

**Tender Ref: SNB/ENG/NIT/2013-14/09/031**  
Dec 2013

**S N BOSE NATIONAL CENTRE FOR BASIC SCIENCES**

**ELECTRICAL WORK, AIR-CONDITIONING AND FIRE  
ALARM SYSTEM FOR NEW LABORATORIES**

**S N BOSE NATIONAL CENTRE FOR BASIC SCIENCES**  
BLOCK-JD, SECTOR – III, SALT LAKE  
Kolkata 700 098

## PART - I

### 1 INVITATION TO TENDER

Sealed Tenders are invited from experienced and resourceful firms by S N Bose National Centre for Basic Sciences (SNBNCBS) for “**ELECTRICAL WORK, AIR-CONDITIONING AND FIRE ALARM SYSTEM FOR NEW LABORATORIES**”

#### 1.1 Submission

1.1.1 Offers are to be submitted for the subject work in two bid system as explained herein. The sealed tender document, duly filled in, shall be submitted in the Tender Drop Box kept at Main Building(Part-B),Ground floor at S N Bose National Centre for Basic Sciences, Kolkata - 700098 (“*the Centre*” in short).

#### 1.2 Tender Documents

1.2.1 Tender Documents can be downloaded from the Centre’s official Website: **www.bose.res.in** Bidders may visit the website for latest updates of this tender.

1.2.2 Amendment of Tender Documents: The Centre may modify the Tender Documents before the last date for submission of tenders by issuing Addenda which shall be part of the Tender Documents and the same will be published in the Centre’s website.

#### 1.3 Earnest Money

1.3.1 No Tender shall be considered which is not made in the prescribed form and which is not accompanied by a deposit of Rs. **1,12,000/-** (Rupees One Lakh Twelve Thousand only) as Earnest Money. Earnest Money Deposit will be accepted only in the form of Crossed Account Payee Banker’s Cheque or Demand Draft or Banker’s Pay Order from Nationalised /schedule Banks payable at Kolkata and drawn in favour of “S N Bose National Centre for Basic Sciences, Kolkata - 700098” This shall be placed in an envelope, clearly super-scribed with Tender number, title and “Earnest Money Deposit” in bold letters. EMD in cash will not be accepted. The offer shall be submitted by the Tenderer in manner explained herein.

#### 1.4 Validity

1.4.1 The Price Offer shall be valid for 90 days from the date of opening of the Technical Cover of the Tender

#### 1.5 Due Date

1.5.1 The due date of Tender Submission is **03.01.2014** (1430 hrs IST) and the Technical Cover will be opened on the same day at 15-00 hours.

#### 1.6 Rejection

1.6.1 If the offers are not received according to the instructions detailed herein, they shall be liable for rejection. The corrections and remarks shall be either typewritten or legibly written and signed.

Sd/-

Campus Engineer cum Estate Officer

S N Bose National Centre for Basic Sciences  
Sector-III, Block-JD, Salt Lake,Kolkata – 700098

## **2 WORK DESCRIPTION AND SCOPE OF WORK**

### **2.1 Scope of work**

2.1.1 The work included in this Tender comprises the following:

2.1.2 Supply, Erection and Testing - Commissioning of Electrical Panels, Air-conditioning and Automatic fire alarm systems including all necessary peripherals, cabling and temporary & enabling works as per schedule of works enclosed following relevant Indian / International standards and best Engineering practices.

2.1.3 Submission of all the equipment, including technical specification, operation and maintenance manuals, test certificates, warranty certificates, installation report

2.1.4 A Guarantee against damage or failure due to defects in design, material, manufacture and workmanship for the duration of the Defect Liability Period of 12 calendar months from the date of satisfactory completion of work shall be provided.

### **2.2 Site Familiarisation**

2.2.1 Before quoting, the Tenderer in his own interest shall carry out site visits to know the site conditions and full implications of the assignment. This will also help him in proper assessment of the work. Failure to do so will not absolve the contractor of his responsibility to carry out the work as specified in the Tender Documents. The cost of visiting the site shall be borne by the Tenderer and shall be at his own responsibility and risk.

### **2.3 Site Consultations**

2.3.1 The work shall be carried out in consultation with the Centre's Engineering Section.

## **3 INSTRUCTIONS TO TENDERER**

### **3.1 Earnest Money Deposit (EMD)**

3.1.1 No bid will be considered which is not accompanied by a sum of Rs.1,12,000/- (Rupees One Lakh Twelve Thousand only) as Earnest Money which is lodged on understanding that in the event of the bidder withdrawing the bid before the expiry of 90 days from the last date of submission of the bid, the bid shall be cancelled and the Earnest Money deposited shall be forfeited.

3.1.2 The EMD must be lodged by adopting following steps:

- (A) Earnest Money will be accepted only in the form of Crossed Account Payee Banker's cheque or Demand Draft or Banker's Pay order from any Nationalised/ scheduled Bank payable at Kolkata. EMD in cash will not be accepted.
- (B) The EMD shall be submitted as per the procedure laid down in the Tender notice.
- (C) Bids, if not accompanied by the requisite EMD, shall be treated as invalid and shall not be opened. The Earnest Money will be returned to the unsuccessful bidders on their request without interest after the bids are settled. The Earnest Money will be retained in case of successful bidder and will form a part of the Initial Security Deposit.

### 3.2 Return of Tender Forms

3.2.1 TENDERER MUST RETURN THE COMPLETE TENDER DOCUMENTS INCLUDING **FORM OF TENDER** WITH CONDITIONS OF CONTRACT, THE SPECIFICATIONS, AND SCHEDULES ETC. DULY SIGNED. ALTERATIONS TO THE CONDITIONS OF CONTRACT, SPECIFICATIONS, ETC. WILL NOT BE ENTERTAINED. ANY TENDER NOT SO SIGNED ON ALL THE DOCUMENTS IS LIABLE TO BE REJECTED.

### 3.3 Completion period

3.3.1 The time allowed for completion of the work from the date of award of the contract is Sixty (60) days.

### 3.4 Filling in contract price schedule

3.4.1 Tenderer must fill in the rates against all the items of works included in the schedule of quantities and rates and give the total figure.

### 3.5 Acceptance of the tender

3.5.1 The Centre reserves its right to accept or reject any Tender in whole or in part without assigning any reasons thereof.

### 3.6 Taxes and Duties

3.6.1 Tenderers rates and amounts are to be fully inclusive of all taxes and duties. The Centre can avail excise duty / custom duty exemption against exemption certificate.

### 3.7 Tender price

3.7.1 Tender price shall be inclusive of all charges for design, manufacture/repair, transport, handling, supply and delivery at site, receipt and storage of all material and equipment at site, installation, trials, testing, commission, maintenance for Defect Liability Period, inspection, supervision and all other incidental charges for the execution of the contract.

### 3.8 Mode of Submission of Tender:

3.8.1 Tenders enclosed in a sealed cover as mentioned in the "Tender Notice" indicating on the envelope the Tender No. and due date and time and endorsed "**ELECTRICAL WORK, AIR-CONDITIONING AND FIRE ALARM SYSTEM FOR NEW LABORATORIES**" and addressed to the Registrar, SNBNCBS, will be dropped in the Tender Box kept at the reception area on or before the due date and time of the Tender submission. All Tenders shall be submitted in sealed covers separately as mentioned below:

- (i) **The first cover** shall contain only EMD in the prescribed manner and shall be sealed and super-scribed with Tender no. and title and EMD as shown below:

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**"EARNEST MONEY DEPOSIT"**

**"ELECTRICAL WORK, AIR-CONDITIONING AND FIRE ALARM SYSTEM FOR NEW LABORATORIES"**

**TENDER REF** \_\_\_\_\_

**CLOSING DATE** \_\_\_\_\_ **AT** \_\_\_\_\_ **HOURS** \_\_\_\_\_

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(ii) **The second cover** shall contain Technical Offer (**Part – I**) along with all Conditions of Contract, Specification, annexures/schedules, attachments etc, in original and shall be sealed and super-scribed as shown below :

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**“TECHNICAL BID”**

**“ELECTRICAL WORK, AIR-CONDITIONING AND FIRE ALARM SYSTEM FOR NEW LABORATORIES”**

TENDER REF \_\_\_\_\_

CLOSING DATE \_\_\_\_\_ AT \_\_\_\_\_ HOURS

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(iii) **The third cover** shall contain only the Price Offer (**Part - II**), and shall be sealed, super-scribed as shown below:

**“PRICE OFFER”**

**“ELECTRICAL WORK, AIR-CONDITIONING AND FIRE ALARM SYSTEM FOR NEW LABORATORIES”**

TENDER REF \_\_\_\_\_

CLOSING DATE \_\_\_\_\_ AT \_\_\_\_\_ HOURS

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(iv) **The fourth cover** shall contain all the above three covers and shall be super-scribed with Tender No. title and **“Complete Offer”** as shown below:

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**“COMPLETE OFFER”**

**“ELECTRICAL WORK, AIR-CONDITIONING AND FIRE ALARM SYSTEM FOR NEW LABORATORIES”**

TENDER NUMBER \_\_\_\_\_

CLOSING DATE \_\_\_\_\_ AT \_\_\_\_\_ HOURS

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If the offers are not received according to the instructions detailed herein, they shall be liable for rejection.

The Tender will be opened in the presence of the Tenderers or their representatives who may wish to be present on scheduled date and time of opening the Tenders.

Evaluation of technical offers will be done first on the basis of criteria given in the Schedule of attachments. Price bids of technically qualified bidders only will be opened thereafter.

**SCHEDULE OF ATTACHMENTS (AS PROOF OF TECHNICAL COMPLIANCE)**  
**TO BE COMPLETED BY THE TENDERER FOR THE TECHNICAL BID**

Item	Title	Attached? (Tenderer to initial)
Conditions of Contract, Specification and Schedules duly signed.		
<b>Technical Submission, to include:</b>		
Tenderer Attachment Ref.	Subject	
A	Proof of experience in similar type of work during last three years including value of contract, proof of completion of works, number of years of experience to be submitted.	
B	Proof of financial credential: Average annual turnover should not be not less than Rs. 1 Crore during the last three years. Audited statement for last 3 financial years (2010-2011, 2011-2012, 2012-13) to be submitted.	
C	Proof of valid electrical contractor Licence, trade license, IT PAN, VAT, Service Tax, and Professional Tax Registration	
D	Number of similar works done during Last 3 Years.	

#### **4 CONDITIONS OF CONTRACT**

##### **4.1 Definitions and Interpretation**

4.1.1 Whenever the following words and expressions occur in the Contract Documents, they shall have the meanings herein assigned to them except where the context otherwise requires:

##### **4.1.2 Owner**

The 'Owner' means the S N Bose National Centre for Basic Sciences and referred to throughout in the Contract Documents by 'Owner' or 'the Centre' having its premises at Sector-III, Block-JD, Salt Lake, Kolkata - 700 098. The word 'Owner' or 'the Centre' when used in conjunction with the words 'as directed', 'where directed', 'approved', 'subject to approval', 'satisfactory', 'accepted', 'equal to', 'proper', 'determined by' shall mean the Registrar of SNBNCBS or any other official nominated by the Owner from time to time.

##### **4.1.3 Contractor**

The 'Contractor' is the successful Tenderer who is awarded the Contract by the Owner to perform the Works covered by this Contract and shall be deemed to include the Contractor's successors, heirs, executors, administrators, representatives or assigns approved by the Owner and will be referred to as if of masculine gender and singular number, throughout in these Documents.

##### **4.1.4 Sub-Contractor**

The term 'Sub-Contractor' used herein refers to a party or parties having a direct Contract with the Contractor to whom any part of the contract has been sublet by the Contractor with the consent in writing of the Owner.

##### **4.1.5 Work**

'Work' means the work to be executed in accordance with the Contract and includes extra works and temporary works.

#### 4.1.6 The Contract

'The Contract' means and includes the documents listed in Schedule A of the Form of Agreement.

#### 4.1.7 Contract Price

'Contract Price' means the sum agreed to and named in the Letter of Award of Contract.

#### 4.1.8 Drawings

'Drawing' means all drawings, calculations and technical information of a like nature provided by the Owner to the Contractor under the Contract and all drawings, calculations and technical information of a like nature submitted by the Contractor and approved by the Owner.

#### 4.1.9 Site

'Site' means the lands and other places, on, under, in or through which the works are to be executed or carried out and any other lands or places provided by the Owner for the purpose of the Contract.

#### 4.1.10 Month and Week

'Month' means English Calendar month; 'week' means calendar week.

#### 4.1.11 Excepted Risk

The 'Excepted Risks' are riot (in so far as it is uninsurable), war, invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection or military or usurped power or acts of God such as earthquake, floods, cyclone, hurricane etc., or use or occupation by the Owner of any portion of the Works in respect of which a certificate of completion has been issued (all of which are herein collectively referred to as the 'Excepted Risks').

#### 4.1.12 Commencement Date

'Commencement Date' means the date for the commencement of the contract as stated in the Letter of Award (LOA).

#### 4.1.13 Letter of Award

'Letter of Award' means a letter issued by the Owner to the successful Tenderer to notify him that he is awarded the contract.

### **4.2 Contractor to execute contract Agreement**

4.2.1 The Contractor shall after acceptance of Tender/work order enter into and execute a Contract Agreement, on a non-judicial stamp paper of Rs. 100/- (One hundred only) within 15 days of issue of LOA, to be prepared as per FORM OF AGREEMENT. Until such Contract Agreement is executed the Conditions of Contract, Instruction to Tenderers, Scope of Work & Specifications, Price Schedule, Drawings and the Tender together with their acceptance thereof, shall be construed as Contract between the Owner and the successful Tenderer. No payment will be made to the Contractor until the Agreement is signed by him. The Contractor shall prepare and finalise the Contract Agreement for signing the formal Contract Agreement. After signing, Contractor shall prepare and submit the full contract documents to Owner duly well bound in both original and copy.

4.2.2 The cost of the non judicial stamp paper shall be borne by the contractor.

### **4.3 Contractor to satisfy himself in all point**

4.3.1 The Tenderer shall inspect and examine the Site and its surroundings and shall satisfy himself or shall be deemed to have satisfied himself before submitting his Tender as to the form and nature of the Site, ground and nature of the work, the means of access to the Site, the means of disposal of debris, the working space he may require, any other local conditions and in general shall himself obtain all necessary information as to risks, contingencies and any other circumstances which may influence or affect his Tender. No extra claim whatsoever shall be entertained on account of misunderstanding or otherwise of the prevailing conditions as well as scope of work.

### **4.4 Earnest Money and Security Deposit**

4.4.1 Earnest Money, the amount of which is specified in the Invitation to Tender, deposited in the ways specified in the Instructions to Tenderer must accompany the Tender without which the Tender will not be considered at all.

4.4.2 Security Deposit shall be deducted from the progressive bills including final bill at ten per cent (10%) of each R.A. Bill/ Final bill value till such time the total deduction together with EMD already taken shall constitute ten percent (10%) of the total contract value.

4.4.3 Security Deposit which shall be converted to Performance Bond after completion of work and shall be refunded after completion of Defect Liability Period without interest and after deduction, if any, made there-from under the provision stated below, on due successful completion of the work.

4.4.4 If the Contractor fails to carry out the work or perform or observe any of the Conditions of Contract, the said Security Deposit may be liable to forfeiture at the option of the Owner. The Owner will also be at liberty to deduct from the Security Deposit or from any sum due or to become due or under any other Contract with the Contractor sums that may become due to the Centre by virtue of any of the terms hereof.

### **4.5 The Contract and General Obligations of the Contractor**

4.5.1 The Contract documents shall be drawn-up in English language.

4.5.2 The contract shall be governed by acts as applicable only within the jurisdiction of the Kolkata High Court, India.

4.5.3 The Contract shall be governed by the following Indian Acts:

- a) The Indian Contract Act, 1872.
- b) The Workmen's Compensation Act, 1923.
- c) The Minimum Wages Act, 1948.
- d) The Contract Labour (Regulation & Abolition) Act, 1970.
- e) The Arbitration and Conciliation Ordinance, 1996 (Ordinance No. 8 of 1996).
- f) Payment of Wages Act, 1936.
- g) The ESI Act, 1948.
- h) Child Labour Act 1986
- i) Employees P.F. & Miscellaneous Provision Act 1952
- j) Any other Act as may be applicable under the statutes from time to time.



4.5.4 Unless otherwise stated in the Conditions of Contract:

The Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the execution and completion of the Work and the remedying of any defects; and the Contractor shall indemnify and hold the Owner harmless from and against the consequences of any failure to do so.

4.5.5 The Contractor shall observe all the safety precautions as necessary to ensure safety of his staff as well as material. Appropriate Personal Protective Equipment (PPE), and other necessary safety equipment is to be provided to staff while working and the staff are to be properly trained to use such safety equipment and to observe the safety norms.

4.5.6 Subletting by Contractor

The Contractor shall not directly or indirectly transfer, assign or sublet the Contract or any part thereof without the written permission of the Owner. Even if such permission be granted, the Contractor shall remain responsible (a) for the act, defaults and neglect of any Sub-Contractor, his agents, servants or workmen as fully as if these were the acts, defaults or neglects of the Contractor himself or his agents, servants or workmen, and (b) for his full and entire responsibility of the Contract and for active superintendence of the works by him despite being sublet, provided always that the provision of labourers on a "piece rate" basis shall not be deemed to be subletting under this clause. However, all lapses delays due to sub-contractor will be treated as contractual failure solely on Contractor's part.

4.5.7 Contractor's Rates to be Fully Inclusive

Unless otherwise specified, the Contractor shall be deemed to have included in this Tender / Offer all his costs for supplying and providing all constructional plant, temporary work, materials both for temporary and permanent works, labour including supervision thereof, transporting to and from the Site and in and about the work, including loading, unloading, fencing, watching, lighting, payment of fees, taxes and duties to the appropriate authorities, Insurance and other things of every kind required of the construction, erection, completion and maintenance of the work including contractor's overhead and profit.

In case of any statutory or imposition of new taxes and duties after submission of the bid due to notification of Government of India during the contract period and if applicable to the end product, the same may only be considered by Owner against documentary evidence'.

4.5.8 Contractor to be Fully Responsible

The Contractor shall be solely responsible for the adequacy, stability and safety of all site operations and methods of construction, even if any prior approval thereto has been taken from the Engineer or his Representative. The Contractor shall be fully responsible for the correct implementation thereof, as also for any design and specification prepared / proposed / used by the Contractor.

4.5.9 Supervision by Contractor

The Contractor shall provide necessary and adequate supervision during the execution of the works and as long thereafter as the Owner or his Representative shall consider necessary during the Defect Liability Period.

4.5.10 The Contractor shall maintain a '**Site Order Book**' at the work site to keep record of the order/instructions issued by Owner and its compliance by the Contractor and a '**Hindrance Register**' to record hindrances, if any, duly countersigned by Owner.

## 4.6 Terms of Payment

4.6.1 Payment will be made after satisfactory completion of the work.

4.6.2 All payments shall be subject to deduction of income-tax at source as per Income Tax Act and Income Tax Rules.

#### **4.7 Delay/ Extension of Completion Time / Liquidated Damage / Termination of Contract**

##### **4.7.1 Extension of Completion Time**

Should the quantum of additional work of any kind and/or for the reasons of 'Excepted Risks' cause delay in completion of the work, the Contractor shall apply to the Owner in writing for suitable extension of completion time within 7 days from the date of occurrence of the reason and the Owner shall there upon consider the stated reasons in the manner deemed necessary and shall either reject the application or determine and grant the extension period as he would deem proper for completion of the work, with or without the imposition of 'Liquidated Damage' on the Contractor. The decision of the Owner shall be binding on the Contract. If an extension of completion time is granted by the owner without imposition of Liquidated Damage, the Liquidated Damage shall apply from the date of expiry of the extended period, if the work is not completed within the extended time.

##### **4.7.2 Liquidated Damage:**

The Contractor should pay as compensation for delay of work @ 1.5% per month of delay to be computed on per day basis which shall not exceed 10% of the tendered value of the Cost.

##### **4.7.3 Termination of contract**

Without being liable for any compensation to the Contractor, the Owner may, in his absolute discretion, terminate the Contract in part or as a whole after giving him a minimum 7 days notice in writing, due to occurrence of any of the following reasons and decision of the Owner in this respect shall be final, conclusive & binding on the contractor:

- a) The Contractor has abandoned the Contract.
- b) In the opinion of the Owner, either the progress of work is not satisfactory or the work is not likely to be completed within the agreed period on account of Contractor's lapses.
- c) The Contractor has failed to commence the works or has without any lawful excuse under these conditions, has kept the work suspended for at least 15 days despite receiving the Owner's written notice to proceed with the work.
- d) The Contractor has failed to remove materials from Site or to dismantle or demolish and replace work for 7 days after receiving from the Owner the written notice stating that the said materials or work were condemned and rejected by him under these conditions.
- e) The Contractor is not executing the works in accordance with the Contract or is persistently or flagrantly neglecting to carry out his obligations under the Contract.
- f) Any bribe, commission, gift or advantage is given, promised or offered by or on behalf of the Contractor to any officer, servant or representative of the Owner or to any person on his or their behalf in relation to the execution of the Contract.

- g) The Contractor is adjudged insolvent or enters in to composition with his creditors or being a company goes in to liquidation either compulsorily or voluntarily.

In all such cases of Termination of work, the Owner shall have the Power to complete the work through any other agency or departmentally at the Contractor's risk and expense and the Contractor shall be debited any sum or sums that may be expended in completing the work beyond the amount that would have been due to the Contractor, had he duly completed the whole of the work in accordance with the Contract.

The Owner shall have the power to retain all amounts due to the Contractor until the work is completed by other agency and the Contractor's liabilities to the Owner are known in all respect. The owner has the right to forfeit performance guarantee.

#### **4.8 Defect Liability and Refund of Performance Guarantee**

##### **4.8.1 Contractor's Obligation for Defect Liability**

The work including equipment or any component thereof are to be guaranteed for satisfactory performance for the period of **twelve (12) Calendar months** from the date mentioned in the Completion Certificate to be issued by the Owner, unless otherwise agreed in writing by the OWNER will be deemed as the 'Defect Liability Period'. Any defect / fault, which may appear in the work during aforesaid guarantee period, arising, in the sole opinion of the Owner, from the defective material and or due to improper design and or due to defective drawing or due to faulty workmanship, or not in accordance with the Contract and shall, upon the written notice of the Owner, be amended and made good by the Contractor at his own cost within seven days of the date of such notice, to the satisfaction of the Owner, failing which the Owner shall have the defects amended and made good through other agency or departmentally at the Contractor's risk and cost and all expenses, consequent thereon or incidental thereto, shall be recoverable from the Contractor in any manner deemed suitable by the Owner. During the above guarantee period, the contractor shall assume full responsibility for rectifications of any defective equipment or components thereof including all direct expenses relating to removal and repositioning of replacement/repaired equipment or component thereof and subsequent test and trial, incurred thereon without any financial implication to Owner. In case of any defect found after receipt of goods or in case of any deviation from the specifications or in case of any operational defect found during the warranty period, then any part or the entire goods will be replaced by the contractor at no extra cost to the Centre.

##### **4.8.2 Refund of Performance Guarantee**

On completion of the Contract in the manner aforesaid, the Contractor may apply for the refund of his Performance Bond by submitting to the Owner (a) The Receipts granted for the amount of Security held by the Owner, and (b) his 'No further claim' Certificates where upon the owner shall issue Certificate and within two months the Owner shall refund without interest the balance due against the Performance Gurantee to the Contractor, after making deduction there from in respect of any sum due to the Owner from the Contractor.

#### **4.9 Clearance of site**

4.9.1 Upon receiving the Completion Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.

4.9.2 If all these items have not been removed within 15 days after the issue of Completion Certificate, the Owner may sell or otherwise dispose of any remaining items. The Owner shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

#### **4.10 Settlement of Disputes**

4.10.1 The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or the interpretation thereof during the tenure of after expiration/termination of this Contract.

4.10.2 Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party to arbitration in accordance with the provisions of Clauses hereinafter.

4.10.3 Any dispute pursuant to Clause 4.10 submitted to arbitration shall be subject to the provisions of the Arbitration and Conciliation Act, 1996 including any modification or amendment thereof for the time being in force shall apply, subject to Arbitration proceedings being held in Kolkata, India.

4.10.4 The matter under dispute shall be referred to an arbitral tribunal of three arbitrators, one to be appointed by each Party by designation/name and the third by the arbitrators so appointed.

4.10.5 In any arbitration proceeding hereunder, proceedings shall be held in Kolkata, India; the English language shall be the official language for all purposes; the decision of the arbitral tribunal shall be final and binding and shall be enforceable in the court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.

4.10.6 Cost of arbitration shall be borne equally by both the parties.

**ANNEXURES TO CONDITIONS OF CONTRACT**

**ANNEXURE - A**

**S N BOSE NATIONAL CENTRE FOR BASIC SCIENCES**

**FORM OF TENDER**

**ELECTRICAL WORK, AIR-CONDITIONING AND FIRE ALARM SYSTEM FOR NEW LABORATORIES**

Date \_\_\_\_\_

Invitation for Bid No. \_\_\_\_\_

Name of Work \_\_\_\_\_

To,  
The Registrar  
SNBNCBS

Sir,

1. I/We the undersigned having examined the Tender Documents and the Site of Works as above hereby submit this Tender amounting to the sum as indicated in Envelope marked Part - II.
2. I/We agree to keep the Tender open for acceptance for the period of 90 days from the due date of submission of the same and in default agree that the amount of Earnest Money deposited along with the Tender may be forfeited.
3. I/We undertake to complete and deliver the whole of the Works covered under this Tender within a period of 90 days from the Date of Commencement.
4. The Earnest Money as required in Invitation for Bid is being enclosed duly endorsed in favour of S N Bose National Centre for Basic Sciences, the full value of which may be retained by the Centre, in part payment of the Security Deposit as called for and in case this Tender is accepted.
5. I/We also undertake to enter into a Contract with the S N Bose National Centre for Basic Sciences, by executing an Agreement in the prescribed Contract Agreement Form with such additions and alterations there to which may be necessary to give effect to the acceptance of the Tender.
6. I/We hereby agree that until such Contract Agreement is executed, the said Tender Documents together with all correspondence, minutes of meeting, acceptance, etc. there of in writing by or on behalf of the S N Bose National Centre for Basic Sciences., shall be the Contract.

Dated.....day of ..... 2013

Witness \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature of Tenderer  
Name \_\_\_\_\_  
Designation \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Telephone No. \_\_\_\_\_

Fax No. \_\_\_\_\_

**ANNEXURE – B**

**FORM OF AGREEMENT**

This AGREEMENT made this..... day of .....2013 ,between S N Bose National Centre for Basic Sciences having its office at Salt Lake, Kolkata – 700098, hereinafter referred to as “THE CENTRE” which expression shall unless excluded by or repugnant to the context be deemed to include all its successors, legal representatives and assigns of the ONE PART and M/s. \_\_\_\_\_, a Company incorporated under Companies Act, 1956 having its registered office at \_\_\_\_\_ hereinafter referred to as “CONTRACTOR” which expression shall unless excluded by or repugnant to the context be deemed to include all its successors, legal representatives and assigns of the OTHER PART.

**PREAMBLE**

1. In order to execute “Electrical work, Air-Conditioning and fire Alarm System for New Laboratories” the Centre invited Tenders from reputed contractors for carrying out various activities of the work contained more fully in the said Tender vide NIT No. \_\_\_\_\_ dated \_\_\_\_\_20..... .

2. The offer submitted by the Contractor vide their letter No. \_\_\_\_\_ dated \_\_\_\_\_ for carrying out the aforesaid work was accepted by the Centre and a Letter of Award vide No. \_\_\_\_\_ dated \_\_\_\_\_ was issued by the Centre duly entrusting the said Contractor to carry out the said work under the terms and conditions contained in the Tender Documents.

3. In the aforesaid premises, Agreement by and between the parties herein, which would reflect the true intent, and scope of the agreement hereinafter is called the “Contract”.

**NOW THEREFORE THIS DEED WITNESSES AS FOLLOWS:**

**Article 1.0: Award of Contract**

1.1 The Centre has awarded the contract to Contractor for the entire scope of work as described in its Letter of Award No. \_\_\_\_\_ dated \_\_\_\_\_ and also on the terms and conditions contained therein and under these presents. The award has taken effect or shall take effect from ..... The terms and expressions used in this agreement shall have the same meaning as are respectively assigned to them in the Tender/ contract documents referred to in the succeeding articles.

**Article 2.0: Contract**

2.1 The Contract shall be performed strictly in accordance with the terms and conditions stipulated herein and in the following documents attached herewith (hereinafter referred to as “Contract”)

2.2 The “Contract Documents” shall mean and include the documents described in the Annexure “A” hereto and also such other documents, minutes, correspondences, etc. forming mutual consent over issues relating to this Contract either inadvertently or otherwise not included in **Annexure “A”** hereto but forming integral part of this agreement.

2.3 The Letter of Award shall mean the Centre’s letter No. \_\_\_\_\_ dated \_\_\_\_\_ forming integral part of the Contract Documents and this agreement.

2.4 This agreement is subject to the terms and conditions and stipulations embodied in the relevant Tender enquiry, price-bid proposal and the Letter of Award (including any agreed alternations and/ or modification thereof and also other contract documents) and it shall supersede all such premises of the contract documents as are repugnant to each other or amount to unilateral acts, conditions or stipulations inconsistent with the Tender enquiry or price-bid proposal (including any agreed variations and/ or modification thereof) made by either of the parties or have not been specifically agreed upon.

### **Article 3.0: Scope of Work**

3.1 The Scope of Work under this agreement shall include and/ or cover the scope of work included and/ or embodied in Clause \_\_\_\_\_ of the Letter of Award No. \_\_\_\_\_ dated \_\_\_\_\_.

3.2 The Scope of Work shall also include all such work which are not specifically mentioned in the contract documents, but which are imperative to achieve completeness in all respects for its safe, reliable, efficient and trouble free working/ operation.

### **Article 4.0: Time Schedule**

4.1 The total time frame for completion, commissioning and handing over of the Project shall be \_\_\_\_ months from the date of issue of LOA. The Contractor shall strictly maintain and/ or adhere to the Time Schedule annexed/ incorporated in the Letter of Award No. \_\_\_\_\_ dated \_\_\_\_\_.

### **Article 5.0: Contract Price**

5.1 The Total Contract Price for the entire scope of work of this agreement as detailed in the Letter of Award No. \_\_\_\_\_ dated \_\_\_\_\_ is Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ in words).

5.2 The aforesaid price and the rates of work shall remain firm and fixed till completion/ commissioning of the project. No escalation in price or rates shall be allowed in any circumstances whatsoever.

### **Article 7.0: Settlement of Disputes, Arbitration**

7.1 The provisions of the Arbitration and Conciliation Act, 1996 including any modification or amendment thereof for the time being in force shall apply, subject to Arbitration proceedings being held in Kolkata, India and in accordance with the terms of the contract.

### **Article 8.0: General Laws & Jurisdiction**

8.1 The Contract shall be governed by the Indian Laws and Rules as amended from time to time and the principles of laws as applicable in this Contract.

8.2 Generally the Kolkata High Court shall have exclusive jurisdiction in all matters arising under this Contract.

### **Article 9.0: Notice of Default**

9.1 Notice of Default given by either party to the other under this Contract shall be in writing and shall be deemed to have been duly and properly served upon the parties thereto if delivered at the addresses given hereinabove against acknowledgement or by registered mail with acknowledgement due.

## **SCHEDULE – A**

## **CONTRACT DOCUMENTS**

- a) The Contract Agreement.
- b) The Letter of Intent/ The Letter of Award
- c) The Tender Documents including Specification.
- d) Any other document forming part of the Contract which is stamped, signed and dated by the competent representatives of the Owner and the Contractors.

In witness whereof the parties have hereinto set their respective hands and Seals in day, month and year first above written.

SIGNED, SEALED AND DELIVERED

FOR \_\_\_\_\_

FOR S N BOSE NATIONAL CENTRE FOR  
BASIC SCIENCES

Name .....

Name .....

Designation.....

Designation.....

Address.....

Address.....

Seal .....

Seal .....

IN PRESENCE OF

IN PRESENCE OF

Name .....

Name .....

Designation.....

Designation.....

Address.....

Address.....

Seal .....

Seal .....



**PART – II**

Tender Ref: SNB/ENG/NIT/2013-14/09/

Dated: 19.12.2013

**ELECTRICAL WORK, AIR-CONDITIONING AND FIRE ALARM SYSTEM FOR NEW LABORATORIES**

**Schedule of Work**

<b><u>A.</u></b>	<b>Electrical Work</b>				
<b>SL. NO</b>	<b>DESCRIPTION OF ITEMS</b>	<b>UNIT</b>	<b>QTY.</b>	<b>RATE Rs.</b>	<b>AMOUNT Rs.</b>
1.	Supply and laying of PILC/PVC insulated and PVC sheathed/XLPE power cable of grade exceeding 1.1 KV but not exceeding 11 KV approved cable conforming to IS 1554 (Part-I) of following sizes.				
	a) 3.5C, 2X185.0 sq.mm. PVC/Al Ar XLPE cable Make: Havells/Finolex/Polycab	Mtr	150		
	b) 3.5C, 150.0 sq.mm. PVC/Al Ar XLPE cable. Make: Havells/Finolex/Polycab	Mtr.	250		
	c) 3.5 C, 50.0 sq.mm PVC/Al Ar XLPE cable Make: Havells/Finolex/Polycab	Mtr.	200		
2	Supplying and making end termination with double brass compression gland and aluminium lugs for 185.0 sq.mm. of PVC insulated and PVC sheathed/XLPE aluminium conductor cable of 1.1 KV grade as required.	Sets	16		
3.	Supplying and making end termination with double brass compression gland and aluminium lugs for 150.0 sq.mm. of PVC insulated and PVC sheathed/XLPE aluminium conductor cable of 1.1 KV grade as required.	Sets	16		

SL. NO	DESCRIPTION OF ITEMS	UNIT	QTY.	RATE Rs.	AMOUNT Rs.
5	Supply, Installation and Testing-Commissioning of indoor type/wall mounted sheet steel (14 SWG) enclosed compartment alias cubicle type Panel Board shall be fabricated from CRCA sheet steel having suitably rated Copper Bus bars, dust and vermin proof suitable for 415 Volt, 3 Phase, 50 Hz A.C. supply. The panel board shall be painted with powder coated and light gray shade and there should be a ventilation provision in the panel, fixed on a M.S. Panel Base including fixing of all MCB neutral, Inside wiring with copper cable all out going and incoming stud type terminals and shall consist of the following:- 1. 250 Amp. 4 Pole MCCB for incoming (50 ka) – 1 No. (breaking capacity 50 ka) 2. 125 Amp. 4 Pole MCCB for outgoing (50 ka) – 4 Nos. (breaking capacity 36 ka) 3. 63 Amp. 4 Pole MCCB for outgoing - 2 Nos. (breaking capacity 36 ka) 4. 1 No. 0-500 Volt Digital Voltmeter with selector switch. 5. 1 No. 0-400 Amp. Digital Ammeter with selector switch. 6. 3 No 400/5 current transformers for metering (Cappa make, Class – 1) 7. 3 Nos. indicating lamps for Mains ON (for three phases) 8.1 Set 300 Amp. Copper Bus bar Make: MCCB L&T /Schneider/Hager Make)	Sets	2		
6	Supply and erection of 600mmX600mmX6mm G.I. earth plate as per IS- 3043, 1987.	No.	04		
7.	Supply, Laying and fixing of 25mmX6mm G.I. earth strip partly underground and partly surface by necessary clamps etc. for earthing.	Mtr.	150.0		
8.	Supply and fixing of 3 mtr. Long 50mm dia 3.64mm thick G.I. pipe including fixing of reducer at top of the pipe for watering purpose.	No.	04		
9.	Supply and fixing of	Mtr.	120.0		

	25mmX6mm PVC sleeve.				
10.	Supply and poring of char coal.	Kg.	400.0		
11.	Supply and poring of Salt.	Kg.	400.0		
12.	Supply and fixing of 450mm X 450mm C.I. earth pit cover with hinged door, Bituminous Paint.	No.	04		
<b>SL. NO</b>	<b>DESCRIPTION OF ITEMS</b>	<b>UNIT</b>	<b>QTY.</b>	<b>RATE Rs.</b>	<b>AMOUNT Rs.</b>
13.	Drilling, Welding and fixing of G.I. earth strip with G.I. earth plate and also with existing earth grid by G.I. Nuts, Bolts and washers etc. complete.	Set	04		
14.	Supply and making of Earth pit masonry enclosure on top of the earth pipe over all size of 550mmX550mmX460mm, Deep below GL and completed with Cement brick work (1:6) with 125mm width duly plastered with cement mortar and digging of well 5 mtr. Depth, 600mm Dia by using ring of burnt clay for placement of G.I. earth plate below G.L. etc all complete as directed by the Engineer-in-Charge.	LS	04		
15	Providing and fixing following rating and breaking capacity MCCB with enclosure including all accessories and connections (Make: L&T/Siemenes/Legrand/Hager) 125 A 25 KA 4 Pole MCCB	Set	10		
16	Supply and installation of busbar chamber on angel iron frame on wall ,including attachment and painting as required (i) 415 V, 200 A, copper busbar	Set	4		
	(ii) 415 V, 100 A, copper busbar	Set	4		
17	Supply and installation double door 4-way TPN Vertical MCB DB surface mounting type complete with all civil works including making good the finish and all connection. The DB shall comprise of all interconnection with socketed and insulated copper leads label inscription plate for all feedres,neutral link, earth7 4` terminals and following MCBS. The protection level of the DB with the outer door closed should not be less than IP 43.All MCBs should be of 10 K short circuit rating (make: Legrand make cat No 607751(8+12) or equivalent.	Set	10		

	(a) 63 Amp 4 pole MCB (incomer)				
	(b) 10 A SP MCB (outgoing)-6 Nos.				
SL. NO	DESCRIPTION OF ITEMS	UNIT	QTY.	RATE Rs.	AMOUNT Rs.
18	Supply and installation double door 4-way TPN Vertical MCB DB surface mounting type complete with all civil works including making good the finish and all connection. The DB shall comprise of all interconnection with socketed and insulated copper leads label inscription plate for all feedres, neutral link, earth terminals and following MCBS. The protection level of the DB with the outer door closed should not be less than IP 43.All MCBs should be of 10 K short circuit rating (make: Legrand make cat No 607751(8+12) or equivalent.	Set	10		
	(a) 63 Amp 4 pole MCB (incomer)				
	(b) 16 A SP MCB-4 Nos.				
	(c ) 32 A TPN MCB-2 Nos.				
19	Supply & erection of approved size & approved designed feeder pillar box fabricated with 6 mm thick CRC sheet. The pillar box made of with- (a) Two fold hinch type door with locking arrangement at both side (b) Door handle on both the doors (c) Danger board (d) Ventilation system on top portion and two sides of the pillar box body. The box should be painted by approved colour paint. The feeder pillar box will comprise of - (i) 400 A MCCB-for incoming supply-1 No. (ii) 250 A MCCB-for outgoing supply-3 Nos. (iii) 500 V, 600 A sheet metal(16 SWG) iron clad busbar chamber on pillar box having 4 Nos. Al Bar including earthing attachment & painting as required. All civil work complete in all respect. MCCB L&T/Schneider/Hager Make)	Set	1		
20.	Supply and fixing 12 module PVC box with plate having 16 Amp switch-1 No., 16 A socket-1	Set	60		

	No. 10 Amp Nos.switch-3 Nos. 10 Amp Socket-3				
21.	Distribution wiring in 1.1 KV single core standard FR PVC copper wire 20 mm size PVC rigid conduit FR including necessary fittings as required				
<b>SL. NO</b>	<b>DESCRIPTION OF ITEMS</b>	<b>UNIT</b>	<b>QTY.</b>	<b>RATE Rs.</b>	<b>AMOUNT Rs.</b>
	Make: Havells/Finolex/Polycab				
	(a) 2 x 4 + 1 x 2.5 sq.mm	Mtr	100		
	(b) 2x 2.5 + 1 x 1.5 sq.mm	Mtr	200		
	(c) 2 x 1.5 + 1x 1.5 sq.mm	Mtr	100		
22	Distribution wiring in 1.1 KV grade 2 x1.5 single core standard FR PVC copper wire in suitable size PVC casing capping with 1.5 sq.mm single core standard FR PVC copper wire for earthing etc with average run of 6 Mtr.	Point	100		
23.	Supply and fixing recess mounted Luminaries cat no. TBS 088 M x 4 TL-1D 18 W IC M2(make Philips) with all accessories	Set	40		
24	Supplying & installing following size of perforated pre-painted M.S cable cable trays with perforation not more than 17.5%, joined with connectors, suspended from the ceiling with M.S suspends including bolts & nuts, painting suspenders etc as required 300 mm width x 50 mm depth x 1.6 mm thickness	Mtr	100		
				<b>SUB TOTAL(A)</b>	

<b>B.</b>	<b>Air-conditioning System</b>				
<b>Sl No.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
1.	<p>Supply, installation, testing, commissioning of 4 TR cassette type split AC system (3-Phase) complete with cordless remote control.</p> <p>The Cassette type, indoor fan coil units shall be ceiling suspended. The outer condenser units shall be mounted on MS structure in the suitable position. Interconnecting pipe lines shall be laid along with electrical wiring so as to confine the respective lengths to the minimum.</p> <p>The condensate water pipe lines shall be terminated at suitable locations nearer available outlet/ proper position accordingly</p> <p>Max Ambient Temp: 45 deg C            Inside Design Conditions:            23+1.0 C &amp; RH 55-65 %            Location: Proposed New Lab:            Occupancy:            Rated Cooling Capacity:            Tonnage: 4 TR            Rated Power Supply:3 ph/415 V/50 Hz</p> <p>Make:            HITACHI/TOSHIBA/MITSUBISHI</p>	Nos.	23		
2.	Supply & fixing of Refrigerant copper pipe of suitable gauge	Mtr	600		
2.	Supply & fixing of Refrigerant copper pipe of suitable gauge	Mtr	600		
4.	Supply & fixing of Drain water PVC pipe	Mtr	600		
				<b>SUB TOTAL(B)</b>	

<b>C. Fire Alarm System</b>					
<b>SL. NO</b>	<b>DESCRIPTION OF ITEMS</b>	<b>UNIT</b>	<b>QTY.</b>	<b>RATE Rs.</b>	<b>AMOUNT Rs.</b>
1.	Supply & fixing Photo Thermal(Heat-cum –optical smoke) detectors Multi Sensor with interchangeable base, built in LED etc. with blinking facility to indicate healthy condition of detector i/c connection, testing & commissioning complete as reqd. (Make: Apollo/System Sensor/Agni)	Nos.	70		
2.	Supplying & fixing Manual Call Switch, Hammer & chain i/c connection, testing etc. as reqd.	Nos.	6		
3.	Supplying & fixing Glow type response indicator surface/recess mounting for indication of triggering of detectors in closed Rooms/Halls/Cabins/Spaces above false ceiling having two no LEDs in parallel i/c connection, testing and commissioning etc. complete as reqd. (Make: Agni/Precision / system sensor)	Nos	30		
4.	Supplying & fixing surface mounted low intensity sounder with power handling capacity of 4/6 watt for Fire Alarm i/c commissioning, testing etc. as reqd.	Nos.	6		
5.	Supplying & fixing 8 Zone conventional wall/floor mounting front openable powder painted type solid state micro processor controlled sector indicating panel with lockable from acrylic door for audio visual indication of fire/fault in section, panel sounder silencing and other switches with LED cum digital display inbuilt battery charging i/c 7 Ah 12 x 2 volt battery testing , commissioning etc as required (Make: Agni/Precision/ System sensor)	Set	2		
6.	Wiring for circuit/sub main wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/recess steel conduit as required				
	(a) 3 x 1.5 sq.mm	Mtr	400		
	(b) 2 x 1.5 sq.mm	Mtr	400		
7.	Supplying and fixing of single/multi way fabricated MS circular box of suitable size made of 1.8 mm thick steel duly painted box on surface for installation of detector as required	Nos.	25		
				<b>SUB TOTAL(C)</b>	

**GRAND TOTAL : (A)+(B)+(C) =**

**In words:**



Signature of Tenderer

Date:

Name: \_\_\_\_\_

Place:

Address: \_\_\_\_\_

Company seal