder and all notes, summaries, memoranda, drawings, manuals, records, excerpts or derivative information deriving there from and all other documents or materials ("Notes") (and all copies of any of the foregoing, including "copies" that have been converted to computerized media in the form of image, data or word processing files either manually or by image capture) based on or including any Confidential Information, in whatever form of storage or retrieval, upon the earlier of (i) the completion or termination of the dealings between the parties contemplated hereunder; (ii) the termination of this Agreement; or (iii) any breach of this agreement, in which case the party in breach shall also be liable towards the Disclosers under the law and this Agreement or (iv) at such time as the respective Discloser may so request; provided however that the Recipient may retain such of its documents as is necessary to enable it to comply with its document retention policies. Alternatively, the Recipient, with the written consent of the respective Discloser may immediately destroy any of the foregoing embodying Confidential Information (or the reasonably nonrecoverable data erasure of computerized data) and, upon request, certify in writing such destruction by an authorized officer of the Recipient supervising the destruction).

13. Notice of Breach

Recipient shall notify the Disclosers immediately upon discovery of any unauthorized use or disclosure of Confidential Information by Recipient or its Representatives, or any other breach of this Agreement by Recipient or its Representatives, and will cooperate with efforts by the Discloser regain possession of Confidential Information and prevent its further unauthorized use.

14. Survival

The provisions of Clauses 8, 9 & 10 of this Agreement, and the rights and obligations contained there under shall not terminate upon termination of this Agreement.

15. Governing Law & Dispute Resolution

The contract shall be governed by the Law for the time being in force in the Republic of India. Civil Court having original Civil Jurisdiction at (name of Place) shall alone have exclusive jurisdiction in regard to all matters in respect of this agreement.

Except as provided elsewhere in this Contract, in case amicable settlement is not reached between the Parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other Party refer such dispute or difference to arbitration. The arbitration shall be conducted by three arbitrators, one to be appointed by each of the Parties and a third arbitrator to be appointed by the mutual consent of the two arbitrators so appointed by the Parties.

The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the Parties. Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be _____ (the place from where the contract is issued)

16. No Publication

Neither Party shall disclose, publicise or advertise in any manner the discussions or negotiations contemplated by the Agreement without the prior written consent of the other Party, except as may be required by law.

17. Miscellaneous

- (a) This Agreement constitutes the entire understanding between the parties and supersedes any and all prior or contemporaneous understandings and agreements, whether oral or written, between the parties, with respect to the subject matter hereof. This Agreement can only be modified by a written amendment signed by the party against whom enforcement of such modification is sought.
- (b) Any failure by a Discloser to enforce the Recipient's strict performance of any provision of this Agreement will not constitute a waiver of its right to subsequently enforce such provision or any other provision of this Agreement.
- (c) Although the restrictions contained in this Agreement are considered by the parties to be reasonable for the purpose of protecting the Confidential Information, if any such restriction is found by a court of competent jurisdiction to be unenforceable, such provision will be modified, rewritten or interpreted to include as much of its nature and scope as will render it enforceable. If it cannot be so modified, rewritten or interpreted to be enforceable in any respect, it will not be given effect, and the remainder of the Agreement will be enforced as if such provision was not included.
- (d) Any notices or communications required or permitted to be given hereunder may be delivered by hand, deposited with a nationally recognized overnight carrier, electronic-mail, or mailed by certified mail, return receipt requested, postage prepaid, in each case, to the address of the other party first indicated above (or such other addressee as may be furnished by a party in accordance with this paragraph). All such notices or communications shall be deemed to have been given and received (a) in the case of personal delivery or electronic-mail, on the date of such delivery, and (b) in the case of

delivery by a nationally recognized overnight carrier, on the third business day following dispatch.

- (e) Parties shall not directly or indirectly assign or transfer it by operation of law or otherwise without the prior written consent of the Disclosers, which consent will not be unreasonably withheld. All obligations contained in this Agreement shall extend to and be binding upon the parties to this Agreement and their respective successors, assigns and designees.
- (f) Paragraph headings used in this Agreement are for reference only and shall not be used or relied upon in the interpretation of this Agreement.

18. Notices

All notices, documents, consents, approvals or other communications (a 'Notice') to be given hereunder shall be in writing and shall be transmitted by first class registered or recorded delivery mail to the person at the address specified herein below, or by telex, facsimile or other electronic means in a form generating a record copy to the party being served at the relevant address for that party shown herein below. Any Notice sent by mail shall be deemed to have been duly served on receipt of delivery confirmation. Any Notice sent by telex facsimile or other electronic means shall be deemed to have been duly served at the time of transmission.

Notice if to:

BHEL, then to,

Phone :

Fax :

E-mail :

ABC, then to,

(Name)_____

(Designation)_____

Phone :

Fax :


E-mail :

19. Counterparts, Telefax Signatures

This Agreement may be signed in two counterparts, each of which is to be considered an original, and taken together as one and the same document.

IN WITNESS WHEREOF, of their Agreement to the terms and conditions contained herein, the undersigned have caused this Agreement to be executed by their duly authorized representatives:

For Bharat Heavy Electricals Limited	For ABC
Signature:	Signature:
Name:	Name:
Designation:	Designation:
Signature:	Signature:
Name:	Name:
Designation:	Designation:

 / MEENA THAKRAN
 प्रबंधक / Manager
 कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 वी.एच.ई.एल हाउस, सीरी फोर्ट / VHSL House, Sirri Fort
 नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-J
NON-DISCLOSURE CERTIFICATE

(To be Typed & submitted in the Letter Head of the Company/Firm of Bidder)

I/We understand that BHEL is committed to Information Security Management System as per their Information Security Policy.

Hence,

I/We

M/s

who are submitting offer for providing services to BHEL against Tender Enquiry No hereby undertake to comply with the following in line with Information Security Policy of BHEL.

- To maintain confidentiality of documents & information which shall be used during the execution of the Contract.
- The documents & information shall not be revealed to or shared with third party which shall not be in the business interest of BHEL .

(Signature, date & seal of Authorized
Signatory of the bidder)

Date

डा. करान / MEENA THAKRAN
प्रबंधक / Manager
कोर्पोरेट एडमिन. & आईएसएमजी / Corporate Admin. & ISMG
भारत भारी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE: K

Format for BACK TO BACK GUARANTEE

(TO BE ON LETTER HEAD OF OEM)

(FOR OEM's AUTHORIZED CHANNEL PARTNER IN INDIA)

TO WHOMSOEVER IT MAY CONCERN

Ref:

Date:

Attn: Tender Inviting Authority

BHEL House Sirifort

New delhi-110049

Subject: Back to Back Guarantee for M/s. _____

Guarantor: M/s. (OEM)

TENDER NO.

Sir,

We M/s. (OEM) who are manufacturer/ SI of _____, hereby agree to provide Back to Back Guarantee to M/s. _____, having established address at _____, for our supplied product for this tender such that in case of failure of any supply(or) performance of the equipment/Software in all respects or as per the warranties /guarantees that have been given, then we will assume all obligations under the contract pertaining to the items in our purview.

Yours faithfully,

Sign. (Authorized Signatory) _____

Name :

Designation :

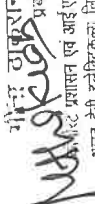
Date :

Address

मीनी ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कorporate प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत भारी बिजली लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-L (TENTATIVE BUSINESS RULES)

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
1	HEP Bhopal	18	General: 8.00AM to 04.30 PM Shift A: 07.00 AM to 3.30 PM Shift B: 3.30 PM to 12.00 AM Shift C: 11.00 PM to 07.00 AM (8 hrs)	8.5 hrs	4 (11 shifts with 02 punch)	<u>1st punch:</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	10 minutes (Lunch In)			HOS HOD GM	HOD , mini mum E7	1200 pm-1230 pm 8.00 pm-8.30 pm	1/2 hr	Missing punches wage upto E7. No Work , No Pay (upto E7)- Hrly


 श्री. मे. ठाकरान / MEENA THAKRAN
 प्रबंधक / Manager
 मिर्च प्रसास एन आईएस एन.ओ. / Corporate Admin. & ISMG
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 सी एच ई एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
2	Haridwar	9	General: 8.00AM to 04.30 PM Shift A: 07.00 AM to 3.30 PM Shift B: 03.30 PM to 12.00 AM Shift A1: 07.00 AM to 3.00 PM Shift B1: 03.00 PM to 11.00 PM Shift C1 : 11.00 PM to 07.00 AM (without working break) Shift A2: 06.00 AM to 02.00 PM Shift B2: 02.00 PM to 10.00 PM Shift C2 : 10.00 PM to 06.00 AM Shift C3 : 06.00 AM to 02.00 PM Shift D2: 02.00 PM to 10.00 PM Shift E2: 10.00 PM to 06.00 AM	8.5 hrs 8 hrs 8 hrs	4	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	15 minutes for meal punch in 05 minutes for start of meal break <u>SHORT LEAVE</u> 08 hrs in 07 spells, max 02 hrs duration. Addl 02 hours (funeral),		Nursing Break	HOD (E7 & ABOVE)	E6 & ABOVE	13.00 pm- 13.30 pm	1/2 hr	Salary

मो-रं ठाकरान / मी-रं ठाकरान
प्रबंधक / मीडिया प्रबंधक
सिटी ऑफ बिरोमेट्रीक सिस्टम & आईएमजी

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
			(without working break)				retire ment/ medical etc.)							

श्री. टी. ठाकरान / MEENA THAKRAN
 अधिकारी / Manager
 भारतीय प्रमाणन एवं आईएसएमजी / Corporate Audit & TMG
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 श्री. एच.ई.एल हाउस, सीरी फोर्ड / BH&L House, Ser Fort
 नई दिल्ली- 110049 / New Delhi-110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
3	HPEP Hyder abad	12	A1: 06.00 - 14.00 A2: 06:15 - 14.45 (BREAK: 11.00-11.30) A3: 07.00-15.00 B1: 14.00-22.00 B2: 14.30 - 23.00 (BREAK: 19.00-1930) B3:15.00-23.00 C1: 22.00-06.00 C2: 23.00-07.00 (BREAK: 03.00-03.30) G1/ G6/H1: 08.00-16.30 (G1/G6: 12.00-12.30 & H1: 12.30-13.00) H2: 08.00-18.00 (BREAK: 12.30-15.00)	8.5 hrs	4	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	After meal late-In entry: 10 minutes (for A2/B2/ C2/G1 /G6/H 1) Maxim um of 6 times and 8 hours in salary month for Workm en, supervi sors and execut ives till E4		Nursin g Breaks Crèche Faciliti es MEDIC AL PASS PERSO NAL PASS UNION PASS EMERG ENCY GAMES & SPORT S SPL. MOVEM ENT Special Events /Occas ions	For first swip e : GMs/ DRO for other swip es : DGM & above	For Unit Hea d and GMs /DR Os only	A2: 11.00 am - 11.30 AM B2:19.00 HRS - 19.30 HRS G1/G6/ H1: 12.00-12.30 H2: 12.30-15.00 H3:12.30-20.00	1/2 hr	Salary Dedu ction for Late entry at shift start time: 1. Appli cable only for work men upto 2 hours from the start of the shift, beyo

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
			12.30-20.00) H5:14.00-20.00 H6: 12.30 - 20.00 H7: 11.30-19.30 H8: 12.00-20.00				grade. Not more than 2 hours in a spell							nd 2 hours marked as absent Deduction for the number of minutes from the shift start time Deduction for personal pass: 1. Exceeding

श्री: अकरा / MEEENA THAKRAN
प्रबन्धक / Manager

संस्था: भारतीय विमानन सेवा / Corporate Admin. & ISMG

पता: भारतीय विमानन सेवा, इलेक्ट्रिकल
बी.ए.ए. हाउस, सी.ए.ए. हाउस / BHEL House, Siri Fort

नयाँ दिल्ली-110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
														Disciplinary action for availing personal pass more than the prescribed limits

मीना ठाकरा / MEENA THAKRAN

प्रबंधक / Manager


कॉर्पोरेट प्रशासन एवं आईएसएमसी / Corporate Admin. & ISMG

सीएसएमसी एवं बिजनेस प्रोसेस कोर / BHEL House, Sir Fort

सं. 110049, Delhi-110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
5	HPBP Try	6	General: 8.00AM to 16.30 PM Shift 1st: 06.00 AM to 1430 Shift 2nd: 2.00 PM to 10.30 PM Shift A: 06.00 AM to 14.00 PM Shift B: 02.00 PM to 10.00 PM Shift C: 10.00 PM to 06.00 AM	8.5 hrs 8hrs	2	<u>1st punch:</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit			Person al Official upto E4 - approval E5 & above	02 through Contr olling Offr, then to Unit head	E5 & above (no punch , show l-card & can move out)	1200 pm-1230 pm 1100 am-1130 am 07.30 pm -8.00 pm	1/2 hr	CL Salary
6	HPVP Vizag	3	General : 08.00 to 04.30 pm 1st Shift :06.00am to 2.30 pm 2nd Shift : 2.30 pm to 11.00 pm	8.5 hrs	4	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	15 minutes , 'thrice' a month			E6A & above	E7 & above /DR Os	1100 am-1130 am 12.30 pm - 13.00 hrs 07.30 pm- 08.00 pm	1/2 hr	Salary

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
7	ISG, Bangalore	1	08.30 AM to 05.36 PM 08.30 AM to 01.30 PM (Saturday)	8hrs 36 minutes 05 hrs (Sat .)	2	1st punch : Grace time of 10 minutes for 1st punch 240 minutes in a month Last Punch: No early exit								Salary


 श्री. मेना ठाकरान / MEENA THAKRAN
 प्रबंधक / Manager
 कॉर्पोरेट प्रशासन एवं आईएसएम.सी. / Corporate Admin. & ISMG
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 वी.एच.ई.एल. हाउस, सीरी फोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi- 110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
8	EDN, Bangalore	4	General Shift: 7.30 am to 4.36 pm 7.30 am to 12.30 pm (Saturday) First Shift: 6.30 am to 2.30 pm Second Shift: 2.30 pm to 10.30 pm Third Shift: 10.30 pm to 6.30 am Staggered Shifts: 6.00 am to 2.00 pm 2.00 pm to 10.00 pm 10.00 pm to 6.00 am	8hrs 36 minutes 05 hrs (Sat .)	4	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	10 minutes (upto A6/B6) 30 minutes (A7/B7 & above) Addl Grace Time of 30 minutes for In-punch - Once a month for S3 to E4 and Twice a month for E5 and above.			E5 and above		11.30 am to 12.00 pm 7.00 pm to 7.30 pm	1/2 hr	

श्री. टी. ठाकरान / MEENA THAKRAN
प्रबंधक / Manager

संशोधन प्रणाली एवं सॉफ्टवेयर / Corporate Admin. & ISMG

संशोधन प्रणाली एवं सॉफ्टवेयर / Corporate Admin. & ISMG
संशोधन प्रणाली एवं सॉफ्टवेयर / Corporate Admin. & ISMG
संशोधन प्रणाली एवं सॉफ्टवेयर / Corporate Admin. & ISMG

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
							Upto A6/B6: Two Hour permission once a month A7 / B7 and above: Two Hour permission twice a month DGM and above identified by respective GM/DR O is Compe tent to							

प्रबंधक / Manager
श्री. श्री. ठाकरान / MEENA THAKRAN

सिटी ऑफ़ न्यू दिल्ली
नगरपालिका
नगर प्रशासन
नगर विकास
नगर निर्माण
नगर सुरक्षा
नगर स्वास्थ्य
नगर शिक्षा
नगर कृषि
नगर उद्योग
नगर वाणिज्य
नगर परिवहन
नगर संचार
नगर मनोरंजन
नगर खेल
नगर श्रम
नगर विद्युत
नगर जल
नगर गैर
नगर अन्य

नगर विकास
नगर निर्माण
नगर सुरक्षा
नगर स्वास्थ्य
नगर शिक्षा
नगर कृषि
नगर उद्योग
नगर वाणिज्य
नगर परिवहन
नगर संचार
नगर मनोरंजन
नगर खेल
नगर श्रम
नगर विद्युत
नगर जल
नगर गैर
नगर अन्य

SI No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
9	ESD, Bangalore	1	General Shift: 7.30 am to 4.36 pm 7.30 am to 12.30 pm (Saturday)	8hrs 36 minutes 05 hrs (Sat .)	4	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	Grace Time of 10 minutes each at the beginning and at the end of Lunch Break Upto A6/B6: Two Hour permission once a month A7 / B7 and above: Two Hour permission twice a			E5 and above	E5 and above	11.50 am to 12.20 pm (Grace Time of 10 minutes each at the beginning and at the end of Lunch Break)	1 1/2 hr	

श्री. टी. ठाकरा / MEEENA THAKRAN
प्रबंधक / Manager

सिटीक बिometric सिस्टम एंड अटेंडनस रिकॉर्डिंग एट पान इंडिया लेवल
सिटीक बिometric सिस्टम एंड अटेंडनस रिकॉर्डिंग एट पान इंडिया लेवल

SI No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
							month DGM and above identified by respective GM/DR O is Compe tent to sign Person al Pass.							

श्री-०००००००० / MEENA THAKRAN
 Manager
 कोर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 सी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
10	SBD, Bangalore	4	General Shift: 8.00 am to 4.30 pm Shift AF: 06.00 AM to 02.00 PM Shift AS: 2.00 PM to 10.00 PM Shift AT : 10.00 PM to 06.00 AM	8.5 hrs	4	<u>1st punch:</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	Max. 2 hrs in a month upto E4 - once in a month E5 & above-twice a month Wkng hrs less than 5.5 hrs a day - leave to be applied			DRO (minimum AGM) & above	E8 & above		1/2 hr	CL Wkmen-Salary

मीना ठाकरान / MEENA THAKRAN

प्रबंधक / Manager

भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल. हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
11	CO PS-NR PS-PEM PS-HQ	1	General Shift: 09.00 AM to 05.30 pm	8.5hrs	2	<u>1st punch:</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit				E7 & Above	E8 & above	13.00 pm - 13.30 pm	1/2 hr	CL / Salary
12	TBG	1	General Shift: 09.00 AM to 05.30 pm	8.5hrs	2	<u>1st punch:</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit		8.30 am to 9.30 am 5.00 pm to 6.00 pm		E7 & Above	E8 & above	13.00 pm - 13.30 pm	1/2 hr	CL / Salary

श्री-म. शर्मा / MEENA THAKURAN

प्रबन्धक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत भारती लिमिटेड / Bharat Heavy Electricals Limited
सी.एच.ई.एस. हाउस, सी.पी. रोड / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
13	IS ,IO , ROD	1	General Shift: 09.00 AM to 05.30 pm	8.5hrs	2	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit		8.30 am to 9.30 am 5.00 pm to 6.00 pm		E7 & Above	E8 & above	13.00 pm - 13.30 pm	1/2 hr	CL / Salary
14	CFP Rudrapur	3	General Shift: 08.00 AM to 04.30 pm A Shift: 07.00 AM to 3.30PM B Shift: 03.30 PM to 12.00 AM	8.5hrs	4	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	04 times (1 hr) 240 minutes		3 (max 02 hrs)	E4 & above	E7 & above	12.00 pm to 12.30 pm 08.00 pm to 8.30 pm 12.00 pm to 12.30 pm	1/2 hr	

 / MEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएस/एस.जी. / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड (Bharat Heavy Electricals Limited)
बी.एस.डी.एल हाउस, सिरि फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
15	Corp R&D	4	General: 8.00Am to 4.30 PM Shift 1st: 06.00 AM to 2.00 PM Shift 2nd: 02.00 PM to 10.00 PM Shift 3rd : 10.00 PM to 06.00 AM	8.5hrs	2	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	480 minutes (in max 05 spells & 02 times for first punch) In one spell, not more than 120 minutes	Up to 5.30 pm		Line Manager / Group Head	E6A & Above	12.30 pm-01.00 pm 01.00 pm-01.30 pm	1/2 hr	CL Salary
16	ASSCP	4	General: 8.30Am to 5.00 PM Shift A: 06.00 AM to 2.00 PM Shift B: 02.00 PM to 10.00 PM Shift C : 10.00 PM	8.5hrs	2	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	480 minutes (in max 05 spells) In one spell, not more than 120 minutes	Up to 5.30 pm		E6A & Above	E6A & Above	12.30 pm-01.00 pm 01.00 pm-01.30 pm	1/2 hr	

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
			PM to 06.00 AM				180 minutes							
17	PS-WR	1	General Shift: 09.00 AM to 05.30 pm	8.5hrs	2	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	30 minutes s, thrice			DRO /CM or GM (Site)		01.00 pm- 01.30 pm	1/2 hr	CL or EL Salary

श्री. राकेश / MEENA THAKRAN
 अधिकारी / Manager
 कोर्पोरेट प्रशासनिक विभाग / Corporate Admin. & ISMG
 भारत हेवी इलेक्ट्रिकल्स, लिमिटेड / Bharat Heavy Electricals Limited
 सी.एच.ई.एल. हाउस, सीरी कोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
18	PS-ER	1	General Shift: 09.00 AM to 05.30 pm	8.5hrs	2	<u>1st punch:</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit				Controlling Officer	DRO /E8 & above	01.00 pm- 01.30 pm	1/2 hr	CL EL
19	PS-SR	1	General Shift: 09.00 AM to 05.30 pm	8.5hrs	2	<u>1st punch:</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	60 minutes (morning/evening) -03 occasions			HOD (E7 & above)	E7 & above	01.00 pm- 01.30 pm	1/2 hr	Salary

श्री. मेना थाकरान / MEENA THAKRAN

प्रबंधक / Manager

भारतीय भारतीया विद्युत निगम लि. / Corporate Admin. & ISMG
भारतीय भारतीया विद्युत निगम लि. / Bharat Heavy Electricals Limited
सी.एच.ई.एल. हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

SI No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
20	FSIP, Jagdis hpur	3	General: 8.00AM to 4.30 PM Shift 1st : 06.30 AM to 3.00 PM Shift 2nd:3.00 PM to 11.30 PM	8.5hrs	2	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	5 (2 first punch+ 3 others)		1 hour max	DRO (1st punch) HOS /E4 & above (other punches) E1- E5 - E6 & above E6 & E6A- E8		11.30am - 12.00pm 07.30 pm -8.00 pm	1/2 hr	CL Salary

श्री-: ठाकरा / MEENA THAKRAN
 Manager
 कॉर्पोरेट प्रशासन एवं आईएसएसी / Corporate Admin. & ISMG
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of so total shift duration (excluding meal is 7.5 hrs)
				1 break)										
23	TP, Jhansi	3	General Shift- 8:00 AM to 4:30 PM A Shift- 6:45 AM to 3:15 PM, B Shift- 3:15 PM to 11:45 PM	8.5 hrs	4	<u>1st punch:</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	A/ General Shift :15 minutes (Lunch entry) B Shift: 15 minutes (Lunch entry)			E7/D RO		12 noon to 12:30 PM 8.00 PM to 8:30 PM	1/2 hr	Leave

संस्थापक / MEEENA THAKRAN

प्रशासक / Manager

कार्यालय प्रशासक / Corporate Admin. & ISMIS

भारतीय बिजली निगम लिमिटेड / Central Board of Secondary Education

भारतीय बिजली निगम लिमिटेड / BHEL

नई दिल्ली- 110049 / New Delhi-110049

SITC of Biometric System & Attendance Recording at PAN INDIA Level

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संस्थापक / MEEENA THAKRAN

Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
							s : 03 times in a month (self regularisation) 10 hrs in a month can be approved by E4 & above							
24	BAP, Ranipet	6	General: 8.30Am to 5.00 PM Shift A: 06.00 AM to 2.00 PM Shift B: 02.30 PM to 11.00 PM Shift R1 : 06.00AM to 02.00 PM Shift R2 :	8.5 hrs	4	<u>1st punch :</u> Grace time of 10 minutes for 1st punch 240 minutes in a month <u>Last Punch:</u> No early exit	PWD- 15 minutes for IN-Out			Controlling Officer	E7 & above			

गो. ठाकराज / MEENA THAKRAN

प्रबंधक / Manager

कंप्यूटर प्रशासन एवं ऑडिट एम.ए.सी. / Corporate Admin & ISMG

सुपरीवेयर / सिस्टम / भारत हेवी इलेक्ट्रिकल्स लिमिटेड

गो. एम.ई.एस. हाउस / E-4 House, Siri Fort

नई दिल्ली - 110049 / New Delhi-110049

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Sl No	Unit	No. Of shifts	Shift timings	Shift Duration	No of punches	1st & last punch for the day	Late in, monthly &	Flexible time	Personal gate Pass	Comp Auth for Regularisation	Self Approval	Meal Break (Lunch/Dinner Timings)	Meal Break duration	Deduction of
			02.00 PM to 10.00 PM Shift R1 : 10.00 PM to 06.00AM											

गी-: ठाकरान / MEENA THAKRAN
 प्रमुख / Manager
 कोर्पोरेट प्रशासन एण्ड इन्फार्मेशन टेक्नोलॉजी / Corporate Admin. & I.T.
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 सी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-M

MANAGEMENT INFORMATION REPORTS (List is only indicative and not exhaustive)

Reports as directed on the desired frequency in desired formats from time to time. Provision for extensive standard & customised reports along with audit trails facility.

Provision for customization (addition / deletion) of data fields based on the requirement of the establishment.

Provision for advanced report wizard enabling the user to issue reports for device uptime, logged events, alarms and all system components: controllers, readers, access groups, cardholders, time, date etc. Reports to support filter by any field.

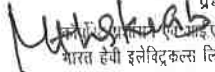
Customised reports and analytics for various role-holders across offices, with centralised access to dashboards for monitoring, control and analysis of users

Reports for real time detail of no. of personnel inside the location premises under various categories and allow for generating and downloading such reports as per the requirements.

Multiple & customized user interfaces for different categories of users with role -based authorizations & controls. Provision to design different user interfaces which shall have the ability to provide / restrict view, edit and reporting functionalities of different sites, locations and role holders based on the defined levels of authorizations and workflows.

Sample of Type of report (The list is only indicative and not exhaustive)	Description (Not restricted to)
Enrollment reports	1. Nos enrolled 2. No of enrollment failed 3. Deptt/ Shift / Cadre/ Grade wise enrolments etc.
Device Allocation	Device related reports: 4. No of readers 5. Status of devices 6. Location wise nos 7. No of punches
Card Status Report	Card Status report 8. No. of cards printed 9. No. of cards as per grade/cadre/nature of manpower (serving + contract labour) / visitor etc.

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager


भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल. हाउस, सी.पी. फोर्ट / BHEL House, Sir Fort
नई दिल्ली- 110049 / New Delhi-110049

Role & Role Holders	Types of Roles 10. No of Role Holders 11. Rights to Role Holders 12. Changes in the roles etc.
Sample of Type of report (The list is only indicative and not exhaustive)	Description (Not restricted To)
Absence/ Leave /UA/Short Absence	13. Attendance 14. Absences 15. Short Absences 16. Holidays across organisation / unit specific 17. Weekly Offs 18. Night Offs for Medical officials 19. Late- Ins / Early outs 20. Long Leave/ Absence reports 21. Continuous Absence for specified period etc.
Access Reports	22. Punches for visitors/ contract workers / trainees (Domestic/ Interns/Regular /Multiple entries meeting officials etc) 23. Restricted Employee reports (employees restricted to go to certain areas/ suspended employees etc.) 24. Rights distribution-which role holder has what kind of access of reports 25. Master Contractor Database: Database of all contractors engaged by the corporation across its various locations / sites through which contract labours are engaged. The service provider shall create user login access for all registered contractor / vendor and assist the corporation in creation of the master database with the following fields
Hierarchical reports (Manager & Subordinates)	Managers & Subordinates: 26. Role Master : various role masters as per the access rights 27. Regularisation status -daily / monthly / for a specified period 28. Shifts Status 29. Absence / Leave reports

Regularisation	Regularisation reports : 30. No of requests 31. Nos regularised 32. Regularisations by Manager / Time Office 33. Regularisation frequency by an employee
Sample of Type of report (The list is only indicative and not exhaustive)	Description (Not restricted To)
Shifts Report	Shifts related reports : 34. Default Shift Status 35. Change in Shifts 36. Deptt Shift Co-ordinator related reports 37. Company/ Unit wide Shift reports & tagged employees
Customised	38. Extra Hours Approval 39. Diff punch related reports 40. Suspended/ Restricted 41. Separated Employees reports 42. Canteen Reports 43. Units Transfer In /Out reports 44. Placement reports : To filter employees posted out at location other than HQ 45. Reports for other Unit employees posted in the Unit. 46. Visiting hours reports - duration spent inside the premises by visitors/ separated employees etc. 47. Salary deduction /leave deduction reports 48. Access & Attendance matching reports 49. Gate pass related reports 50. Approving Authority related reports (which grade is given authority to approve of what grade employees)

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एंड आईएसएमजी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-N

Manpower strength of each unit

MANPOWER SUMMARY & Software Payment % (AS ON 01.12.2024)

Phase	Unit/ Grade	Executive	Supervisor	Worker	Grand Total	% share in payment of Software amount
Phase-I	Corporate Office	428	59	15	502	Delhi/NCR (7.87%)
Phase-I	Industry Sector	113	10	1	124	
Phase-I	International Operations Divn	17			17	
Phase-I	PS - Project Engineering Mgmt.	360	34	15	409	
Phase-I	PS - Business Group I	125	4	1	130	
Phase-I	PS - Business Group II	39	3		42	
Phase-I	PS - Head Quarters	58	8		66	
Phase-I	PS - Northern Region	356	55	2	413	
Phase-I	PS - Technical Services	50	3		53	
Phase-I	PS-Spares & Services Business	88	8		96	
Phase-I	Regional Operations Division	121	37	6	164	
Phase-I	Transmission Business Group	180	14		194	
Phase-I	Central Foundry Forge Plant, Haridwar	160	50	192	402	1.43
Phase-I	Heavy Electrical Equip. Plant. Haridwar	1112	702	1847	3661	13.04
Phase-I	Corporate Research & Dev., Hyderabad	215	27	15	257	0.92
Phase-I	Electrical Mach. Repair Plant, Mumbai	9	5	14	28	0.10
Phase-I	Electronics Division, Bangalore	525	130	712	1367	4.87
Phase-I	Heavy Electrical Plant, Bhopal	1260	780	2480	4520	16.10

Phase	Unit/ Grade	Executive	Supervisor	Worker	Grand Total	% share in payment of Software amount
Phase-I	Heavy Power Equipment Plant, Hyderabad	1053	494	1257	2804	9.99
Phase-I	Project Engg & Systems Divn , Hyderabad	173	30	1	204	0.73
Phase-I	Industrial Systems Group , Bangalore	219	30	15	264	0.94
Phase-I	Solar Business Division, Bangalore	143	65	148	356	1.27
Phase-II	Boiler Auxiliaries Plant, Ranipet	367	163	913	1443	5.14
Phase-II	Component Fabrication Plant, Rudrapur	70	16	40	126	0.45
Phase-II	Fab, Stamping & Insulator Plant, Jagdishpur	122	59	165	346	1.23
Phase-II	Heavy Equipment Repair Plant, Varanasi	117	64	84	265	0.94
Phase-II	Heavy Plates & Vessels Plant, Vizag	153	63	387	603	2.15
Phase-II	High Pressure Boiler Plant, Trichy	877	700	3798	5375	19.15
Phase-II	Seamless Steel Tube Plant, Trichy	26	34	222	282	1.00
Phase-II	Industrial Valves Plant, Goindwal	55	22	87	164	0.58
Phase-II	Power Plant Piping Unit, Thirumayam	41	20	504	565	2.01
Phase-II	PS - Eastern Region	548	93		641	2.28
Phase-II	PS - Southern Region	563	105	9	677	2.41
Phase-II	PS - Western Region	455	75	2	532	1.89

Phase-II	Transformer Plant , Jhansi	300	191	492	983	3.50
	Grand Total	10498	4153	13424	28075	100.00

मीना ठाकरान / MEENA THAKRAN
 प्रबंधक / Manager
 कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
 भारत भारी विद्युत लिमिटेड / Bharat Heavy Electricals Limited
 बी.एच.ई.एल हाउस, सारी फोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-O

MANUFACTURER'S AUTHORIZATION FORM

Ref:
Date:

To,
Notice Inviting Authority,
BHEL House,
Sirifort, New Delhi-110049

Subject: Manufacturer Authorization for Tender No _____

Sir,

We confirm that having its registered office at _____, is our authorized channel partner for _____. We hereby authorize to quote and execute the order for the subject tender on behalf of

Our full support is extended to them in all respects for SITC for entire Contract period including lease period.

Further, we shall provide all support services during the entire Contract period including lease period directly by us for the offered equipment in India as per the terms and conditions of the tender.

We also undertake that in case of default in execution of this tender by the....., we will take all necessary steps for successful execution of this project as per tender requirements.

Thanking You

For < (Authorized Signatory)>

Name:

Designation:

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed & stamped by Legal Officer/HR Head/Company Secretary of OEM Company / Power of Attorney.

मीना ठाकरान / MEENA THAKRAN

प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएमजी. / Corporate Admin. & ISMG

भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited

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नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-P
EXPERIENCE ORDER DETAILS
(As per Qualification Criteria)

Tender Enquiry No:, dated --/--/----

S.No.	Description	Experience of Successful Execution		
		Project 1	Project 2	Project 3
1	Work Order Number, date and value (copy to be enclosed)			
2	Name of the customer / company where such system is installed.			
3	Complete postal address of the customer.			
4	Year of commissioning.			
5	Name and designation of the contact person of the customer.			
6	Phone, FAX no. and email address of the contact person of the customer.			
7	Certificate from the customer regarding satisfactory performance			

Place:
Date:

Signature with seal

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं आईएसएमजी. / Corporate Admin. & ISMG
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नई दिल्ली-110049 / New Delhi-110049

**ANNEXURE-Q
INSOLVENCY UNDERTAKING**

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir/Madam,

**Sub: DECLARATION REGARDING INSOLVENCY/ LIQUIDATION/ BANKRUPTCY
PROCEEDINGS**

Ref: Tender Enquiry No :

I/We, _____ declare that,

I/We am/are not admitted under insolvency resolution process or liquidation under Insolvency and Bankruptcy Code, 2016, as amended from time to time or under any other law as on date, by NCLT or any adjudicating authority/authorities.

Note: Alongwith this, INSOLVENCY Certificate shall also be submitted by Bidder.

**Sign. of the AUTHORISED SIGNATORY
(With Name, Designation and Company seal)**

Place:

Date:

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
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ANNEXURE-R

DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH
REVISED PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER 2017 DATED 19TH
JULY, 2024 ISSUED BY DPIIT AND SUBSEQUENT ORDER(S)

(To be typed and submitted in the Letter Head of the Entity/Firm providing certificate as applicable)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration reg. minimum local content in line with Public Procurement (Preference to Make in India), Order 2017-Revision, dated 19th July, 2024 and subsequent order(s).

Ref: 1) Tender Enquiry No :
2) All other pertinent issues till date

We hereby certify that the items/works/services offered by..... (specify the name of the organization here) has a local content of _____ % and this meets the local content requirement for 'Class-I local supplier' / 'Class II local supplier' ** as defined in Public Procurement (Preference to Make in India), Order 2017-Revision dated 19.07.2024 issued by DPIIT and subsequent order(s).

The details of the location(s) at which the local value addition is made are as follows:

- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |

Thanking you,
Yours faithfully,

(Signature, Date & Seal of
Authorized Signatory of the Bidder)

**** - Strike out whichever is not applicable.**

Note:

1. Bidders to note that above format, duly filled & signed by authorized signatory, shall be submitted along with the techno-commercial offer.
2. In case the bidder's quoted value is in excess of Rs. 10 crores, the authorized signatory for this declaration shall necessarily be the statutory auditor or cost auditor of the company (in the case of companies) or a practising cost accountant or practicing chartered accountant (in respect of suppliers other than companies).
3. In the event of false declaration, actions as per the above order and as per BHEL Guidelines shall be initiated against the bidder.

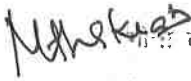
ANNEXURE-S

BANK ACCOUNT DETAILS FOR E-PAYMENT

(To be given on Letter head of the Company / Firm of Bidder, and **ENDORSED (SIGNED & STAMPED)** BY THE BANK to enable BHEL release payments through Electronic Fund Transfer (EFT/RTGS)

1. Beneficiary Name :
2. Beneficiary Account No. :
3. Bank Name & Branch :
4. City/Place :
5. 9 digit M ICR Code of Bank Branch :
6. IFSC Code of Bank Branch :
7. Beneficiary E-mail ID :
(for payment confirmation)

NOTE: In case Bank endorsed certificate regarding above has already been submitted earlier, kindly submit photocopy of the same



ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं आई.एस.एम.जी. / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-T

BIDDER'S GENERAL INFORMATION (To be submitted along with Part-1 Bid)

*Photograph of
bidder / authorised
signatory
holding power
of attorney*

Sl. No.	Description	Details
1	Name of tendering company/Firm/Agency	
2	Type of firm	
3	Name of proprietor/ Director of Company/Firm/Agency	
4	Full address of registered office with telephone no., Fax no. & E-mail Address etc.	
5	Full address of operating/branch office with telephone no, Fax no. & E-mail Address etc.	
6	Permanent Account Number (PAN)	
7	GST Registration No. (GSTIN)	
8	Name of Bidder/ Contact Person	
9	Phone No. of Bidder / Contact Person	
10	E-mail Address of Bidder / Contact Person	
11	Name of Authorized Signatory	

Signature
With name, Designation & seal of the firm

मीना ठाकरान / MEENA THAKRAN
अध्यक्ष / Manager
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-U

OFFER FORWARDING LETTER / TENDER SUBMISSION LETTER
(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

Offer Reference No:

Date:

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Submission of Offer against Tender Enquiry No :

Having examined the tender documents against your Tender Enquiry No. _____ dated _____ and having understood the provisions of the said tender documents and having thoroughly studied the requirements of BHEL related to the work tendered for, in connection with _____ (name of work & project site), we hereby submit our offer for the proposed work in accordance with terms and conditions mentioned in the tender documents, at the prices quoted by us and as per the indicated delivery schedule.

Should our Offer be accepted by BHEL for Award, I/we further agree to furnish 'Performance Security' for the work as provided for in the Tender Conditions within the stipulated time as may be indicated by BHEL.

I/We further agree to execute all the works referred to in the said Tender documents upon the terms and conditions contained or referred to therein and as detailed in the appendices annexed thereto.

I/We have deposited herewith the requisite Earnest Money Deposit (EMD) as per details furnished in the Check List.

Authorised Representative of Bidder

Signature:

Name:

Address:

Place:

Date:

मीना ठाकरान / MEENA THAKRAN

प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG

भारत भारी विद्युत निगम लिमिटेड / Bharat Heavy Electricals Limited

बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort

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ANNEXURE-V

DECLARATION BY AUTHORISED SIGNATORY OF BIDDER

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration by Authorised Signatory regarding Authenticity of submitted documents.

Ref : 1) Tender Enquiry No. & Date:

2) All other pertinent issues till date

I/We, hereby certify that all the documents submitted by us in support of possession of "Qualifying Requirements" are true copies of the original and are fully compliant required for qualifying / applying in the bid and shall produce the original of same as and when required by Bharat Heavy Electricals Limited.

I / We hereby further confirm that no tampering is done with documents submitted in support of our qualification as bidder. I / We understand that at any stage (during bidding process or while executing the awarded contract) if it is found that fake / false / forged bid qualifying / supporting documents / certificates were submitted, it would lead to summarily rejection of our bid / termination of contract. BHEL shall be at liberty to initiate other appropriate actions as per the terms of the Bid / Contract and other extant policies of Bharat Heavy Electricals Limited.

Yours faithfully,

(Signature, Date & Seal of Authorized
Signatory of the Bidder)

Date:

 MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
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नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-W

CERTIFICATE OF NO DEVIATION

(To be Typed & submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Subject: No Deviation Certificate

Ref: 1) Tender Enquiry No:
2) All other pertinent issues till date

We hereby confirm that we have not changed/ modified/materially altered any of the tender documents as downloaded from the website/ issued by BHEL and in case of such observance at any stage, it shall be treated as null and void.

We also hereby confirm that we have neither set any Terms and Conditions and nor have we taken any deviation from the Tender conditions together with other references applicable for the above referred Tender Enquiry.

We further confirm our unqualified acceptance to all Terms and Conditions, unqualified compliance to Tender Conditions.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the bidder)

Date:
Place:

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
भारत भारी इलेक्ट्रिकल्स लिमिटेड / Corporate Admin. & ISMG
भारत भारी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-X

DECLARATION FOR RELATION IN BHEL

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder failing which the offer of Bidder is liable to be summarily rejected)

----- To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration for relation in BHEL

Ref: 1) Tender Enquiry No :

I/We hereby submit the following information pertaining to relation/relatives of Proprietor/Partner(s)/ Director(s) employed in BHEL

Tick (✓) any one as applicable:

1. The Proprietor, Partner(s), Director(s) of our Company/Firm DO NOT have any relation or relatives employed in BHEL

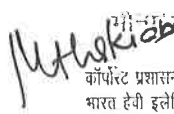
OR

2. The Proprietor, Partner(s), or Director(s) of our Company/Firm HAVE relation/relatives employed in BHEL and their particulars are as below:
 - i.
 - ii.

(Signature, Date & Seal of Authorized
Signatory of the Bidder)

Note:

1. Attach separate sheet, if necessary.
2. If BHEL Management comes to know at a later date that the information furnished by the Bidder is false, BHEL reserves the right to take suitable against the Bidder/Contractor.


मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
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ANNEXURE-Y

FORM FOR EXTENSION OF VALIDITY OF BANK GUARANTEE

1. To be typed on non-judicial Stamp Papers of value as applicable in the State of India from where the BG has been issued or the State of India where the BG shall be operated
2. The non-judicial stamp papers shall be purchased in the name of the Party on whose behalf the BG is being issued or the BG issuing Bank

BANK GUARANTEE No:

Date:.....

To

(Write Designation and Address of Officer of BHEL inviting the Tender)

Dear Sir

Sub: Validity of Bank Guarantee No:..... Dated for
..... Rs in favour of yourself, expiry date
....., on account of M/s in respect of
Contract Number....., (herein after called the Original bank Guarantee)

At the request of M/s....., we Bank, having its
branch Office at and having Head office at, do
hereby extend our liability under the above mentioned Bank Guarantee number.....
dated for a further period ofMonths/years from to expire
on

Except as provided above, all other terms and conditions of the Original Bank Guarantee No
..... Dated..... shall remain unaltered and binding on us.

Kindly treat this extension as an integral part of the original Bank Guarantee to which it
would be attached.

Yours faithfully

Signature.....

Name & Designation.....

Power of Attorney/Signing Power No

Seal of Bank

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन, आईएसएमजी / Corporate Admin. & ISMG
भारत भारी विद्युत लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
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ANNEXURE-Z

DECLARATION REGARDING COMPLIANCE TO RESTRICTIONS UNDER RULE 144 (xi) OF GFR 2017

(To be typed and submitted in the Letter Head of the Entity/ Firm providing certificate as applicable)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017

Ref: 1) Tender Enquiry No:
2) All other pertinent issues till date

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I certify that _____ (SPECIFY THE NAME OF THE ORGANIZATION HERE), is not from such a country/ has been registered with the Competent Authority (*attach valid registration by the Competent Authority, i.e., the Registration Committee constituted by the Dept. for Promotion of Industry and Internal Trade (DPIIT).*

I hereby certify that we fulfil all requirements in this regard and is eligible to be considered.

Thanking you,
Yours faithfully,

(Signature, Date & Seal of
Authorized Signatory of the Bidder)

Note: Bidders to note that in case above certification given by a bidder, whose bid is accepted, is found to be false, then this would be a ground for immediate termination and for taking further action in accordance with law and as per BHEL guidelines.

Meena श्रीमती मेना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-ZZ

INDEMNITY BOND

(To be executed on a Non Judicial Stamp Paper of the requisite value as per Stamp Duty prevalent in the respective State)

This Indemnity Bond executed by <name of company> having their Registered Office at <xxxxxxxxxxx> in favour of M/s Bharat Heavy Electricals Limited, a Company incorporated under the Companies Act, 1956, having its Registered Office at BHEL House, Siri Fort, Asiad, New Delhi - 110049 through its Unit at _____, _____ State. (Hereinafter referred to as the Company)

And whereas the Company has entered into a Contract with M/s xxxxxxxxx, the executants of this Deed (hereinafter referred to as the Contractor) as its contractor in respect of the work of "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx".

AND WHEREAS under the provisions of GCC further stipulates that the Contractor shall indemnify the Company against all claims of whatever nature arising during the course of execution of Contract including defects liability period of <xx Months> i.e till <xx xx xxxx>

Now this deed witness that in case the Company is made liable by any Authority including Court to pay any claim or compensation etc. in respect of all labourers or other matters at any stage under or relating to the Contract with the Contractor, the Contractor hereby covenants and agrees with the Company that they shall indemnify and reimburse the Company to the extent of such payments and for any fee, including litigation charges, lawyers' fees, etc, penalty or damages claimed against the Company by reason of the Contractor falling to comply with Central/States Laws, Rules etc, or his failure to comply with Contract (including all expenses and charges incurred by the Company).

The Contractor further indemnifies the Company for the amount which the Company may be liable to pay by way of penalty for not making deductions from the Bills of the Contractor towards such amount and depositing the same in the Government Treasury.

The Contractor further agree that the Company shall be entitled to withhold and adjust the Security Deposit and/or withhold and adjust payment of Bills of Contractor pertaining to this Contract against any payment which the Company has made or is required to make for which the Contractor is liable under the Contract and that such amount can be withheld, adjusted by the Company till satisfactory and final settlement of all pending matters and the Contractor hereby gives his consent for the same.

The Contractor further agrees that the terms of indemnity shall survive the termination or completion of this contract.

The contractor further agrees that the liability of the contractor shall be extended on actual basis notwithstanding the limitations of liability clause, in respect of:

1. breach of terms of contract by the contractor
2. breach of laws by the contractor
3. breach of Intellectual property rights by the contractor
4. breach of confidentiality by the contractor

Nothing contained in this deed, shall be construed as absolving or limiting the liability of the Contractor under said Contract between the Company and the Contractor. That this Indemnity Bond is irrevocable and the condition of the bond is that the Contractor shall duly

Meena Thakran / MEENA THAKRAN
कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत भारी बिजली लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

and punctually comply with the terms and the conditions of this deed and contractual provisions to the satisfaction of the Company.

In witness where of M/s xxxxxxxxxxxxxx these presents on the day, month and year First, above written at xxxxxxxx by the hand of its signatory Mr. xxxxxxxxxxxx.

Signed for and on behalf of
M/s xxxxxxxxxxxxxxxxx

Witness:

- 1.
- 2.

Meena

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-XI
UNPRICE-BID FORMAT

UN PRICE-BID (TO BE SUBMITTED WITH PART-I BID) BY FILLING "Q" AT PLACE WHERE BIDDER HAS TO QUOTE %.							
CONSOLIDATED ESTIMATE FOR COMPLETE PROJECT							
S. No	Particulars	Five Year Lease Cost include onsite service and Maintenance without GST Part - A	Five Year Lease Cost include onsite service and Maintenance with GST Part - B	Outright Purchase Miscellaneous Items without GST Part - C	Outright Purchase Miscellaneous Items with GST Part - D	Part A + Part C (Lease Model)	Part B + Part D (Lease Model)
						Total Cost without GST	Total Cost with GST
	a	b	c	d	e	f=b+d	g=c+e
1	BoQ for DR	168,883,676.64	199,282,738.44	-	-	168,883,676.64	199,282,738.44
2	BoQ for DC	29,112,288.17	34,352,500.04	-	-	29,112,288.17	34,352,500.04
3	BOQ of hardware for all Units	285,459,692.16	336,842,436.74	29,751,028.08	35,106,213.14	315,210,720.24	371,948,649.88
4						BHEL ESTIMATED VALUE (in Rs.)	605,583,888.36
5						% TO BE QUOTED BY BIDDER (ABOVE OR BELOW the amount mentioned at S.No. 4)	

NOTE:

- The Percentage (%) above/ below (+/-) quoted at S.No. 5 shall be used to arrive at rate for all line items of (DR, DC & Hardware) on proportionate basis. GST rates @ 18% is already included in aforesaid item rates/amount at 18%, so, % above / below (+/-) quoted at S.No. 5 shall be adjusted for calculating item rates accordingly at the time of payment.

श्री. मेनका थाकरान / MEENA THAKRAN
 कोषाध्यक्ष / Manager
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 सी.एच.ई.एल. हाउस, सी.पी. फोर्ट / BHEL House, Sirri Fort
 न्यू दिल्ली- 110049 / New Delhi-110049

CENTRALIZED INFRASTRUCTURE AND SOFTWARE SERVICES BUDGETARY BOQ for Disaster Recovery Site (DR)

S. No	Item name	Unit	Qty	Five Year Lease Cost include onsite service and Maintenance (BHEL ESTIMATE)			
				Unit Cost all-inclusive but without GST	Total Unit Cost all-inclusive but without GST	GST %	Total Unit Cost all-inclusive but with GST
		A	B	O	P=B*O	Q	R=(P)+(P)*(Q)
CENTRALIZED SERVER SYSTEM							
1	HCI Solution	LOT	1	8,635,777.72	8,635,777.72	18%	10,190,217.71
2	TOR Switch	NOS	2	3,451,401.74	6,902,803.49	18%	8,145,308.11
3	Management Switch	NOS	1	1,144,737.90	1,144,737.90	18%	1,350,790.73
4	Load Balancer	NOS	1	3,260,360.73	3,260,360.73	18%	3,847,225.67
5	x86 backup server with backup software	NOS	1	3,999,658.33	3,999,658.33	18%	4,719,596.83
6	Tape Library with Tapes	NOS	1	1,717,283.33	1,717,283.33	18%	2,026,394.33
7	Database License(s)	Lot	1	3,293,333.33	3,293,333.33	18%	3,886,133.33
	Sub Total 1			28,953,954.84			34,165,666.71

MEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएसएलसी / Corporate Admin & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल. हाउस, सोनी फोर्ट / BHEL House, Soni Fort
नई दिल्ली- 110049 / New Delhi-110049

CENTRALIZED INFRASTRUCTURE AND SOFTWARE SERVICES BUDGETARY BOQ for Disaster Recovery Site (DR)									
S. No	Item name	Unit	Qty	Five Year Lease Cost include onsite service and Maintenance (BHEL ESTIMATE)					
				Unit Cost all-inclusive but without GST	Total Unit Cost all-inclusive but without GST	GST %	Total Unit Cost all-inclusive but with GST		
		A	B	O	P=B*O	Q	R=(P)+(P)*(Q)		
		CENTRALIZED SOFTWARE/APPLICATION							
1	Centralized Time & Attendance Recording, Access control Software, Visitor management system, Meal Booking & Canteen Access Software, Device Control Application, API services	Lot	1	34,543,055.13	34,543,055.13	18%	40,760,805.06		
2	Operating cost for Manpower {30 Hardware Engineers at various location for 05 years (60 months)} Various locations mentioned in Hardware BOQ item no. 4.1	Lot	1	82,808,333.33	82,808,333.33	18%	97,713,833.33		
3	Operating cost for Manpower {(03 Software Engineers at Delhi/NCR Corporate Office for 05 years (60 months))}	Lot	1	22,578,333.33	22,578,333.33	18%	26,642,433.33		
Sub Total 2					139,929,721.80		165,117,071.72		
Grand Total					168,883,676.64		199,282,738.44		

प्रमाणित / MEENA THAKURAN

प्रमाणित / Manager

प्रमाणित / Corporate Admin & ISM
प्रमाणित / Bharat Heavy Electricals Limited

प्रमाणित / BHEL House, Siri Fort

प्रमाणित - 110049 / New Delhi-110049

CENTRALIZED INFRASTRUCTURE AND SOFTWARE SERVICES BUDGETARY BOQ for Data Centre (DC)							
S. No	Item name	Unit	Qty	Five Year Lease Cost include onsite service and Maintenance (BHEL ESTIMATE)			
				Unit Cost all-inclusive but without GST	Total Unit Cost all-inclusive but without GST	GST %	Total Unit Cost all-inclusive but with GST
				A	B	O	P=B*O
CENTRALIZED SERVER SYSTEM							
1	HCI Solution	LOT	1	8,635,778	8,635,777.72	18%	10,190,217.71
2	TOR Switch	NOS	2	3,451,402	6,902,803.49	18%	8,145,308.11
3	Management Switch	NOS	1	1,144,738	1,144,737.90	18%	1,350,790.73
4	Load Balancer	NOS	1	3,260,361	3,260,360.73	18%	3,847,225.67
5	x86 backup server with backup software	NOS	1	3,999,658	3,999,658.33	18%	4,719,596.83
6	Tape Library with Tapes	NOS	1	1,717,283	1,717,283.33	18%	2,026,394.33
7	Database License(s)	Lot	1	3,451,667	3,451,666.67	18%	4,072,966.67
	Grand Total				29,112,288.17		34,352,500.04

- The Percentage (%) above/ below (+/-) quoted at S.No. 5 of "Table named: Consolidated Estimate for Complete project" of shall be used to arrive at rate for all line items of (DR, DC & Hardware) on proportionate basis. GST rates @ 18% is already included in aforesaid item rates/amount at 18%, so, % above / below (+/-) quoted at S.No. 5 shall be adjusted for calculating item rates accordingly at the time of payment.

संशोधन एवं प्रौद्योगिकी विभाग, भारतीय परमाणु आयोग, एन.टी.पी.ओ. बिल्डिंग, नई दिल्ली-110049
भारत हेवी इलेक्ट्रिकल्स लिमिटेड, एन.टी.पी.ओ. बिल्डिंग, नई दिल्ली-110049
सी.एच.ई.एल. हाउस, सी.पी. कोर्ट / BHEL House, N.T.P.O. Building, New Delhi-110049
नर्स दिल्ली- 110049 / New Delhi-110049

Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes) *
			a	b	c	d = b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
1	Enrollment Unit as per Annexure - 2.1 (computer unit/ laptop, imaging printer, recognition enrollment kit, smart card encoder/programmer , HD Quality digital photo camera (as per Point no.10) along with photography setup & photo card preparation module, relevant software)	NOS	31	7790	755.25	8545.25	18%	10083.4	312585.2	5298055.0	6251704.9

कोर्पोरेट प्रशासन एवं आई.एस.एम.सी. / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड (Bharat Heavy Electricals Limited)
बी.एस.ई.एल हाउस, कोर्पोरेट, BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter total Lease Charge for Unit (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20

2 Access Control & Attendance recording unit

2.1	Wall Mount Face recognition reader (Type I) with card reader, IP 65 protection, specifications as per 9.1 of Annexure 9 for workplace for 5000 user capacity	NOS	1243	4375.7	551.6	18%	5814.3	7227116.9	122493506.7	144542337.9
2.2	Face recognition reader (Type-II) with card reader, IP 65 protection, specifications as per	NOS	446	4512.5	660.3	18%	6103.8	2722314.9	46140930.0	54446297.4

प्रमाणित / MEENA THAKRAN
NOS 446
कोरपोरेट प्रमाणित एण्ड आइडेंटिफिकेशन / Corporate Admin. & ISMG
भारत हेल्थी इलेक्ट्रिकल्स लिमिटेड / Bharat Healthy Electricals Limited
प्लॉट नं. 10049, सी.ए. रोड, बल्लभपुरा, गुरुग्राम-110049

Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit Qty (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit Qty (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d = b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
2.3	9.2 of Annexure 9 for Access control at gates for 15000 user capacity. Face recognition reader (Type -V) with card reader and keypad, IP 65 protection, specifications as per Para 9.5 of Annexure-9 for Access control at gates for 15000 user capacity.	NOS	136	4583.8	668.2	5251.92	18%	6197.3	842827.6	14285213.3	16856551.7


 MEEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आईएलएसी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी एच ई एल हाउस, सीडी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter total Lease Charge for Unit Qty (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit Qty (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
2.4	Portable Face recognition reader (Type- III) with card reader & Wi-Fi For Access Control at Gates (Emergency/ sudden breakdown situation & for Suspend employees) with IP 65 protection, specifications as per 9.3 of Annexure 9 for 15000	NOS	16	4512.5	660.3	18%	6103.8	97661.5	1655280.0	1953230.4


मीना थक्रान
 प्रबंधक / Manager
 कोर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 री.एच.ई.एल हाउस, सीरी कोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

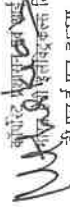
Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d = b+c	e	f = d+g*e	g = (a*f)	h = (d*a*20)	i = g*20
2.5	Face recognition reader (Type-IV) with card reader & cellular connectivity, as per 9.4 of Annexure 9 for locations in Township where LAN connection is not available for 5000 user capacity.	NOS	58	4797.5	767.9	5565.42	18%	6567.2	380897.1	6455883.3	7617942.3
2.6	Tower Light (Red and Green LEDs) as per Annexure-12	NOS	319	381.9	110.5	492.42	18%	581.1	185355.5	3141618.3	3707109.6
3.1	Turnstile as per Annexure 10	NOS.	167	5747.5	396.6	6144.13	18%	7250.1	1210761.3	20521377.5	24215225.5

श्री अ. ठाकरान / MEENA THAKRAN

प्रबंधक / Manager


 श्री अ. ठाकरान / श्री अ. ठाकरान / Corporate Admin. & ISMG
 श्री अ. ठाकरान / श्री अ. ठाकरान / Bharat Heavy Electricals Limited
 श्री अ. ठाकरान / श्री अ. ठाकरान / BHEL House, Siri Fort
 नई दिल्ली - 110049 / New Delhi-110049

Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d = b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
3.2	Boom Barrier 6mtr as per 11.1 of Annexure 11	NOS	36	11241.7	2280.0	13521.67	18%	15955.6	574400.4	9735600.0	11488008.0
3.3	Boom Barrier 4 mtr as per 11.2 of Annexure 11	NOS	22	10608.3	1626.9	12235.21	18%	14437.5	317626.0	5383491.7	6352520.2
3.4	Boom Barrier 1 mtr as per 11.3 of Annexure 11	NOS	25	10450.0	1927.7	12377.71	18%	14605.7	365142.4	6188854.2	7302847.9
3.5	Automatic Swing Barriers Gates (2 lane for physically handicapped (PH) compatible) compatible with Face recognition with Anti Tail gating system as per 11.4 of Annexure 11	NOS	6	25966.7	3844.7	29811.40	18%	35177.4	211064.7	3577367.5	4221293.7

प्रमाणित / MEENA THAKRAN
प्रमाणित / Manager
प्रमाणित / Corporate Admin. & ISMG

भारत हीरो इलेक्ट्रिकल्स लिमिटेड / Bharat Hero Electricals Limited
भारत हीरो इलेक्ट्रिकल्स, सी 404 / BHEL House, Sin Fort
पिन कोड - 110049 / New Delhi-110049

Hardware BOQ for All locations											
BHEL Estimate											
S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit Qty (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit Qty (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d =b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
	per 16.2 of Annexure - 16										
3.6	Automatic Swing Barriers Gates (1 lane for physically handicapped (PH) compatible) with Face recognition with Anti Tail gating system as per 16.1 Annexure - 16	NOS	14	18738.8	2531.2	21269.95	18%	25098.5	351379.5	5955584.7	7027589.9

श्री. राकेश / MEENA THAKRAN

प्रबंधक / Manager

भारत भारती लिमिटेड / Corporate Admin. & ISMG
भारत भारती लिमिटेड / Bharat Heavy Electricals Limited
बीएचईएल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi- 110049

Hardware BOQ for All locations											
BHEL Estimate											
S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit Qty (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit Qty (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d =b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
3.7	Automatic Swing Barriers Gates (2 lane) (Able to work in both directions i.e. IN & OUT) and make it compatible with Face recognition Devices (and through RFID card also) with Anti Tail gating system as per 16.4 of Annexure - 16	NOS	12	59786.7	4989.1	64775.75	18%	76435.4	917224.6	15546180.0	18344492.4

श्री. ठाकरान / MEENA THAKRAN

प्रबंधक / Manager

भारत भारती इलेक्ट्रिकल्स लिमिटेड / Corporate Admin. & ISMG
भारत भारती इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एस.ई.एल. हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

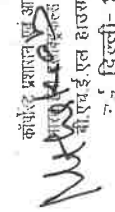
Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit Qty (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit Qty (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d = b+c	e	f = d+d*e	g = (a*f)	h = (d*a*20)	i = g*20
3.8	Automatic Swing Barriers Gates (1 lane) (Able to work in both directions i.e. IN & OUT) and make it compatible with Face recognition Devices (and through RFID card also) as per 16.3 of Annexure - 16	NOS	45	18129.2	3071.7	21200.83	18%	25017.0	1125764.3	19080750.0	22515285.0
SUB TOTAL-1									16842121.84	285459692.2	336842436.7

4.	Manpower Cost	LOT									
4.1	Operating cost for Manpower (PROPOSED)	(Hardware & Software Engineer)		Rate not to be quoted here. Rates quoted in BOQ for DR sheet							

प्रबंधक / Manager


 कोयले प्रमाणित आईएसएजी / Corporate Admin. & ISMG
 भारती भारती लिमिटेड / Bharat Heavy Electricals Limited
 कोयले आईएसएजी हाउस, सीरी कोर्ट / BHEL House, Siri Fort
 दिल्ली- 110049 / New Delhi-110049

Part B - Outright purchase (These charges should be valid for entire contract period)			Quantity (Total)	Outright purchase price per unit	GST %	Outright purchase price including GST	Total cost for total Qty (excluding Taxes)	Total cost for total Qty (including Taxes)
			(A)	(B)	(C)	(D)= (B)+(B)*(C)	(E)= (B)*(A)	(F)= (D)*(A)
1	Smart Cards	NOS	115180	60.20	18%	71.00	6929996.70	8177396.10
2	UTP Cable	METER	70755	40.50	18%	47.80	2867936.00	3384164.50
3	RJ 45 connectors	NOS	7480	13.00	18%	15.30	97115.30	114596.10
4	PVC Conduit	METER	41900	41.20	18%	48.60	1724883.30	2035362.30
5	MS Pipe	METER	8615	99.10	18%	117.00	853890.10	1007590.30
6	Power Cable	METER	19600	84.90	18%	100.10	1663386.70	1962796.30
7	Installation commissioning, including civil & electrical work at all locations/ Training charges	LOT	27	516166.70	18%	609076.70	13936500.00	16445070.00
8	Shifting of readers to new location	NOS	145	3166.70	18%	3736.70	459166.70	541816.70
9	Shifting of turnstile along with reader to new location	NOS	37	9975.00	18%	11770.50	369075.00	435508.50
10	EM locks for Door Access Control (Double Door) compatible with Face recognition Devices (and RFID also)	NOS	11	4401.70	18%	5194.00	48418.30	57133.60
11	EM locks for Door Access Control (Single Door) compatible with Face	NOS	11	2976.70	18%	3512.50	32743.30	38637.10

कोरपोरेट प्रमाणित एल आईएस एमसी / भारतीय प्रमाणिक / भारतीय इलेक्ट्रिकल लिमिटेड / BHEL (Heavy Electricals) Limited
 भारत हेवी इलेक्ट्रिकल लिमिटेड / BHEL मोस्टा सिग्नलिंग
 बी.एच.ई.एल. हाउस, सीपी कोर्ट / BHEL House Signaling
 नई दिल्ली- 110049 / New Delhi-110049

Part B - Outright purchase (These charges should be valid for entire contract period)		Quantity (Total)	Outright purchase price per unit	GST %	Outright purchase price including GST	Total cost for total Qty (excluding Taxes)	Total cost for total Qty (including Taxes)
		(A)	(B)	(C)	(D)= (B)+(B)*(C)	(E)= (B)*(A)	(F)= (D)*(A)
	recognition Devices (and RFID also)						
12	Door Buzzer compatible with EM lock NOS	17	1108.30	18%	1307.80	18841.70	22233.20
13	Transportation & Installation of readers to new location (for sites) JOB	96	7283.3	18%	8594.3	699200.00	825056.00
14	Shifting of automatic swing barrier gates along with reader to new location JOB	3	16625.00	18%	19617.50	49875.00	58852.50
	SUB TOTAL-2					29751028.1	35106213.14
	GRAND TOTAL for HARDWARE BOQ					315210720	371948649.9

- The Percentage (%) above/ below (+/-) quoted at S.No. 5 of "Table named: Consolidated Estimate for Complete project" of shall be used to arrive at rate for all line items of (DR, DC & Hardware) on proportionate basis. GST rates @ 18% is already included in aforesaid item rates/amount at 18%, so, % above / below (+/-) quoted at S.No. 5 shall be adjusted for calculating item rates accordingly at the time of payment.

गोपल ठाकरान / MEENA THAKRAN
 प्रबंधक / Manager
 कोरपोरेट म्याग्नेटिक्स प्राइवेट लिमिटेड
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड
 सी.एस.ई. एल. हाउस, सीरी फोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-XII

CHECKLIST (TO BE ATTACHED WITH TECHNO-COMMERCIAL BID (PART I) DULY FILLED BY THE VENDOR)

NOTE: - Suppliers are required to fill in the following details in their Letterhead and no column should be left blank

A	EMD DETAILS	
B	DESCRIPTION	ENCLOSED BY BIDDER
1	Whether Pre - Qualification Criteria is understood and provided proper supporting documents.	YES / NO
2	Whether all pages of the Tender documents including annexures, appendices etc are read and understood	YES / NO
3	Audited Balance Sheet and profit & Loss Account for the last three years	YES / NO
4	Copy of PAN Card & GST registration	YES / NO
5	Submission of UDYAM/MSE certificate as specified in Tender	YES / NO
6	Technical Specifications (Annexure 1 to 17)	YES / NO
7	Bill of Quantities (Annexure-18)	YES / NO
8	BHEL Units & Sites (Annexure A)	YES / NO
9	Role Based Dashboards (Annexure B)	YES / NO
10	Submission of Integrity Pact as specified in Tender as per Annexure - C	YES / NO
11	BHEL Nodal Officers (Annexure D)	YES / NO
12	Declaration confirming knowledge about Site Conditions as per Annexure - E	YES / NO
13	Pre Bid Queries as per Annexure-F	YES / NO
14	Power of Attorney for submission of tender as per Annexure - G	YES / NO

मीना ठाकरा / MEENA THAKRAN
प्रबन्धक / Manager
कॉर्पोरेट प्रशासन एवं आईएसएमसी / Corporate Admin. & ISMC
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

15	Proforma of Bank Guarantee for Earnest Money as per Annexure - H	YES / NO
16	Submission of Non-Disclosure Certificate as per Annexure - I	YES / NO
17	Submission of Non-Disclosure Agreement Annexure - J	YES / NO
18	Back to Back Guarantee Annexure - K	YES / NO
19	Business Rules Annexure - L	YES / NO
20	MIRs Annexure - M	YES / NO
21	Signed copy of Annexure-N BHEL Manpower Strength of each Unit	YES / NO
22	Manufacturer's Authorisation Form Annexure -O	YES / NO
23	Executed Work Order Details Annexure - P	YES / NO
24	Declaration regarding Insolvency/ Liquidation/ Bankruptcy Proceedings as per Annexure -Q	YES / NO
25	Declaration reg. minimum local content in line with revised public procurement as per Annexure - R	YES / NO
26	Bank Account Details for E-Payment as per Annexure - S	YES / NO
27	Bidders General Information Annexure - T	YES / NO
28	Offer forwarding letter / tender submission letter as per Annexure - U	YES / NO
29	Declaration by Authorized Signatory as per Annexure - V	YES / NO
30	Submission of Certificate of No Deviation as per Annexure- W	YES / NO
31	Declaration for relation in BHEL as per Annexure - X	YES / NO
32	Form of extension of validity of Bank Guarantee Annexure- Y	YES / NO
33	Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017 as per Annexure - Z	YES / NO
34	Signed & stamped copy of Indemnity Bond Annexure- ZZ	YES / NO
35	Signed & stamped copy of Un-price Bid Format Annexure- XI मीना ठाकरान / MEENA THAKRAN प्रबंधक / Manager	YES / NO

36	Signed & stamped copy of List of Consortium Banks Annexure- XIII	YES / NO
37	Signed & stamped copy of HSE Guidelines: Annexure- XIV	YES / NO
38	Signed & Stamped Copy of price-Bid (In Separate Envelope) ANNEXURE-XV	YES / NO

NOTE: Strike off 'YES' or 'NO', as applicable. Tender not accompanied by the prescribed above applicable documents are liable to be summarily rejected.

DATE :

Signature of Authorised Signatory
(With Name, Designation and Company seal)

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं सुरक्षा प्रबंधन विभाग / Corporate Admin. & ISMG
भारत भारी बिजली लिमिटेड / Bharat Heavy Electricals Limited.
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नई दिल्ली- 110049 / New Delhi-110049

ANNEXURE-XIII
LIST OF CONSORTIUM BANK

Sl. No.	NAME OF THE BANK
1	State Bank of India
2	Canara Bank
3	IDBI Bank Limited
4	ICICI Bank Limited
5	HDFC Bank Limited
6	Axis Bank
7	IndusInd Bank Limited
8	Bank of Baroda
9	Exim Bank
10	Indian Bank
11	Punjab National Bank
12	Union Bank of India
13	Yes Bank Limited
14	RBL Bank Ltd.
15	Standard Chartered Bank
16	Indian Overseas Bank
17	Kotak Mahindra Bank Limited
18	Federal Bank Limited
19	Hongkong and Shanghai Banking Corporation Ltd

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन, भारती भारती लिमिटेड / Corporate Admin. & ISMG
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ANNEXURE-XIV
HSE GUIDELINES

Safety and Environment Obligations

1. Rules to be observed, (while inside BHEL premises):

- i. BHEL is a no-smoking zone. This rule shall be observed by all workmen at all times while inside BHEL.
- ii. Workers shall not indulge in gambling or consumption of liquor while inside BHEL.
- iii. No workmen shall enter BHEL in inebriated condition.
- iv. Contractor shall not post any worker at a workplace without instructing him of all Safety requirements, Technical requirements and all rules of proper conduct in line with Factories Act and BHEL Rules and regulations.

2. SAFETY:

- i. No workman shall be below the age of 18 years on the date of starting work in BHEL. Neither shall any contract worker be above 60 years of age during the entire period of contract.
- ii. For any skilled / semi-skilled work; notarized copies of trade certificate such as ITI pass, Diploma, or degree shall be furnished.
- iii. Electricians shall furnish their valid license from Chief Electrical Inspector, Govt of respective state Or Equivalent Certificate of experience as per IEE Rules.
- iv. For Crane operators, a minimum skill certificate of ITI pass shall be required. Experience certificate stating specific skill in crane operation such as EOT crane, mobile crane etc as may be relevant, names of enterprises where cranes have been operated in the past, period (from and to date) shall be furnished at the time of quoting for the tender.
- v. Contractor shall submit proof of crane operator having undergone training for operating the crane. Or that he is sufficiently/adequately skilled and/or experienced in operation of the said crane. This has to be in accordance of Factories Act Rule 62(3) which states "No person under 18 years of age and no person who is not sufficiently competent AND reliable shall be employed as driver (meaning: operator) of a lifting machine (meaning: crane) whether driven by mechanical power (meaning Fork lift truck, mobile crane) or otherwise (meaning: JIB crane, Mono-rail/Goliath/semi-goliath crane, EOT Crane, Hoist, Lift), or to give signals to driver (meaning: slinger).
- vi. For slingers employed by contractor, the minimum educational qualification shall be 10th pass.
- vii. List of all Personal Protective Equipment which shall be provided by Contractor must be furnished at the time of quoting for tender. In the event where, after award of work order, it is found that Contractor's workmen are working without the required PPEs, BHEL reserves the right to terminate the contract OR to provide

the PPEs at the cost of Contractor. The expenses so incurred shall be deducted from the running/final bills of the contractor.

- viii. At the time of starting work, the contractor shall submit all PPEs through designated entries in BHEL for such items as Face Shield, Respirators, Safety Belts, Dungarees, Welding shields etc as relevant and mandatory for adequate safety of personnel. For other consumable nature of PPEs also, such as masks, ear-buds, muffs gloves, inspection at workplace by BHEL personnel shall confirm whether workmen are provided the PPEs and are using the same.
- ix. For items which are relevant with safe performance of work at workplace, on first day of commencement of work, the contractor shall get the signed endorsement from AGM concerned of the department where work is to be started, that workmen have been issued the relevant PPEs by contractor and that the same are being used.
- x. The Signed endorsement of this sheet shall be sent to CLC division at the time of commencement of work.
- xi. Failing to furnish this endorsed copy will result in objection for processing the running / final bill, whichever is put up first, for clearing.

3. ENVIRONMENT:

- i. For any Chemicals, Paints or oils etc. that the contractor may be required to be bring inside factory, the empty drums, containers etc. shall be taken out through designated gate under intimation to concerned BHEL official of the department where work is being carried out OR as specified by the BHEL Unit/ Office.
- ii. No oil, effluent or chemical etc. shall be drained in the drains or water pools inside factory.

4. HEALTH

- i. Medical certificate of current date, from local Registered doctor (MBBS) in respect of all workmen shall be furnished by contractor before starting work in BHEL.
- ii. For crane operators Medical certificate with special fitness of eye-sight & colour-vision from Registered doctor (ophthalmology MBBS) shall be furnished before start of work; and fresh medical certificate shall be thereafter produced every 12 months. For an operator of 45 years and above, the same shall be furnished every 6 months of his working inside BHEL from Registered doctor (MBBS Ophthalmology).
- iii. All hired/on-contract crane operators shall be got verified by the contractor from Safety Department before deployment at any shop floor, and from time to time as required in accordance with directive of BHEL.
- iv. For such workmen as will be employed in Canteens, the contractor shall furnish Medical Certificate of fitness from Registered doctor (MBBS) stating fitness in addition to general aspects, free from any skin diseases, infectious diseases or diseases like TB, Asthma, Leprosy etc.

मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager

कॉर्पोरेट प्रशासन एवं आरोग्य सुरक्षा विभाग / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited

बी.एल. हाउस, सीरी फोर्ट / BHEL House, Sec. Fort
नई दिल्ली - 110049 / New Delhi-110049

- v. As a general rule, no person above age 60 years shall be employed for contract work. However, if a specific skill set necessitates employing of a person above 60 years of age, the contractor shall specify this condition at the time of quoting for a tender. And BHEL reserves the right to allow/ permit such a person to work inside BHEL. The necessary condition for this shall be that the contractor shall furnish a certificate (of current date) of Physical Fitness from a registered Medical doctor mentioning the age of the person to be employed. However, this may be allowed only as an exception due to skill-requirement, and not as a general practice. The permission for such exception may be granted after due consideration by an official not lower than AGM(HOD).
- vi. For all such work requiring working at heights such as chimneys, rooftops, columns of blocks etc, special medical certificate of fitness from MBBS doctor shall be furnished showing the person is free from such medical conditions as vertigo, epilepsy etc. Specific written permit shall be taken from the In-charge/HOD of that department not less than AGM, for such work.
- vii. The contractor shall follow the Permit system for all dangerous operations as governed under Factories act and State Rules.

5. ROAD SAFETY:

- i. All vehicles brought inside the factory by contractor, shall have valid registration. The drivers, or operators as the case may be, shall have valid licenses. The vehicles shall be Roadworthy and Load-worthy as applicable.
- ii. Operation of Battery operated trucks (BOT) and Fork-lift trucks inside factory shall be done only by workmen who hold valid licenses for light commercial vehicles.
- iii. Maintaining road safety rules inside factory at all times is the prime responsibility contractor's workmen. Any violation of the same shall be deemed a punishable offence in accordance with road safety rules. Any damage to the property of BHEL by any act of carelessness on road/mishap, shall be recoverable from the contractor.

6. GENERAL SAFETY ASPECTS:

All Contractor's workmen shall abide by the rules & regulations of BHEL with respect to Safety, Health and Environment while inside BHEL factory:

- i. BHEL's HSE policy shall be honoured at all times.
- ii. PPEs shall be used as required at the work-place
- iii. No unsafe act shall be indulged-in, by the workmen.
- iv. Special written permissions for working at heights shall be obtained by contractor
- v. Medical clearances as required for work shall be submitted before start of work.
- vi. While working at any machine tool area/dangerous operation, BOTs, Cranes etc. mobile phone usage is not allowed.
- vii. No loose clothing like shawls, mufflers, dupatta etc. should be worn near machine tools. Clothes shall be reasonably tight fitting and preclude any mishap occurrence.
- viii. Smoking & consumption of intoxicating substances is prohibited at all times inside factory.

- ix. No make-shift arrangements shall be made for any engineering shop-floor work.
- x. Compressed air shall not be used for area or personal cleaning/de-dusting.
- xi. All stipulations of the Factories Act shall be honoured and observed by contractor's workmen.

The following requirements are specific to the Skills, Trades and Situations as per Factories Act 1948.

- 7. These have to be fulfilled by the contractor for allocating his worker(s) inside BHEL for any work awarded to him, for workers working at/on: whichever is applicable. (All Factories Act & MP Rules to be fulfilled by contractor for Age, Skill, Training and Instruction for any of the below mentioned equipment, Machinery, Process)
 - i. Revolving Machinery
 - ii. Pressure Vessels
 - iii. Lifting Devices
 - iv. Power Presses
 - v. Work at heights
 - vi. Any confined space
 - vii. Electrical Equipment
 - viii. In the vicinity of other hazardous process/machinery

I/WE Agree
Sign & Seal of Contractor




मेना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager
कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

**ANNEXURE-XV
PRICE-BID FORMAT (PART-II)**

PRICE-BID (TO BE SUBMITTED in SEPARATE ENVELOPE) BY FILLING “%” AT S.No. 5							
CONSOLIDATED ESTIMATE FOR COMPLETE PROJECT							
S. No	Particulars	Five Year Lease Cost include onsite service and Maintenance without GST Part - A	Five Year Lease Cost include onsite service and Maintenance with GST Part - B	Outright Purchase Miscellaneous Items without GST Part - C	Outright Purchase Miscellaneous Items with GST Part - D	Part A + Part C (Lease Model)	Part B + Part D (Lease Model)
						Total Cost without GST	Total Cost with GST
	a	b	c	d	e	f=b+d	g=c+e
1	BoQ for DR	168,883,676.64	199,282,738.44	-	-	168,883,676.64	199,282,738.44
2	BoQ for DC	29,112,288.17	34,352,500.04	-	-	29,112,288.17	34,352,500.04
3	BOQ of hardware for all Units	285,459,692.16	336,842,436.74	29,751,028.08	35,106,213.14	315,210,720.24	371,948,649.88
4				BHEL ESTIMATED VALUE (in Rs.)			
5				% TO BE QUOTED BY BIDDER (ABOVE OR BELOW the amount mentioned at S.No. 4)			
				BHEL ESTIMATED VALUE (in Rs.)			
				513,206,685.05			

NOTE:

- The Percentage (%) above / below (+/-) quoted at S.No. 5 shall be used to arrive at rate for all line items of (DR, DC & Hardware BOQ) on proportionate basis. GST rates @ 18% is already included in aforesaid item rates/amount, so, % above / below (+/-) quoted at S.No. 5 shall be adjusted for calculating item rates accordingly at the time of payment.


 गौरी ठाकरान / MEENA THAKRAN
 प्रबंधक / Manager
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 बी.एच.ई.एल. हाउस, रोदी फोर्ड / BHEL House, Sui Ford
 नई दिल्ली- 110049 / New Delhi-110049

CENTRALIZED INFRASTRUCTURE AND SOFTWARE SERVICES BUDGETARY BOQ for Disaster Recovery Site (DR)

S. No	Item name	Unit	Qty	Five Year Lease Cost include onsite service and Maintenance (BHEL ESTIMATE)			
				Unit Cost all-inclusive but without GST	Total Unit Cost all-inclusive but without GST	GST %	Total Unit Cost all-inclusive but with GST
				A	B	O	P=B*O
CENTRALIZED SERVER SYSTEM							
1	HCI Solution	LOT	1	8,635,777.72	8,635,777.72	18%	10,190,217.71
2	TOR Switch	NOS	2	3,451,401.74	6,902,803.49	18%	8,145,308.11
3	Management Switch	NOS	1	1,144,737.90	1,144,737.90	18%	1,350,790.73
4	Load Balancer	NOS	1	3,260,360.73	3,260,360.73	18%	3,847,225.67
5	x86 backup server with backup software	NOS	1	3,999,658.33	3,999,658.33	18%	4,719,596.83
6	Tape Library with Tapes	NOS	1	1,717,283.33	1,717,283.33	18%	2,026,394.33
7	Database License(s)	Lot	1	3,293,333.33	3,293,333.33	18%	3,886,133.33
	Sub Total 1			28,953,954.84			34,165,666.71

श्री. सुनील / MEENA THAKRAN


(Signature)

कॉर्पोरेट प्रशासन एवं आई एल एस सी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
सी एच ई एल हाउस, सीरी फोर्ड / BHEL House, Siri Fort

फ़ोन - 110049 / New Delhi-110049


CENTRALIZED INFRASTRUCTURE AND SOFTWARE SERVICES BUDGETARY BOQ for Disaster Recovery Site (DR)

Five Year Lease Cost include onsite service and Maintenance (BHEL ESTIMATE)							
S. No	Item name	Unit	Qty	CENTRALIZED SOFTWARE/APPLICATION			
				Unit Cost all-inclusive but without GST	Total Unit Cost all-inclusive but without GST	GST %	Total Unit Cost all-inclusive but with GST
		A	B	O	P=B*O	Q	R=(P)+(P)*(Q)
CENTRALIZED SOFTWARE/APPLICATION							
1	Centralized Time & Attendance Recording, Access control Software, Visitor management system, Meal Booking & Canteen Access Software, Device Control Application, API services	Lot	1	34,543,055.13	34,543,055.13	18%	40,760,805.06
2	Operating cost for Manpower {30 Hardware Engineers at various location for 05 years (60 months)} Various locations mentioned in Hardware BOQ item no. 4.1	Lot	1	82,808,333.33	82,808,333.33	18%	97,713,833.33
3	Operating cost for Manpower {(03 Software Engineers at Delhi/NCR Corporate Office for 05 years (60 months))}	Lot	1	22,578,333.33	22,578,333.33	18%	26,642,433.33
	Sub Total 2			139,929,721.80			165,117,071.72
	Grand Total			168,883,676.64			199,282,738.44

 **MEENA THAKRAN**
 प्रबंधक / Manager
 कॉर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 बी.एच.ई.एल हाउस, सीरी फोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

CENTRALIZED INFRASTRUCTURE AND SOFTWARE SERVICES BUDGETARY BOQ for Data Centre(DC)							
S. No	Item name	Unit	Qty	Five Year Lease Cost include onsite service and Maintenance (BHEL ESTIMATE)			
				Unit Cost all-inclusive but without GST	Total Unit Cost all-inclusive but without GST	GST %	Total Unit Cost all-inclusive but with GST
				A	B	O	P=B*O
CENTRALIZED SERVER SYSTEM							
1	HCI Solution	LOT	1	8,635,778	8,635,777.72	18%	10,190,217.71
2	TOR Switch	NOS	2	3,451,402	6,902,803.49	18%	8,145,308.11
3	Management Switch	NOS	1	1,144,738	1,144,737.90	18%	1,350,790.73
4	Load Balancer	NOS	1	3,260,361	3,260,360.73	18%	3,847,225.67
5	x86 backup server with backup software	NOS	1	3,999,658	3,999,658.33	18%	4,719,596.83
6	Tape Library with Tapes	NOS	1	1,717,283	1,717,283.33	18%	2,026,394.33
7	Database License(s)	Lot	1	3,451,667	3,451,666.67	18%	4,072,966.67
	Grand Total				29,112,288.17		34,352,500.04

- The Percentage (%) above/ below (+/-) quoted at S.No. 5 of "Table named: Consolidated Estimate for Complete project" of shall be used to arrive at rate for all line items of (DR, DC & Hardware) on proportionate basis. GST rates @ 18% is already included in aforesaid item rates/amount at 18%, so, % above / below (+/-) quoted at S.No. 5 shall be adjusted for calculating item rates accordingly at the time of payment.



 प्रबंधक / Manager
 कॉर्पोरेट ग्राहक एवं आईएसएमजी / Corporate Admin. & ISMG
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
 सी.एच.ई.एल. हाउस, सीरी फोर्ट / BHEL House, Siri Fort
 नई दिल्ली- 110049 / New Delhi-110049

Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d = b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
1	Enrollment Unit as per Annexure - 2.1 (computer unit/ laptop, imaging printer, facial recognition enrollment kit, smart card encoder/programmer, HD Quality digital photo camera (as per Point no.10) along with photography setup & photo card preparation module, relevant software)	NOS	31	7790	755.25	8545.25	18%	10083.4	312585.2	5298055.0	6251704.9

Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit Qty (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit Qty (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d = b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20

2 Access Control & Attendance recording unit

2.1	Wall Mount Face recognition reader (Type I) with card reader, IP 65 protection, specifications as per 9.1 of Annexure 9 for workplace for 5000 user capacity	NOS	1243	4375.7	551.6	4927.33	18%	5814.3	7227116.9	122493506.7	144542337.9
2.2	Face recognition reader (Type-II) with card reader, IP 65 protection, specifications as per	NOS	446	4512.5	660.3	5172.75	18%	6103.8	2722314.9	46140930.0	54446297.4

श्री. मे. शर्मा / MEENA THAKKAR

प्रबंधक / Manager

भारत भारती इलेक्ट्रिकल्स लिमिटेड / Corporate Admin. & ISMG
भारत भारती इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
सी.एच.ई.एल. हाउस, सी.पी. कॉर्ड / BHEL House, Sirsi Fort
नई दिल्ली-110049 / New Delhi-110049

Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter total Lease Charge for Unit Qty (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit Qty (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d = b+c	e	f=d+d*e	h=(d*a*20)	i=g*20
2.3	9.2 of Annexure 9 for Access control at gates for 15000 user capacity. Face recognition reader (Type -V) with card reader and keypad, IP 65 protection, specifications as per Para 9.5 of Annexure-9 for Access control at gates for 15000 user capacity.	NOS	136	4583.8	668.2	5251.92	18%	6197.3	14285213.3	16856551.7

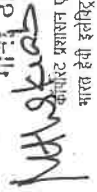
मीना ठाकरान / MEENA THAKRAN
प्रबंधक / Manager

कोर्पोरेट प्रशासन एवं आईएसएमजी / Corporate Admin. & ISMG
भारत हेवी इलेक्ट्रिकल्स लिमिटेड / Bharat Heavy Electricals Limited
सी.एच.ई.एल. हाउस, सीरी फोर्ट / BHEL House, Siri Fort
नई दिल्ली- 110049 / New Delhi-110049

Hardware BOQ for All locations

BHEL Estimate

S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit Qty (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit Qty (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d = b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
2.4	Portable Face recognition reader (Type- III) with card reader & Wi-Fi For Access Control at Gates (Emergency/ sudden breakdown situation & for Suspend employees) with IP 65 protection, specifications as per 9.3 of Annexure 9 for 15000	NOS	16	4512.5	660.3	5172.75	18%	6103.8	97661.5	1655280.0	1953230.4


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			a	b	c	d = b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
2.5	Face recognition reader (Type-IV) with card reader & cellular connectivity, as per 9.4 of Annexure 9 for locations in Township where LAN connection is not available for 5000 user capacity.	NOS	58	4797.5	767.9	5565.42	18%	6567.2	380897.1	6455883.3	7617942.3
2.6	Tower Light (Red and Green LEDs) as per Annexure-12	NOS	319	381.9	110.5	492.42	18%	581.1	185355.5	3141618.3	3707109.6
3.1	Turnstile as per Annexure 10	NOS	167	5747.5	396.6	6144.13	18%	7250.1	1210761.3	20521377.5	24215225.5
3.2	Boom Barrier 6mtr as per 11.1 of Annexure 11	NOS	36	11241.7	2280.0	13521.67	18%	15955.6	574400.4	9735600.0	11488008.0

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Hardware BOQ for All locations

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			a	b	c	d = b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
3.3	Boom Barrier 4 mtr as per 11.2 of Annexure 11	NOS	22	10608.3	1626.9	12235.21	18%	14437.5	317626.0	5383491.7	6352520.2
3.4	Boom Barrier 1 mtr as per 11.3 of Annexure 11	NOS	25	10450.0	1927.7	12377.71	18%	14605.7	365142.4	6188854.2	7302847.9
3.5	Automatic Swing Barriers Gates (2 lane for physically handicapped (PH) compatible) with Face recognition with Anti Tail gating system as per 16.2 of Annexure - 16	NOS	6	25966.7	3844.7	29811.40	18%	35177.4	211064.7	3577367.5	4221293.7

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Hardware BOQ for All locations

BHEL Estimate

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			a	b	c	d =b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
3.7	Automatic Swing Barriers Gates (2 lane) (Able to work in both directions i.e. IN & OUT) and make it compatible with Face recognition Devices (and through RFID card also) with Anti Tail gating system as per 16.4 of Annexure - 16	NOS	12	59786.7	4989.1	64775.75	18%	76435.4	917224.6	15546180.0	18344492.4


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Hardware BOQ for All locations											
BHEL Estimate											
S. No	Item name	Unit	Qty	Per quarter lease charge for unit quantity (Equipment Cost and Incidentals like Interest on capital & Insurance (transit & onsite)	Per quarter Maintenance charge for unit quantity	Per Quarter total Lease Charge for Unit Qty (excluding g Taxes)	GST %	Per Quarter total Lease Charge for Unit Qty (including GST)	Per Quarter Lease Charges for total Qty (including Taxes)	Total Lease Charge for contract for total Qty (excluding Taxes)	Total Lease Charge for contract for total Qty (including Taxes)
			a	b	c	d =b+c	e	f=d+d*e	g=(a*f)	h=(d*a*20)	i=g*20
3.8	Automatic Swing Barriers Gates (1 lane) (Able to work in both directions i.e. IN & OUT) and make it compatible with Face recognition Devices (and through RFID card also) as per 16.3 of Annexure - 16	NOS	45	18129.2	3071.7	21200.83	18%	25017.0	1125764.3	19080750.0	22515285.0
SUB TOTAL-1									16842121.84	285459692.2	336842436.7
4.	Manpower Cost										
4.1	Operating cost for Manpower (PROPOSED)		LOT								
			(Hardware & Software Engineer Engrs)								
Rate not to be quoted here. Rates quoted in BOQ for DR sheet											
Prepared by: <div>ANNA THEVAR</div> Checked by: <div>ANNA THEVAR</div> Date: <div>17/07/2024</div> Page No: <div>1</div> / Manager											

Rate not to be quoted here Rates quoted in BOQ for DR sheet

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Part B - Outright purchase (These charges should be valid for entire contract period)		Quantity (Total)	Outright purchase price per unit	GST %	Outright purchase price including GST	Total cost for total Qty (excluding Taxes)	Total cost for total Qty (including Taxes)
		(A)	(B)	(C)	(D)= (B)+(B)*(C)	(E)= (B)*(A)	(F)= (D)*(A)
1	Smart Cards	115180	60.20	18%	71.00	6929996.70	8177396.10
2	UTP Cable	70755	40.50	18%	47.80	2867936.00	3384164.50
3	RJ 45 connectors	7480	13.00	18%	15.30	97115.30	114596.10
4	PVC Conduit	41900	41.20	18%	48.60	1724883.30	2035362.30
5	MS Pipe	8615	99.10	18%	117.00	853890.10	1007590.30
6	Power Cable	19600	84.90	18%	100.10	1663386.70	1962796.30
7	Installation commissioning, civil & electrical work at all locations/ Training charges	27	516166.70	18%	609076.70	13936500.00	16445070.00
8	Shifting of readers to new location	145	3166.70	18%	3736.70	459166.70	541816.70
9	Shifting of turnstile along with reader to new location	37	9975.00	18%	11770.50	369075.00	435508.50
10	EM locks for Door Access Control (Double Door) compatible with Face recognition Devices (and RFID also)	11	4401.70	18%	5194.00	48418.30	57133.60
1	EM locks for Door Access Control (Single Door)	11	2976.70	18%	3512.50	32743.30	38637.10

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Part B - Outright purchase (These charges should be valid for entire contract period)		Quantity (Total)	Outright purchase price per unit	GST %	Outright purchase price including GST	Total cost for total Qty (excluding Taxes)	Total cost for total Qty (including Taxes)
		(A)	(B)	(C)	(D)= (B)+(B)*(C)	(E)= (B)*(A)	(F)= (D)*(A)
	compatible with Face recognition Devices (and RFID also)						
12	Door Buzzer compatible with EM lock	17	1108.30	18%	1307.80	18841.70	22233.20
13	Transportation & Installation of readers to new location (for sites)	96	7283.3	18%	8594.3	699200.00	825056.00
14	Shifting of automatic swing barrier gates along with reader to new location	3	16625.00	18%	19617.50	49875.00	58852.50
	SUB TOTAL-2					29751028.1	35106213.14
	GRAND TOTAL for HARDWARE BOQ					315210720	371948649.9

- The Percentage (%) above/ below (+/-) quoted at S.No. 5 of "Table named: Consolidated Estimate for Complete project" of shall be used to arrive at rate for all line items of (DR, DC & Hardware) on proportionate basis. GST rates @ 18% is already included in aforesaid item rates/amount at 18%, so, % above / below (+/-) quoted at S.No. 5 shall be adjusted for calculating item rates accordingly at the time of payment.
- For DR ,DC & Software etc wherever, Five Year Lease amount is available, that 5 year lease amount shall be used to back calculate Quarterly Lease amount for that item (after due consideration of GST). (As GST @ 18 % is included in all rates /amount and that shall be adjusted accordingly from % quoted by bidder.


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 कोषाध्यक्ष / Manager
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