



सी एस आइ आर
राष्ट्रीयवांतरिक्षप्रयोगशालाएँकोडीहल्लि,बेंगलूर-17
CSIR -NATIONAL AEROSPACE LABORATORIES
KODIHALLI, BENGALURU- 560 017



E – Tender (Re-tender)

For the work of:

Annual maintenance contract for Electrical installation at CSIR-NAL, Belur campus, Bengaluru-560037.

NIT NO: ESD-NAL / 17 / E OF 2024 – 2025

Estimated Cost	₹ 19,64,016.00 (Minimum wages prescribed by GOI)	
Earnest Money Deposits	₹39,280.00	
Tender Fee	₹ 500.00 (Non-refundable & non-transferable)	
Time period for completion	Twelve (12) months	
Publish Date	10.01.2025	11:00 Hrs
Sale Start Date	10.01.2025	11:00 Hrs
Clarification Start Date on-line	N A	N A
Clarification End Date on-line	N A	N A
Date of pre bid meeting	N A	N A
Bid Submission Start Date	10.01.2025	11:00 Hrs
Bid Submission End Date	20.01.2025	15:00 Hrs
Bid Opening Date	21.01.2025	16:00 Hrs



सी एस आइ आर
राष्ट्रीयवांतरिक्षप्रयोगशालायेंकोडिहळ्ळी,
बेंगलूर- 560 017



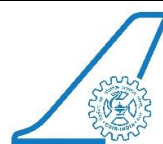
CSIR
NATIONAL AEROSPACE LABORATORIES
KODIHALLI, BENGALURU - 560 017

NAME OF THE WORK: Annual maintenance contract for Electrical installation at CSIR-NAL, Belur campus, Bengaluru-560037.

THIS DOCUMENT CONTENT OF:

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Note: Tenderer should confirm that they have downloaded all the above papers.



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1. Notice Inviting Tenders (Re-tender)

1. Controller of Administration invites the sealed item rate online tender (E-tender) on behalf of The Director, CSIR-NAL for the work of **Annual maintenance contract for Electrical installation at CSIR-NAL, Belur campus, Bengaluru-560037** from approved & eligible vendors / contractors & who have worked with CSIR or its Laboratories / institutes, CPWD, Railways, MES, State / Central Govt. / Semi Govt. organizations / Public Sector undertaking / Govt. Autonomous bodies / KPTCL / BESCO and all ESCOMS. The eligible bidder who having the Class-I electrical license Certificate or equivalent certificate issued by Chief Electrical Inspectorate authorities, Govt of Karnataka or Govt of India or any other state Govt authorities to work on electrical installation, proof of registration with GST, ESI & EPF authorities and satisfactory **work completion certificate for at least three similar works each of value not less than 40% or two similar works each of value not less than 60% or one similar work of value not less than 80 % of estimated cost** as shown in the NIT during the last seven (7) years ending last day of the month previous to the one in which tenders are invited. The contractor / vendor / bidder fulfilling the above conditions may download the tender document through <https://etenders.gov.in/eprocure/app>. The estimated cost of work put in the tender is based on prevailing market rates and minimum wages prescribed by GoI.
 - a. **Similar works means: Maintenance & repairing of electrical installation etc. of Govt / Semi-Govt / Public sector offices / Industrial buildings / national laboratories / national institutes / residential complex of various types / apartments / office buildings.**
 - b. **Credentials:** Must have credentials (satisfactory work completion certificate) of similar jobs successfully carried out in the CSIR or its Laboratories / Institutes, CPWD, Railways, MES, State / Central Govt. / Semi Govt. organizations / Public Sector undertaking / Govt. Autonomous bodies / KPTCL / BESCO / all ESCOMS during the last seven (7) years ending last day of the month previous to the one in which tenders are invited. The value of works shall be as follows:

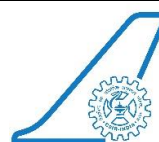
Three completed works each costing ₹ **7,85,606.40** (40% of the estimated cost) or above

Or

Two completed works each costing ₹ **11,78,409.60** (60% of the estimated cost) or above

Or

One completed work costing ₹ **15,71,212.80** (80% of the estimated cost) or above.
 - c. **Statutory Requirements:** Should have (i) GST Registration, (ii) PAN, (iii) EPF and ESI registration certificate & (iv) Class-I electrical license Certificate or equivalent Certificate issued by Chief Electrical Inspectorate authorities, Govt. of Karnataka or Govt. of India or any other state Govt. authorities to work on electrical installations.



d. **Time Schedule for Tender:**

Sl. No.	Particulars	Date	Time
i.	Tender e-Publication date	10.01.2025	11.00 Hours
ii.	Document download / sale start date	10.01.2025	11.00 Hours
iii.	Start date for seeking Clarification on-line	NA	NA
iv.	Last date for seeking Clarification on-line	NA	NA
v.	Date of Pre-bid Meeting (applicable if any)	NA	NA
vi.	Bid Submission start date	10.01.2025	11.00 Hours
vii.	Bid submission closing date	20.01.2025	15.00 Hours
viii.	Bid Opening date	21.01.2025	16.00 Hours

The tender documents can be downloaded from Central Public Procurement (CPP) Portal <https://etenders.gov.in/eprocure/app> and the bids are to be submitted through the same E- Procurement portal only. **Manual / Offline bids will not be accepted.** The scanned copy of the Tender fee, Demand Draft towards EMD, Tender acceptance letter and other relevant documents as specified are to be uploaded through the above said E-Procurement Portal for the specified work.

Important particulars for this Tender Process are as follows:

- Estimated cost is ₹ **19,64,016.00 (Rupees Nineteen lakh sixty-four thousand and sixteen only)**. The estimated cost work put in the tender is based on the prevailing market rates and minimum wages prescribed by GoI.
- In consideration of CPWD OM no. DG / MAN / Misc / 10 dated 27.06.2017 no relaxation is admissible in submission of EMD by MSME registered Contractors.**
- Time for carrying out the work will be **12 (Twelve) months** and the date of commencement shall be reckoned from the on or before tenth day of issue of award letter
- Complete Contract documents can be seen at the e-Tendering Portal <https://etenders.gov.in/eprocure/app> and this is to be complied by the tenderer whose tender is accepted.
- Tenders should be submitted on the specified form (Non-transferable) which is available at <https://etenders.gov.in/eprocure/app>. Interested bidders may download the NIT, tender document, scope of works, financial bid etc., and participate in the bidding process after going through all the documents carefully.
- The Scanned Copy of Demand drafts as EMD (as applicable) and self-certified documents supporting for the eligibility in participation in the specified work are to be uploaded through the portal as mentioned below.



7.1 Mandatory documents to be uploaded by the Bidder to qualify technically in the tender process

Cover	Cover Details as given in CPP website https://etenders.gov.in/e procure/app . (all copies must be digitally signed)	
I	a) Fee Details (.pdf)	i) Scanned Copy of Demand draft of Tender fee ii) Scanned Copy of Demand draft of Earnest Money Deposit.
	b) Credential & Statutory Documents	i) Scanned copy of Class-I electrical license Certificate or equivalent Certificate issued by Chief Electrical Inspectorate authorities, Govt. of Karnataka or Govt. of India. ii) Work completion certificates as per clause no 1.b under NIT. iii) Scanned Copies GST Registration. iv) Scanned copies of PAN v) Scanned copies of EPFO and ESIC registration certificate if available or registration with EPFO, ESIC authorities or proof of applying thereof within 7 days from the date of issue of letter of acceptance.
	d) Tender Documents (.pdf)	i) Scanned copy of ' Letter of undertaking ' duly signed by the bidder in the company's Letter Head. iv) Scanned copy of ' Letter of tender document acceptance ' duly signed by the bidder in the company's Letter Head.
II	Finance (.xls)	Bills of Quantity (.xls) [**The rates shall be quoted inclusive of applicable GST]

7.2 Opening of Technical Bid (Cover. I)

- The Technical bid (Cover – I) will be opened by **Tender Opening Committee (TOC) on 01.10.2024 at 11.00 Hours, CSIR-NAL, Kodihalli, Bengaluru - 560017**, in the presence of such intending tenderers or their authorized representatives who may wish to be present at that time. No claim or any grievances will be entertained what-so-ever by the Tender Opening Committee in this regard.
- The TOC, after evaluation of documents contained in Cover-I i.e. Technical Bid, will decide the eligible tenders, as per the criteria laid down in the NIT.
- The TOC will then open the Financial Bids of only eligible tenderer.

7.3 Opening of Financial Bid (Cover- II)

The Cover-II of Technically Qualified Bidders / Tenderers shall be opened.

Tender Liable for Rejection.

Tender is liable for outright rejection if on opening it is found that –

- The Tenderer has not strictly followed the procedure laid down for submission of tender.
- If the tender is **CONDITIONAL**.
- If the Tenderer has quoted his offer anywhere else other than specified place provided.
- The Tenderer has not uploaded the documents or Failed to fill the prescribed format.
- Any other ground as decided by the TOC in view of deviation from Tender Document.



2. **Earnest Money**

- a. The Earnest money amounting to **₹ 39,280.00 (Rupees thirty-nine thousand two hundred and eighty only)** as demand draft / Bankers Cheque of a schedule bank and drawn in favour of **The Director, CSIR – National Aerospace Laboratories, Bengaluru - 560017**. The scanned copy of the demand draft / Bankers Cheque should be uploaded as required.
- b. The original demand draft / Bankers Cheque drawn towards tender fee and EMD shall be reached on or before opening date of the bid to the following address:

The Controller of Administration,
CSIR – National Aerospace Laboratories,
P.B No: 1779, HAL airport road,
Kodihalli, Bengaluru – 560017.

- c. The bidder can also make the payment of tender fee (non-refundable) & EMD through **ONLINE** mode
- d. The bidder can make payment through NEFT / RTGS the of tender fee and EMD from any scheduled Bank(s)
- e. In case of payment through NEFT/RTGS from any scheduled bank(s), the bidder shall have to make payment to CSIR-NAL account. The details of bank mandates are as at **page no.9** and bidder has to furnish online, the UTR Remittance Number (s) before submission of bid. The payment of EMD through NEFT/RTGS mode should be made well ahead of time to ensure that the EMD amount is transferred to CSIR - NAL account before submission of bid.
- f. It may be noted that even if the payment of tender fee (non-refundable) & EMD is made by the bidder either by online or offline well within the last date and time for bid submission, but not received by CSIR - NAL within the specified period for any reason(s) whatsoever then the bid will not be accepted.
- g. **Only EMD will be refunded back to the unsuccessful bidder. The tender fee will not refundable.**
3. The Organization does not bind itself to accept the lowest or any tender and reserves the right of accepting the whole or any part of the tender and the tenderer is bound to perform the same at the rates quoted.

The Organization also reserves the right, without being liable for any damages or obligation to inform the tenderer, to:

- a. Amend the scope and value of contract to the tenderer.
- b. Reject any or all the applications without assigning any reason
4. Canvassing in connection with the tender is prohibited and any bidder after submission of the tender resorts to canvassing, such bids are also liable for rejection.
5. The tenderer is not permitted to tender for works in the concerned unit of CSIR in which a relative is working in the level of Controller of Administration up to Junior Engineer, (both inclusive). The bidder is also required to intimate the names of persons who are working with him in any capacity or subsequently employed by him and who are relatives of the level as mentioned above.



NOTE: A person shall be deemed to be a relative of another if, and only if, (a) they are members of Hindu undivided family; or (b) they are husband and wife; or (c) the one is related to the other in the following manner: Father, Mother (including Step mother), Son (including step son), Sons wife. Daughter (including step daughter), Father, Son's son, Son's wife, Son's daughter, son's Daughter's husband, Daughter's husband, Daughter's son's wife, Daughter's daughter, Daughter's daughters husband, Brother (including step brother), wife, Sister (including step sister). Sister's husband.

6. Tender submitted shall remain valid for **90 days** from the last day of receipt of bids for the purpose of acceptance and award of work, validity beyond **90 days** from the date of opening shall be by mutual consent.
7. The tenderer should see drawings and in case of doubt, obtain required particulars, which may in any way influence his tender from the Engineer as no claim whatsoever will be entertained subsequently for any alleged ignorance thereof.
8. Before tendering, the tenderer shall inspect the site to fully acquaint himself about the condition with regard to accessibility of site, nature and extent of ground, working condition of site and locality including stacking of materials, installations of tools and plants (T & P) etc., conditions affecting accommodation and movement of labour etc. required for the satisfactory execution of the work contract. No claim whatsoever on such account shall be entertained by the Organization in any circumstances.
9. **Forfeiting of EMD**
 - a. If any tenderer withdraws his tender before the expiry of the validity period, or before the issue of letter of acceptance or work order, whichever is earlier, or makes any modification in the terms and conditions of the tender which are not acceptable to the Organization, then the employer shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money.
 - b. If the bidder fails to furnish the prescribed performance guarantee within the prescribed period, 100% of the earnest money will be absolutely forfeited.
 - c. In case the tenderer fails to commence the work specified in the tender documents or in such time period as mentioned in the letter of award or after the date on which organization issues written orders to commence the work or from the date of handing over of the site, whichever is later, the Organization is at liberty to forfeit whole of the earnest money.
 - d. If only a part of the work as shown in the tender is awarded, and the bidder does not commence the work, the proportionate earnest money with respect to cost of work so awarded will be forfeited. In case of forfeiture of earnest money as above, the tenderer shall not be allowed to participate in re-tender of the work.
10. **Refund of EMD.**
 - a. If EMD is paid by the bidder through online mode (Direct Debit/NEFT/RTGS) then the EMD of rejected or unsuccessful bidders will be refunded directly to the account, from which it was received (except in the cases where EMD is to be forfeited). **Therefore, the bidder shall have to upload the scanned copy of bank mandate as shown at page no.10.**
 - b. No claim from the bidders will be entertained for non-receipt of the refund to any



- account other than the one from where the money was received.
- c. If the refund of EMD is not received by the bidder in the account from which the EMD has been made due to any technical reason, then it will be paid through conventional system of e-payment. For this purpose, if required, Tender Inviting Authority will obtain the Mandate Form from the Bidder.
 - d. In case the tender is cancelled, then EMD of all the participating bidders will be refunded unless the department forfeits it.
 - e. If the bidder withdraws his/her bid online (i.e. before the last date of submission of tender) then his/her EMD will be refunded automatically after opening of the tender.
 - f. The EMD of successful bidder will be retained by CSIR - NAL and will be adjusted to Security Deposit.
11. The tenderers who are desire to offer rebate, the same should be clearly indicate separately in the covering letter and upload the scanned copy of the same along with the tender.
12. Some of the provisions of General Conditions of Contract are given below. Interpretation however shall be as given in the General Conditions of Contract.
- a. **Defects Liability Period:** Two months from the date of completion as certified by the Employer.
 - b. **Minimum Value of Work for the Intermediate Certificate: Every month satisfactorily carried out works as defined in the scope of work.** Intermediate certificate for any works can also be admitted for payment at the discretion of the Engineer In-charge.
 - c. **The clause no 9 (c) (i to iv) under GCC is not applicable for this contract.**
 - d. **The clause no 27 (a) under GCC & clause no. 19 under Special conditions –II shall be read as:**

Security Deposit: A sum @ 10 % of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of work. In addition, the contractor is required to deposit an amount equal to 3% of the tendered value of the contract as Performance Guarantee within the period prescribed for commencement of work in the letter of award issued-

The Performance Guarantee shall be initially valid up to the stipulated date of completion plus minimum 60 days beyond that. In case the time for completion of work gets enlarged / extended, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged extended time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.

The performance guarantee in the shape of BG as per the format or Bankers cheque / Demand draft / Fixed Deposit Receipts (FDR) in the name of The Director, CSIR-National Aerospace Laboratories Bengaluru and these deposits shall be interest free.



Time allowed for submission of performance guarantee will be seven (07) days from the date of issue of letter of acceptance and maximum allowable extension with late fee @ 0.1% per day of performance guarantee amount (non-refundable) by another seven (07) days only.

- e. **Compensation:** Contractor shall pay as-compensation and amount equal to one percent or such smaller amount as the Organization (whose decision in writing shall be final) may decide on the cost of whole work as shown in the agreement, for every week that the work remains un-commenced or unfinished or due quantity of work remains incomplete after the proper dates. Compensation to be paid shall not exceed ten percent of the estimated cost of the work shown in the agreement.
- f. **Rates quoted by the contractor shall be inclusive of applicable GST and other levies whatsoever into this contract.**

Clause No. 6 (a) under GCC shall be read as:

Rates quoted by the contractor shall be inclusive of applicable GST and all other taxes in respect of this contract. The employer shall not entertain any claim whatsoever in this respect. However pursuant to the constitution (Forty sixth Amendment) & section 16 of Central GST and Service Tax Act, 2017 (12 of 2017) if any further tax or levy is imposed by statutes, after the date of receipt of tenders and the contractor there upon necessarily and properly pays such taxes / levies the contractor shall be reimbursed the amount as per the rules on producing proof of payment so made provided such payments, if any, is not in the opinion of the Employer (Whose decision shall be final and binding) attributable to delay in execution of work within the control of the contractor.

Applicable TDS towards GST, Labour cess Income tax & other statutory deductions if any as per government laws at the time of release of payment will be deducted at source at each bills as per norms.

- g. That this agreement shall come into force w.e.f date of issue of work order and shall remain in force for a period of ONE YEAR. This agreement may be extended on such terms and conditions as are mutually agreed upon.
- h. Proof of deposit of provident fund and ESI contribution to concerned authorities shall be submitted to the Engineer - in Charge at every month till end of the contract.
- i. The Contractor shall pay to the engaged staff to carry out the works according to minimum wages prescribed by the Ministry of Labour & Employment, Govt. of India from time to time on or before 7th day of every month by ECS or by Cheque & submit copy of same along with the invoice to the Engineer – In charge.
- j. The contractor should have Employee's Provident Fund (EPF) Registration ESIC facility, documentary proof regarding the EPFO & ESIC should be submitted while uploading tender or all necessary documentary proof registration with EPFO and ESI, authorities shall be taken by contractor within the time limits as prescribed under NIT clause 6.1.b (v).
- k. No Running Account / monthly Bill shall be paid for the work till the applicable labour licenses, registration with EPFO & ESIC whatever applicable are submitted by the contractor to the Engineer-in Charge.



- i. The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor to the concerned authorities. **These contributions on the part of the employer paid by the contractor will be reimbursed by the CSIR-NAL to the contractor on actual basis in addition to accepted rate.** The verification of deployment of labour force to carry out this contract will be verified by the Engineer in Charge. The applicable and eligible amount of employer contribution towards ESI & EPF will be reimbursed after submission of documentary proof of payment made to the concerned authorities.
- m. **Certified of Registration for GST and acknowledgement of filled return.**
If the contractor / vendor / Bidder is presently not working in the state of Karnataka, then they have to submit and undertaking that:
- (i) I am presently not working in the state of Karnataka where the work is to be executed and do not have GST Registration of the concerned state.
- (ii) If the work is awarded to me, then I shall obtain GST registration within 30 days of award of work OR before the 1st payment is made whichever is earlier.
- n. **Clause No. 30 w.r.t Arbitration under GCC has been modified:**
This clause has been amended by CSIR vide their letter no. 36-02/80-Law / 23 dated 27.10.2021. (copy of the order has been made available in the document at page no 13).
- o. The successful bidder shall be followed COVID – 19 protocol as per the standard operating procedure (SoP) issued by the laboratory, GoK & GoI from time to time scrupulously. The present SoP to be followed issued by the Laboratory vide even no org.OM / 2020-21 dated 11th August, 2021 is made available at **page no.12** for reference.

13. **Tender Liable for Rejection.**

Tender is liable for outright rejection if on opening it is found that:

- a. The tenderer has not strictly followed the procedure laid down for submission of tender. If the tender is CONDITIONAL.
- b. If the tenderer has quoted their offer anywhere else other than specified place provided.
- c. The tenderer has not uploaded the documents or failed to fill the prescribed format.
- d. Any other ground as decided by the TOC / TEC in view of deviation from tender document.



ELECTRONIC CLEARING SERVICE (CreditClearing)/REAL TIME GROSS SETTLEMENT (RTGS)FACILITY FOR RECEIVING PAYMENTS

DETAILS OF ACCOUNT HOLDER

NAME OF THE INSTITUTION	NATIONAL AEROSPACE LABORATORIES
COMPLETE CONTACT ADDRESS	P B NO. 1779, OLD AIRPORT ROAD, KODIHALLI, BANGALORE – 560 017.
TELEPHONE NO./FAX NO.	080-25086061 080-25086069
E-MAIL ID OF THE FO/AO/REG/DIR	anna@nal.res.in

BANK ACCOUNT DETAILS

INSTITUTION ACCOUNT NAME (AS PER BANK RECORD)	NATIONAL AEROSPACE LABORATORIES
ACCOUNT NO.	30268539001
IFSC CODE	SBIN0004815
BANK NAME (in full)	STATE BANK OF INDIA
BRANCH NAME	NAL BRANCH
COMPLETE BRANCH ADDRESS	OLD AIRPORT ROAD, KODIHALLI, BANGALORE – 560 017
MICR NO.	560002035
ACCOUNT TYPE	SAVINGS BANK

Certified that the Institute's account is in an RTGS enabled branch.
I hereby declare that the particulars given above are correct and complete.

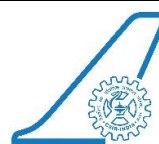
Date: 16/02/2017

Signature of the Competent Authority
of the Institution with seal
एम. अण्णादुरै / M. ANNABURAI
वित्त एवं लेखा अधिकारी
Finance & Accounts Officer
राष्ट्रीय वांतरिक्ष प्रयोगशालाएं
National Aerospace Laboratories
बंगलूरु / Bengaluru - 560 017
For STATE BANK OF INDIA

Certified that the particulars furnished above are correct as per our records.

Date: 16/02/2017

Asst. General Manager
Signature of the Authorized
Bank official with Bank Seal.
N.A.L. Branch - Bengaluru - 560 017



Details of bank mandate to be filled by the bidder

All payments to Contractors / Bidders will be made by e-payment mode namely 'Electronic Clearance System (ECS) National Electronic Fund Transfer (NEFT) / Real Time Gross settlement (RTGS) /Net Banking by direct credit to their account.

As State Bank of India (SBI) is the Banker for Council of Scientific & Industrial Research (CSIR) and National Aerospace Laboratories, it would be convenient for the institute to make e-payment through this bank.

Therefore, all the Contractors / Bidders are required to furnish all relevant details of their bank account along with the bid documents.

Sl. No.	Particulars	To be filled by Bidder
i.	Name / Firm of the Bidder	
ii.	Address of the bidder	
iii.	Banking Account No	
iv.	Type of account	
v.	Name & Branch of the Bank	
vi.	Address of the Bank	
vii.	Branch Code	
viii.	IFSC Code	
ix.	MICR Code	

(To be signed by the owner / Proprietor / Partner of the firm Only with Stamp / Seal)



CSIR – National Aerospace Laboratories
Electrical Section (K), Bengaluru – 17.



सीएसआईआर - राष्ट्रीय वांतरिक्ष प्रयोगशालाएं
CSIR - NATIONAL AEROSPACE LABORATORIES
बेंगलूरु BENGALURU 560 017

सं.No.3(1)/संग.परिपत्र Org.OM/2020-21

11th August, 2021

परिपत्र CIRCULAR

Sub.: Measures at CSIR – NAL and CSIR – 4PI to contain COVID – 19 for Contract workers under construction inside CSIR–NAL Buildings–reg.

Ref.: 1) CSIR – NAL Circular of even no. dated 06-07-2021
2) CSIR – NAL IOM dated 16-07-2021

The Task Force Committee in its meeting held on 11th August, 2021 has decided that the following SOPs to be followed for Civil and Electrical Works inside the buildings with immediate effect and until further orders :

1. The workers will enter the campus by 10.00 AM and work till 6.00 PM. Entry shall be restricted from materials gate. The workers shall be permitted only after strict thermal screening and pulse oximeter screening and they are advised not to interact with the staff members of CSIR – NAL.
2. The site shall be barricaded with tape with an identified toilet facility. Regular NAL staff members shall not enter into the barricaded area.
3. As regards, materials concerned to these activities, they shall be permitted through main gate as per the existing SOPs and protocols for which barricade area will have a door for dumping.
4. The workers will be restricted to the construction site and will not move out anywhere.
5. The Contractors, Site Engineers & Supervisors shall be vaccinated compulsorily.
6. 1st time entry of workers based on COVID – 19 negative report and subsequent entries based on biweekly health checks at Health Centre. A Fitness certificate from CMO / MO shall be produced at the gate.
7. Health Centre will Coordinate with BBMP for conducting COVID – 19 test.
8. Head, EBU to provide the list of workers to Health Centre for appropriate Health Tests and checks.
9. The workers are not permitted to take food from the Canteen and have to make their own arrangements.
10. Both NAL staff and Contractor staff shall strictly follow COVID protocols (Mask, Social Distance, Sanitization etc. while interacting.
11. NAL security shall keep a strict vigil on the adherence to COVID protocols.

The contract workers are requested to adhere to the above Standard Operating Procedure. Any violation of the above will be viewed very seriously and appropriate action will be initiated.

This is issued on the directions and approval of Director, CSIR-NAL.

[रामप्रसाद बी एस. Ramaprasad B. S]

प्रशासन नियंत्रक / Controller of Administration

To : All concerned

Copy to : Head, KTMD - With a request to host the same on Intranet for information of all.



वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
अनुसंधान भवन, 2, रफी मार्ग, नई दिल्ली-110 001
Anusandhan Bhawan, 2, Rafi Marg, New Delhi- 110 001



File No. 36-02/80-Law/22

Dated 27.10.2021

The Directors/Heads of all National Labs/Instts./Units of CSIR

Sub: Change in Arbitration clause of Domestic Agreement in accordance with Section 12(5) of Arbitration and Conciliation Act,1996 introduced by the Arbitration and Conciliation (Amendment) Act, 2015.

Ref: CSIR Circular letter dated No. 36-02/80-Law/355 dated 06.05.2019

Sir/Madam,

It is brought to the kind attention of all concerned that recently in an order dated 08.07.2021 of Hon'ble High Court of Kerala in the case of Tuls Developers India Pvt. Ltd. Vs. Dr. Appu Benny Thomas, while relying on the judgment of Hon'ble Supreme Court in TRF Ltd. Vs. Energo Engineering Projects Ltd., has held, "Subsequent to the amendment to the Act in the year 2015 through which sub Section (5) was inserted into section 12 notwithstanding any agreement to the contrary any person whose relationship with the parties falls under any of the categories in the 7th Schedule of the Act, is rendered ineligible to be appointed as an Arbitrator". Hon'ble Court discarded the stipulation of the existing Arbitration clause in the agreement to the extent to which it allows the respondent to nominate the Arbitrator when the parties fail to arrive at a consensus nominee.

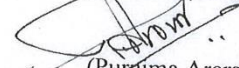
In view of the amendments 2015 and 2019 in the Arbitration & Conciliation Act, 1996 regarding the arbitration, and the recent order of the Hon'ble Kerala High Court as quoted above, It is stated that the Arbitration clause providing for appointment of Sole Arbitrator by any of the parties to the agreement, irrespective of the date of such agreement, shall stand redundant. In case of any dispute with respect to such agreement, the Arbitrator shall be got appointed in accordance with circular dated 06.05.2019, as referred to above, i.e. by referring the matter to Delhi International Arbitration Centre (DIAC).

Hence in future also, the model "Arbitration Clause" in the domestic agreement will be as under:-

"ARBITRATION

1. In the event of any question /dispute/difference arising under the agreement or in connection herewith (except as to matters the decision of which is specially provided under this agreement) the same shall be referred to the Delhi International Arbitration Centre for appointment of Arbitrator to adjudicate the dispute.
2. The award of the Arbitrator shall be final and binding on the parties. The Arbitrator may give interim award(s) and /or directions, as may be required.
3. Subject to the aforesaid provision, the arbitration and conciliation act, 1996 and the rules made hereunder and any modification thereof from time to time being in force shall be deemed to apply to the Arbitration proceedings under this clause."

Yours faithfully,


(Purnima Arora)
Under Secretary (Legal)

Phones : EPABX-23710138, 23710144, 23710158, 23710468, 23710805, 23711251, 23714238, 23714249, 23714769, 23715303
Fax : 91-11-23714788
Website : <http://www.csir.res.in>



II ARTICLES OF AGREEMENT

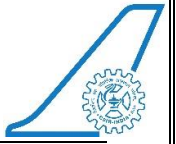
ARTICLES OF AGREEMENT MADE AT _____ this _____ day of _____ BETWEEN the Council of Scientific & Industrial Research, New Delhi, a society registered under the Societies Registrations Act 1860 (Hereinafter referred to as the Employer, which expression shall include its successor and assignees and authorized officers of the Society) of the one part and _____ trading in the name and style of _____ (herein after referred to as the contractor(s) which expression shall include his/ their respective heirs, executors, administrators and permitted assignees) of the other part.

WHEREAS the Employers is desirous of getting the work ofdone and has caused drawings, schedule of Quantities and Specifications describing the work to be prepared.

AND Whereas the said specifications and the schedule of quantities and other documents have been signed by on behalf of the parties.

Now it is hereby agreed and declared by and between the parties hereto as follows:

1. In consideration of the payments to be made to them as hereinafter provided the Contractor shall upon and subject to the conditions hereinafter contained executed and complete, the work at the rates specified in the attached schedule of quantities and with such materials as are provided for and in accordance in all respect with specifications, designs, drawings and instructions in writing. Time for carrying out the work will be.....and the date of commencement be reckoned from the **tenth day** of issue of award letter.
2. The Employer shall pay to the Contractors such sum as shall become payable hereunder at the items and in the manner specified in the said conditions.
3. This agreement contains the following documents in addition to pages of Articles of Agreement.
 - (i) General Conditions of Contract Page No _____ to _____.
 - (ii) Special Conditions Page No _____ to _____.
 - (iii) Additional Conditions Page No _____ to _____ .
 - (iv) Indenture for Secured Advance Page No _____ to _____.
 - (v) Original tender document along with the covering letter of the firm dated Page No: 1 to _____.
 - (vi) _____ .
 - (vii) _____ .
 - (viii) _____ .



In witness whereof the parties hereto have set their respective hands the day and year in above written.

Signed by, for and on behalf of Employers _____

In the presence of

(1) _____ (2) _____.

Signed by the said contractor

In the presence of

(1) _____ (2) _____.



III GENERAL CONDITIONS OF CONTRACT

1. Interpretation

- (a) In construing these conditions, the Specifications, the Schedule of Quantities, Tender, Special Conditions and Agreement, the following words shall have the meaning herein assigned to them except where the subject or context otherwise requires.
- (b) This contract shall comprise of the Articles of Agreement, General Conditions of Contract, Special Conditions. Additional Special Conditions, the Schedule of Quantities, Specifications, letter of acceptance of tender and other documents mentioned in the contents sheet attached hereto and including these to which only reference is made herein.

Work or Works: Shall mean all work or works defined in schedule of quantities, specification and such other work or works as the contractor may be entrusted with for carrying out under this contract.

Employer: Shall mean Director-General, CSIR or any officer authorized by Director-General for the purpose.

Engineer: Shall mean the Engineer designated by the Employer to superintend and perform other duties as indicated in the contract.

Contractor: Shall mean the individual or Firm or Company, whether incorporated or not. Undertaking the work and shall include the legal personal representative or such individual or the persons composing such Firm or Company or the successors of such Firm or Company and the permitted assignees of such individual or Firm or Firms or Company.

Site: Shall mean the site of the contract works including any buildings and erections thereon and any other land adjoining thereto (inclusive) as aforesaid allotted by the Employer or the Engineer for the contractor's use.

Compensation: Shall mean all sum payable by way of compensation under any of the conditions shall be considered as reasonable compensation without reference to the actual loss or damage sustained and whether or not any damage sustained, and whether or not any damage shall have been sustained. Words imputing persons include firms and corporations; Words imputing the singular only also include the plural and vice versa where the context so required.

The headings are given to the clauses for convenience and they will not limit the meaning or scope of the clauses in any way.

2. Drawings and Specifications

The Contractor shall execute whole and every part of the work in the most substantial and workmanlike manner both as regards material and otherwise in every respect in



accordance with the specifications. The contractor shall also confirm exactly and faithfully to the design, drawings and instructions given in the respect of the work by the Engineer. The contractor shall be furnished free of charge one- copy of such specifications and all such designs, drawings and instructions as are not included in the printed publications.

3. Earnest Money Deposit (EMD)

EMD upto the value of **Rs.10,000/-** may be deposited in cash and when value of EMD exceeds *Rs.10,000/-* then EMD should be deposited in the shape of **DD/PO** upto the value of *RS.25 lacs*. If EMD amount is in excess of *RS.25 lacs* then the excess amount over *RS.25 lacs* can be accepted in the form of Bank Guarantee issued by a scheduled bank.

4. Contractor to Provide Everything Necessary

- (a) The contractor shall provide at his own cost all materials (except such materials, if any as may in accordance with the contract be supplied by the Employer) plants, tools, appliance, implements, ladders, scaffolding, temporary works, etc. requisite or proper for the execution of the work whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or which may be necessary for the purpose of satisfying or complying to the requirements of Engineer, as to any manner as to which under these conditions he is entitled to be satisfied together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer **at the expense of the contractor** and the expenses may be deducted from any money due to the contractor under the contract and *I* or from his Security Deposit.
- (b) The contractor shall provide himself with requisite quantity and quality of water for carrying out the works at his own, if, however piped water is supplied by the Employer, the contractor shall pay for the water at **one percent of** the total of the work done except on Electrical Work, Air-conditioning work and Furniture work. The contractor shall make own arrangement for water connection and laying of further pipelines from the source of supply of the Employer. It should be clearly understood that the Employer does not guarantee to maintain uninterrupted supply of water and it will be incumbent on the part of the contractor to make alternative arrangement for water at his own cost in the event of any temporary breakdown in the water mains so that the progress of work is not held up for want of water. No claim as damages or refund of water charges will be entertained on account of such breakdowns. However, if the contractor is permitted to make his own arrangement to draw water from a well, hand-pump, or natural river or pond of the Employer, no charges will be made for the water drawn from the same, but the contractor will make good any damage done to the installations and ensure



that the quality of water used in the work is conforming to BIS codes and provide for any treatment at his own cost.

- (c) The contractor shall be allowed to construct temporary wells in Employer's land for taking water for construction purpose only after he has permission of the Employer in writing. No charges shall be recovered from the contractor on this account but the contractor shall be required to provide necessary safety arrangement to avoid any accident or damage to adjacent buildings, roads and service lines. He shall be responsible for any accident or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.
- (d) The Employer on no account shall be responsible for the expenses incurred by the contractor for hired ground or water obtained for elsewhere.
- (e) Subject to availability the Employer may **supply power** at only one point from where the Contractor shall make his own arrangement for distribution including provision of electric meters, switches, fuses etc. at his own cost. These shall be in the custody of the Employer. If there is any hindrance caused to other works the contractor shall reroute or remove such temporary lines without any extra cost. Such temporary lines shall be removed after the completion of work. The cost of power consumed by the contractor shall be payable to the employer at rates fixed by the Employer, which would be deducted from the running account bills. However the Employer does not guarantee the supply of power and no compensation for any failure or short supply of power shall be entertained.

"Sufficiency of Tender:

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of the tender the works and the rates and the prices quoted in the schedule of items, which rates and the prices shall, except as otherwise provided, cover all his obligation under the contract and all matters and things necessary for the proper completion and maintenance of the works".

5. Authorities, Notice & Patents

- (a) The contractor shall confirm to any regulations and bye-laws of any corporation and of any electricity supply company and authorities with whose systems the structure is proposed to be connected, and shall before making any variations from the drawing and specifications that may be necessitated for so conforming by giving written notice to the Engineer specifying the **variations proposed** to be made, the reasons for making it and apply for instructions thereon. If the compliance with this clause involves any extra work not included in this contract, he shall specify these items of work and the allowance of extra payment required on their account.
- (b) The contractor shall give all notices required by the said regulations or bye-laws to be given to any Authority and pay to such Authority or to. any public office



all fees that may be chargeable in respect of the works and lodge the receipts with the bill to the Engineer for reimbursement.

6. Rates to include all Taxes

- (a) Rates quoted by the contractor shall **include sales tax /VAT (except service tax), purchase tax, turnover tax, duties, octroi, toll tax**, realties and all other taxes in respect of this contract. The Employer shall not entertain any claim whatsoever in this respect. **However, in respect of service tax, same shall be paid by the contractor to the concerned department on demand & it will be reimbursed to him by the department after satisfying that it has been actually & genuinely paid by the contractor. The applicable & eligible service tax shall be reimbursed preferably within 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order.** Tendered rates are inclusive of all taxes levies payable under the respective statutes. However pursuant to the Constitution (Forty Sixth Amendment) Act; 1982 if any further tax or levy is imposed by Statutes, after the date of receipt of tenders and the contractor there upon necessarily and properly pays such taxes/ levies the contractor shall be reimbursed the amount as per the rules on producing proof of payment so made provided such payments, if any, is not in the opinion of the Employer (whose decision shall be final and binding) attributable to delay in execution of work within the control of the contractor.
- (b) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Employer and further shall furnish such other information and documents as the Employer may require.
- (c) The contractor shall within a period of thirty days of imposition of any **further tax** or levy pursuant to the Constitution (Forty Sixth Amendment) Act, 1982 give a written notice thereof to the Employer that the same is given pursuant to this condition together with all necessary information relating thereto.

7. Materials

- (a) If the specifications of schedule of items provide for the use of any material to be supplied by the Employer's stores or if it is required that the contractor shall use certain stores to be provided by the Employer as shown in the schedule of materials hereto annexed, the contractor shall be bound to procure and shall be supplied such materials and stores as are from time to time required to be used by him for the purpose of the contract only and value of the materials so supplied at the rates specified in the said schedule of materials and of the quantities incorporated in the work may be set of or deducted from any sums then due, or thereafter to become due to the contractor under the contract or otherwise or against or from the Security deposit. All materials so supplied to the contractor by the Employer shall remain the absolute property of the Employer and the contractor shall be the trustee of the materials so supplied procured and the



said materials shall not be removed/disposed off from the site of the work on any account and shall be at all times open for inspection by the Engineer or Employer. The contractor shall bear all incidental charges for cartage, storage and safe custody of all materials and against damage due to 'dampness, rain, sun, fires and theft and be fully responsible for their storage and maintenance. Any such material unused and in perfectly good condition in the opinion of the Employer at the time of the completion of work or termination of the contractor or earlier shall be returned to the Employer at a place directed by the Engineer at contractor's cost and at rates stipulated in the said schedule but in case the Employer decides not to take back the materials the contractor shall have no claim for compensation on account of any such materials supplied to him as aforesaid being unused by him or for any wastage or damage to any such materials.

- (b) If for any reason there is delay or non-supply of material as shown in the schedule, the contractor shall procure the same and complete the work in time after due intimation and approval of the Employer. The difference in price (between his procurement price and price shown in the schedule) shall be paid to the contractor. However, in case approval of the Employer is not given, only suitable extension of time would be considered and no other claim of compensation/damages shall be payable by the Employer.
- (c) After completion of the work or on determination/ termination of the contract, the theoretical quantity of cement to be used in work shall be calculated on the basis of statement showing quantity of cement to be used in different items of work provided in current Schedule for the purpose printed by CPWD. In case any item is executed for which the standard contents for the consumption of cement are not available in the above mentioned statement or cannot be derived from this statement, the same shall be calculated on the basis of standard formula to be laid down by the Engineer. Over this theoretical quantity of cement shall be allowed a variation up to 3% plus/minus for works estimated cost of which put to tender is not more than Rs.10 lakhs and up to 2% plus/ minus for works estimated cost of which put to tender is more than Rs. 10 lakhs. The difference in the quantity actually issued to the contractor and the theoretical quantity including authorized variation if not returned by the contractor, shall be recovered at twice the issue rate, without prejudice to the provision of other conditions regarding return of material governing the contract. In the event of its being discovered that the quantity of cement which is less than the quantity ascertained as herein before provided (allowing variation on minus side as stipulated above) the cost of quantity of cement not so used, shall be recovered from the contractor on the basis of stipulated issue rates and cartage to site.
- (d) The provisions of foregoing sub-clause shall apply Mutatis-Mutandis in the case of steel reinforcement structural steel sections (each diameter/ section or category shall be considered separately) except that the theoretical quantity of the steel be taken as the quantity required as per design or as authorized by the Engineer, including lappages, plus 3% wastage due to cutting into pieces. Over this theoretical quantity 2% plus/ minus shall be allowed as variation due



to wastage.

- (e) The provision of foregoing sub-clause shall apply Mutatis-Mutandis in the case of cables; (other than under-ground cables) wires, conduits/ GI pipes, GI/ MS sheets used in various items of work shall be calculated on the basis of measurements recorded in the measurement books for the purpose of payment and for assessing the Consumption of materials used in the works. Over this quantity a variation of 5% plus shall be allowed for wastage of materials during execution in case of cables (other than under-ground cables), wires, conduits GI pipes, and 10% plus in case of GI/ MS Sheets.
- (f) The provisions made above are without prejudice to the right of the Employer to take action against the contractor under the conditions of the contract for not doing the work according to the prescribed specifications.
- (g) "In case of easy availability of approved quality of cement and steel in the open market it will be Employer's discretion to make these items as contractor's supply".

8. Testing of Materials

The contractor shall provide assistance, instruments, materials, labour and any other arrangement normally required for testing, checking of materials and workmanship as stipulated in the specifications and by statutory authority at his own cost. The Employer has the right to appoint the testing authorities. The contractor shall pay for the cost of test samples, its packing, transportation including testing fees. Failings his so doing, the same shall be provided by the Engineer at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract and/ or from the Security Deposit or proceeds thereof or of a sufficient portion thereof.

9. Contractor's Engineers/ Foreman & Workman

- (a) The contractor shall give all necessary personals superintendence during the execution of the (work and as long thereafter as the Engineer may consider necessary until the expiration of the Defects Liability Period. The contractor shall employ competent Site-Engineer/ Foreman as per CPWD norms and as approved by the Engineer Whose qualification must conform to the requirement specified by the Engineer who shall be constantly in attendance of the work while the men are at work. Any directions, explanations, instructions or notices given by the Engineer to such Site-Engineer or Foreman or any other authorized agent shall be held to be given to the contractor.
- (b) Contractor's Site Superintendence Staff to be employed by contractor on works:
The contractor shall employ the following technical staff during execution of works
 - (a) For building and road works
 - (i) One Graduate Engineer, when the tendered cost of work exceeds Rs. 10 lakhs



- (ii) One qualified Diploma holder (overseer) with experience not less than 3 years when the tendered cost of work exceeds Rs. 5 lakhs but is less than RS.10 lakhs.
 - (iii) One qualified Diploma holder when the tendered cost of work is more than RS.2lakhs but less than RS.5lakhs.
- (b) For sanitary and water supply works

One qualified diploma holder with experience of not less than 5 years, out of which one year should be in sanitary and water supply works when the tendered cost of work is more than Rs.50,000.

(c) For Electrical works

- (i) One qualified Graduate Engineer possessing Degree in Electrical Engineering from recognized university with an experience of not less than 3 years or a Diploma holder in Electrical Engineering with an experience of not less than 7 years when the tendered cost of the work is not less than Rs.1.5 lakhs.
 - (ii) One Graduate Electrical Engineer with two years' experience or a Diploma holder in Electrical Engineering with experience of not less than 3 years when the tendered cost of the work is more than RS. 75,000 but less than Rs. 1.5 lakhs.
 - (iii) One Diploma holder in Electrical Engineering with experience of not less than 3 years when tendered cost of work is more than Rs. 37,000, but less than Rs.75,000.
 - (iv) One licensed Supervisor with experience of not less than 3 years when the tendered cost of work is more than Rs.7,500 and less than Rs.37,000.
- (d) In case the contractor fails to employ the technical staff as aforesaid, he shall be liable to pay reasonable amount not exceeding the amount shown below for each month. of default. These recoveries are subject to modification, from time to time by CSIR based on CPWD.
- (i) In case when a Graduate Engineer is to be employed Rs. 3,000
 - (ii) In case when a qualified Diploma holder is required to be employed Rs. 1,500
 - (iii) In case when a technical Supervisor is required to be employed Rs. 750
- (e) The contractor shall on the request of the Engineer immediately dismiss from the works any person employed thereon who may in the opinion of the Engineer be unsuitable or incompetent or who may in the opinion of the Employer misconduct himself.

10. Access

- (a) The Engineer, and the Employer or its representatives shall at all reasonable time have free access to the works and/or workshops, factories or other places the materials are being prepared or constructed for the contract and also to any place where the materials are lying or from which they are being obtained and the contractor shall give every facility to them for inspection. Except the representatives of statutory authorities and those mentioned above no other person shall be allowed on the works at any time without the permission of the Engineer.
- (b) If any work is to be done at a place other than the site of works, contractor shall obtain written permission of the Engineer.

11. Variation & Price for Variation



- (a) The Engineer with the approval of the Employer shall have powers to make any alterations/ omissions/ additions and/ or substitutions from the originals specifications, drawings, designs and written instructions of such alterations, omissions, additions, substitutions shall not invalidate the contract and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work. The rates for such altered, additional or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order.
- (b) If the rates for the altered, additional, or substituted work are specified in the contract for the work, the contractor is bound to carry out the altered, additional, or substituted work at the same rates as are specified in the contract for the work.
- (c) If the rates for the altered, additional, or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for a similar class of work as are specified in the contract for the work.
- (d) If the rates for the altered, additional, or substituted work cannot be determined in the manner specified in sub-clause (b) and (c) above, then the contractor shall, with 10 working days from the date of receipt of the order to carry out the work through notice in writing, inform the Engineer of the rate which it is his intention to charge for such class of work, supported by analysis of the rate claimed which shall be based on actual cost of work plus 10% as contractor's profit and overheads except in case of departmental materials for which contractor's profit and overheads shall be 2.5%. When such notice has been given, the Engineer with the consent of the Employer may agree to such a rate but if the Engineer does not agree to the contractor's rate the Engineer may cancel his order to carry out such class of work and arrange to carry out in such a manner as he may consider advisable.
- (e) Under no circumstances, the contractor shall suspend the work on the plea of non-settlement of rates of items falling under the clause.
- (f) "Deviation limits"
- | | |
|-----------------------------|-------|
| Building work | 30 % |
| Maintenance/emergency works | 50 % |
| Foundation works | 100 % |
| Services works | 30 % |

12. Faulty Materials, Workmanship & Defects After Completion

- (a) The Engineer shall have powers to require the removal from the site of all materials and work which in his opinion are not in accordance with specifications and in case of default, the Engineers shall be at liberty to employ other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials to be substituted thereof and in case of default the Engineer may cause the same to be supplied and all costs which may attend such removal and/ or substitution are to be borne by the contractor.
- (b) If it shall appear to the Engineer or to the Employer based on audit/ technical examination that any work has been executed with unsound, imperfect, or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality



inferior to that contracted for or otherwise not in accordance with the contract, any defects, shrinkage or other faults which may appear within the defects liability period of 12 months from the date of completion arising in the opinion of the Engineer, the contractor shall on demand in writing which shall be made within 12 months of the completion of the work from the Engineer specifying the work, materials, articles defects or other faults complained of notwithstanding that the same may have been passed, certified and paid for, forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may requires or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own cost. In case of any such failures, the Engineers may rectify or remove or re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and cost in all respects of the contractor.

- (c) In lieu of rectifying the work not done in accordance with the contract, the Employer may, allow such work to remain, and in that case make allowance for the difference in value, together with such further reduction as in his opinion may be reasonable.
- (d) Provided always that nothing in this clause shall relieve the contractor from his liability to execute the works in all respects in accordance with the terms and conditions of this contract, or from his liability to make good all defects.

13. Works to Be Open for Inspection

- (a) All work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer and the contractor shall at all times, during the usual working hours, and at all other times at which reasonable notice of the intentions of the Engineer to visit the works shall have been given to the contractor, either himself be present to receive order and instruction or have a responsible agent duly accredited in writing present for that purpose.
- (b) The contractor shall give not less than seven days notice in writing to the Engineer before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up and place beyond the reach of measurement, any work without the consent in writing of the Engineer and the Engineer shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurement without sud1 notice having been or the Engineer's consent obtained the same shall be uncovered at the contractors expense or in default thereof. no payment or allowance shall be made for such work or the materials with which the same was executed

14. Assignment or Sub-Letting

- (a) The contract shall not be assigned or sublet without the written approval of the Employer. And if the contractor shall assign or sub-let his contract or attempt to do so or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so or if any bribe, gratuity or gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly



or indirectly, be given, promised or offered by the contractor or any of his servants or agents to any person in the employment of the Employer in any way relating to his office or employment, or if any such employee or person shall become in any way directly or indirectly interested in the contract, the Employer shall have the power to adopt any of the courses specified under clause-23 as may be best suited to the interest of the Employer and in the event of any of the courses being adopted the consequences specified in the said clause shall ensure.

- (b) Where the contractor is a partnership firm, the approval in writing of the Employer shall be obtained before any changes in the constitution of the firm. Where the contractor is an, individual or a Hindu undivided family business concern such approval as aforesaid shall likewise be obtained the contractor enters into any partnership agreement hereunder the partnership firm would have the right to carry out the work hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned or sublet in contravention of clause 13 (a) and the same action may be taken and the same consequences shall ensue as provided in the said clause 13 (a).

15. Indemnifying Against Damages to Persons, Property & Statutes

The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of work.

- (a) The contractor shall be responsible for all injury to persons, animals or things, and for all damage, whether such injury or damage arises from carelessness or accident in any way connected therewith. This clause shall be held to include inter alia any damage due to causes as aforesaid to work, building (whether immediately adjacent or otherwise) and to roads, streets, foot paths, bridges or ways as well as all damage caused to the buildings and works forming the subject of this contract by inclemency of weather. The contractor indemnifies the Employer and holds him harmless in respect of all expenses arising from such injury or damage as aforesaid and also in respect of any award of compensation or damage consequent upon such claim including legal costs.
- (b) The contractor shall reinstate all damage of every sort mentioned in this clause, so as to deliver the whole of the contracted works complete and perfect in every respect and so as to make good and otherwise satisfy all claims for damage as aforesaid to the property of third parties.
- (c) The contractor also indemnifies the Employer against all claims which may be made upon the Employer for acts during the currency of this contract by any employee or representative of an employee of the contractor or any sub-contractors, employed by him, for any injury to or loss of life, of such employees, or for compensation payable under any law for the time being in force to any workmen or to the representative of any deceased or incapacitated workmen.
- (d) The contractor also indemnifies the Employer against all claims which may be made upon the Employer for acts during the currency of this contract by the Central/ State



Government or local Municipal authorities for the noncompliance of any laws, regulations, rules pertaining to wages act, safety act in force and any amendments thereof in respect of all labour and apprentices directly or indirectly employed in the work under this contract.

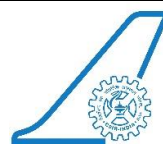
- (e) The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensation costs, charges and/ or expenses arising or accruing from or in respect of any such claim and/ or damages as aforesaid from any sum or sums due or to become due to the contractor or security deposit.
- (f) The contractor shall indemnify the employer against any action, claim or proceedings relating to infringement or sue of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against the Employer in respect of any such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise there from. Provided that the contractor shall not be liable to indemnify the Employer if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the said Employer or his authorized representative.

16. Lien in Respect of Claim in Other Contracts

- (a) Any sum of money due and payable to the contractor including the security deposit under the contract may be withheld or retained by way of lien by the Employer or Government or any other contracting person or persons against any claim of the Employer or Government or such other persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Employer or Government or with such other persons.
- (b) It is agreed term of the contract that the sum of money so withheld or retained under this clause by the Employer will be kept withheld or retained as such by the Employer or till his claim arising out of in the same contract or any other contract is either mutually settled or determined by the Arbitrator if the contract is governed by arbitration clause or by the competent court as the case may be, and that the contractor shall have no claim for interest or damages whatsoever on this account or any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

17. Withholding & Lien in Respect of Sums Claimed

- (a) Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the contractor, the Employer shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security deposit if any deposited by the contractor and for the purpose aforesaid, the Employer shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security deposit being insufficient to cover the claimed



amount or amounts or if no security deposit has been taken from the contractor, the Employer shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which at any time thereafter may become payable to the contract under the same or any other contract, with the, Employer or any contracting person pending finalization or adjudication of any such claim.

It is an agreed terms of the contract that the sum of money so withheld or retained under the lien referred above, by the Employer will be kept withheld or retained as such by the Employer till the claim arising out of or under the contract is determined by the Arbitrator (if the contract is governed by the arbitration clause) or by the competent court as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company the Employer shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or In part from any sum payable to any Partner/ Limited company as the case may be, whether in his individual capacity or otherwise.

- (b) The Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been over paid in respect of any work done by the contractor under the contract or any work claimed by him to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over payment and it shall be lawful for the Employer to recover the same from him in the manner prescribed in sub-clause (a) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under-payment shall be duly paid by the Employer to the contractor.

Provided that the Employer shall not be entitled to recover any sum over-paid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Employer on the one hand, and the contractor on the other hand under any term of contract permitting payment for work after assessment by the Employer.

18. In-Case of Death of Contractor

Without prejudice to any of the rights of remedies under this contract, if the contractor dies, the Employer shall have the option of terminating the contract without compensation to the contractor.

19. Sub -Contractors

The Employer reserves the right to use the premises and any portion of the site for the



execution of any work not included in the contract. The contractor is to afford all reasonable facilities to all sub-contractor, specialists, merchants, tradesmen and others who may at any time be appointed by the Employer for executing any work or supplying any goods relating to the construction, servicing, equipping or furnishing of the work under this contract.

20. Compliance to Labour Laws & Apprentice Act

The contractor shall comply with an the provisions of the Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970, and rules and orders framed there under and other labour laws affecting contract labour and Apprentice Act, 1961 and the rules and orders framed there under that may be in force or brought into force from time to time.

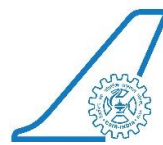
Contractor shall obtain a valid license under Contract Labour (R&A) Act 1970 and Contract Labour (R&A) Central Rules 1971 before commencing work and which should be valid till the completion.

21. Compensation for Delay

- (a) The time for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be deemed to be essence for the contract on the part of the contractor. The work shall throughout the stipulated period of the contract be proceeded with all due diligence and the contractor shall pay as compensation an amount equal to ONE PER CENTOR such smaller amount as the employer (whose decision in writing shall be final) may decide on the amount of the whole work as shown in the agreement, for every week that the work remains uncommenced or unfinished after the purpose.
- (b) And further to ensure good progress during the execution of the work, the contractor shall be bound in all cases. in which the time allowed for any work exceeds one month (say for special jobs) to complete one-eighth of the whole of the work before one-fourth of the whole time allowed under the contract has elapsed: three-fourths of the work before three-fourths of such time has elapsed. However for special jobs if a time schedule has been submitted by the contractor and the same has been accepted by the Employer, the contractor shall comply with the said time schedule. In the event of the contractor failing to comply with this condition he shall be liable to pay as compensation an amount equal to one per cent or such smaller amount as the Employer (whose decision in writing shall be final) may decides on the said cost of the work for every week that the due quantity of work remains incomplete. Provided that the entire compensation to be paid under the provisions of this clause shall not exceed ten percent on the estimated cost of the work as shown in the tender.

22. Damage to Works in Consequence of Hostilities or War-Like Operation

- (a) The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and others things connected therewith shall



be at the risks of the contractor until the work has been delivered to the Employer and a certificate from him to that effect obtained. In the event of the works or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or war-like operations, the contractor shall, when ordered in writing by the Employer, remove any debris from the site, collect and properly stored or remove from store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking, removal of serviceable materials and for the reconstruction of all works ordered by the Employer such payment being addition to compensation up to the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for the damage/ destruction suffered and for restoring the material at the rates based on the analysis of rates tendered for in accordance with the provision of this agreement. The certificate of the Employers regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on the contractor.

- (b) Provided always that no compensation shall be payable for any loss in consequence of hostilities or war-like operations (i) unless the contractor had taken all such precautions against Air Raid as are deemed necessary by the A. R. P. Officers or the Employer, (ii) for any materials etc., not on the site of the work or for any tools and plant, machinery, scaffolding, temporary buildings and other things not intended for the work.
- (c) In the event on the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Employer.

23. Extension of Time

- (a) If the contractor shall desire an extension of time for the completion of the work on the grounds of his having been unavoidably hindered in its execution or any other ground he shall apply in writing to the Employer within thirty days of the date of hindrance on account of which he desires extension-as aforesaid, and the Employer shall, if in his opinion (which shall be final) reasonable grounds shown therefore, authorize such extension of time if any, which may, in his opinion, be necessary or proper
- (b) In the event, the value of work exceeds the value of the Bill of Quantities owing to variations, the contractor shall be entitled to ask for extension of time in proportion to the increased value of work.

24. Suspension of Work by Contractor

- (a) The Employer may without prejudice to his right against the contractor in respect of any delay or inferior workmanship or otherwise or to any claims for damages in respect of any breaches of the contract and without prejudice to any rights or remedies under any of the provisions of this contract or otherwise and whether the



date for completion has elapsed by notice absolutely determine the contract in any of the following cases:

- (i) If the contractor having been given by the Engineer to rectify, reconstruct or replace any defective work or that the work is being performed in any inefficient' or otherwise improper or unworkman-like manner shall omit to comply with the requirements of such notice for a period of seven days thereafter or if the contractor shall delay or suspend the execution of the work so that in the judgment of the Employer (which shall be final and bindings) he will be unable to ensure completion of the work by the date for completion or he has already failed to complete the work by that date.
 - (ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditors shall be appointed or if circumstances shall arise which entitle the court of creditor to appoint a receiver or a manager or which entitle the court to make a winding up of order.
 - (iii) If the contractor commits breach of any of the terms and conditions of this contract.
 - (iv) If the contractor commits any acts mentioned in clause-23th thereof.
- (b) When the contractor has made himself liable for action under any of the cases aforesaid, the Employer shall have the following powers:
- (i) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of the Employer shall be conclusive evidence). Upon such determination or recession the security deposit of the contractor shall be liable to be forfeited and shall be absolutely at the disposal of the Employer.
 - (ii) The Engineer may employ labour paid by the Employer and to supply materials to carry out the work or any part of the work debiting the contractor with the cost of the labour and the price of the materials (of the amount of which cost and price certified by tile Engineer shall be final and conclusive against the contractor) and crediting him with the value of the work done in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Engineer as to the value of the work done shall be final and conclusive against the contractor, provided always that action under the sub-clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the Employer are less than amount payable to the contractor at his agreement rates, the difference should not be paid to the contractor.
 - (iii) After giving notice to the contractor to measure up the work of the contractor and to take such part thereof as shall be unexecuted out of his hands and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor if the whole work had been executed by him (of the amount of which exceed the certificate in writing of the Engineer shall be final and conclusive)



shall be borne and paid by the original contractor and may be deducted from any money due to him by the Employer under this contract or any other account whatsoever or from his security deposit.

(iv) In the event anyone or more of the above courses being adopted by the Employer the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagement or made any advances on account or with view to the execution of the work or the performance of the contract. And in case action is taken under any of the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer has shall certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

25. Secured Advance

The contractor on signing an indenture in the form specified by the Employer during the progress of the execution of the work may be paid if agreed by the Employer upto 75 percent of the estimated value which shall take into account the market value and contractor tendered rates for the finished item of any material which in the opinion of the Engineer is likely to be incorporated in the work within next three months, are non-perishable and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and protected against damage by weather or other causes, which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this clause are incorporated in the worth the amount of such advance shall be deducted from the next payment made under any of the clause of clauses of this contract.

26. Certificates & Payments

(a) No payments shall be made for a work estimated to cost Rupees ten thousand or less till the whole of the work shall have been completed and certificate of completion given. But in the case of a work estimated to cost more than Rupees ten thousand, the contractor shall, on submitting the bill entitled to receive a monthly payment proportionate to the part of the work executed and to the satisfaction of the Engineer, whose certificate of the sum so payable shall be final and conclusive against the contractor, provided the amount of work done is as per the value of intermediate certificate or for a lesser amount at the discretion of the Engineer as mentioned in the NIT. All such intermediate payments shall be regarded as payments by way of advance against the/ final payment only and not as payments for work actually done and completed and shall not preclude the requiring of bad, unsound, imperfect or unskilled work to be removed and taken away and reconstructed, or recreated or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim nor shall it conclude, determine, or affect in any way the powers of the Employer under these conditions or any of them as to the final settlement and



adjustment of the accounts or in any other way affect the contract. The final bill shall be submitted by the contractor within two months of the date fixed for the completion of work or of the date of the certificate of completion furnished by the Employer and payments shall be made within three months if the value of the completed works is upto Rupees Two lakhs and in six months if the same exceeds Rupees Two lakhs of the submission of such bill. If there shall be any dispute about any item or items of the work then the undisputed item or items only shall be paid within the said period of three months or six months as the case may be.

- (b) Whenever there is likely to be delay in recording detailed measurements for making a running payment, advance payment without detailed measurements for work done worked out at 75 percent of the tendered rates for assessed quantities may be made in running account bills by the Employer on the basis of a certificate from the Engineer. The advance payments so allowed shall be adjusted in the subsequent running bills by taking detailed measurements thereof. Final payments shall be made only on the basis of detailed measurements.
- (c) A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer on printed forms obtainable from the Engineer's office. The Engineer shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible, adjusted as far as possible, before the expiry of ten days from the presentation of the bills. If the contractor does not submit the bill within the time fixed as aforesaid the Engineer may take action within seven days of the date fixed as aforesaid, an authorised representative to measure up the said work in the presence of the contractor whose signature to the measurement will be sufficient warrant and the Engineer may prepare the bill from such measurements.
- (d) Before taking any measurement of any work the Engineer or his authorised representative deputed by him shall give reasonable notice to the contractors. If the contractor fails to attend after such notice or fails to sign or to record the difference within a week from the date of measurement in the manner required by the Engineer then in any such event the measurements taken by the Engineer or by the authorised representative deputed by him as the case may be, shall be final binding on the contractor and the contractor shall have no right to dispute the same.
- (e) The charges in the bills shall always be entered at the rates specified in the agreement or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the agreement at the determined as per-clause-10. However in case of partially executed items of work, the Employer at his discretion allows proportionate rates for such items of work as determined by the Engineer whose certificate of the sum so payable shall be final and conclusive against the contractor.

27. Security Deposit

- (a) A sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest



money, will amount to security deposit of the 5% tender value of the work. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as Performance Security within the period prescribed for commencement of work in the letter of award issued to him.

- (b) In case a fixed deposit receipt of any scheduled bank is furnished by the contractor to the Employer as part of the Security deposit and the bank goes into liquidation or for any reason is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Employer to make good the deficit of such sum from the running bill as mentioned above. Such deductions will be held by the Employer by way of security deposit, provided always that the Employer for this purpose shall be entitled to recover the said percentage of the amount from each running bill till the balance of the amount of security deposits is realised. All compensation or the other sums of money payable by the contractor under the terms of this contract may be deducted from the security deposit or from the interest arising there from or from any sums which may be due to or may become due to the contractor by the Employer on any account whatsoever and in the event of his security deposit being reduced reason of any account whatsoever and in the event of his security deposit being reduced reason of any such deductions aforesaid, the contractor shall within ten days make good in cash or further fixed deposit receipt pledged in favour of the Employer. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the earnest money if deposited-at the time of tenders will be treated as part of the security deposit.
- (c) The contractor if he so desires may furnish fixed deposit receipt in advance towards the security deposit. Such fixed deposit receipt shall be of a minimum value of Rs.25,000/- each. (The last such fixed deposit receipt could be of a lower value on the basis of the amount) In case any recovery is effected from running account bills, such recovered amount shall not be replaced with fixed deposit receipt. It is in the contractor's interest to keep a ward about the adequacy of the fixed deposit receipt submitted.
- (e) No partial refund of security deposit shall be made during the defect liability period. In case the final bill is not settled within stipulated period for reasons beyond control and the Employer is satisfied that the security deposit is not required for adjustment of Employer dues or whatsoever dues either in this or any other contract then this security deposit either in full or in part could be refunded at the sole discretion of the Employer. However, release of security deposit would be only after written clearance of Labour Officer regarding no dues or claims is received.
- (f) In case of termination of contract, this security deposit shall be forfeited and amount necessary to makeup this amount shall be recovered from money due to the contractor under this contract, or any Contract with the Employer.

28. Completion Certificate

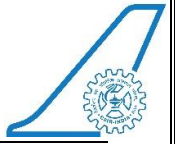
Within ten days of the completion of the work, the contractor shall give notice of such



completion to the Employer and within ten days of the receipt of such notice the Engineer shall inspect the work. If there is no defect in the work the Employer shall furnish the contractor with certificate of completion otherwise a certificate of completion indicating defects shall be issued but the work shall not, considered to be completed until the contractor shall have removed from the premises on which the work shall be executed all the scaffolding, surplus material, rubbish, and all the huts and sanitary arrangements required for his work, people on the site in connection with execution of the works as shall have been erected or constructed by the contractor and cleaned of the dirt, splashes, droppings of finishing items from all wood work, doors, windows, walls, floors or other parts of any building, in upon or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof. If the contractor shall fail to comply with requirements of this clause on or before the fixed for the completion of the work, the Employer may at the risk and cost of the contractor take action as he may think fit and the contractor shall have no claim except for any sum actually realised by the sale thereof.

29. Escalation

- (a) If the prices of materials not being supplied by the Employer and/ or wages of labour required for execution of the works increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contractor shall accordingly be varied, subject to the condition that compensation for escalation in prices shall be available only for the work done during the stipulated period of the contract including such period for which the contract is validly extended under the provisions of Clause-22 of General Conditions of Contract without levy of compensation under Clause-20 of General Conditions of Contract and also subject to the condition that no such compensation shall be payable for a work and also which the stipulated period of **completion is eighteen months or less**. Such compensation for escalation in the prices of materials and labour when due shall be worked out based on the following provisions.
- (i) The base date for working out such escalation shall be the last date on which the tenders were stipulated to be received.
- (ii) The cost of work on which escalation will be payable shall be reckoned as 85% of the cost of the work as per the bills, running or final, and from this amount the value or material supplied by the Employer and proposed to be recovered in the particular bill shall be deducted before the amount of compensation for escalation is worked out. In case of materials bought to site for which secured advance is included in the bill full value of such materials as assessed by the Engineer in charge (and not the reduced amount for which secured advance has been paid) shall be included in the cost of work done for operation of this clause. Similarly, when such materials are incorporated in the work, the secured advance is deducted from the bill full assessed value of the materials originally considered for operation of this clause shall be deducted from the cost of work shown in the bill running or final. Further the cost of work shall not include any work for which payment is made for any item at prevailing market rates.
- (iii) The compensation for escalation for materials & labour shall be worked out as



per the formula given below:

VM	=	$W \times A/100 \times (MI-MI_0)/MI_0$.
VM	=	Variation in material cost Le. increase or decrease in the amount in rupees to be paid or recovered
W	=	Cost of work done worked out as indicated in sub para (ii) above.
A	=	Component of materials expressed as percent of the total value of work and is predetermined as 75
MI	=	Index numbers of Wholesale Prices in India for all commodities published by the Reserve Bank of India for the period under reckoning
MI ₀	=	Index numbers of Wholesale prices in India for all commodities published by the Reserve Bank of India and valid on the stipulated date of receipt of tenders
VL	=	$W \times B/100 \times (LI-LI_0)/LI_0$
VL	=	Variation in labour cost, that is, increase or decrease in the amount in rupees to be paid of recovered
W	=	Value of work done, worked out as indicated in sub para (ii) above.
B	=	Component of labour expressed as percent of the total value of work and is predetermined as 25
L1	=	All India consumer price index numbers for workers published by the Reserve Bank of India for the period under reckoning as for the period under consideration
L1 ₀	=	All India consumer price index numbers for industrial workers published by the Reserve Bank of India and valid on the stipulated date of receipt of tenders.

(b) The following principle shall be followed while working out indices mentioned in sub para (iii) above.

(i) The compensation for escalation shall be worked out at yearly intervals and shall be with respect to the cost of work done during the six calendar months of the said work. The first such payment shall be made at the end of the six months after the month (excluding) in which the tenders was accepted and thereafter at six monthly intervals. At the time of completion of work, the last period for payment might become less than six months, depending on the actual date of completion

(ii) The index (MI or LI) relevant to any six months for which such compensation is paid shall be the arithmetical average of the indices relevant to the six calendar months. If the period upto date of completion after the six months covered by the last such installment of payment, is less than six months the index MI or LI shall be the average of indices for the months falling within that period.

(iii)The base index (MI or LI) shall be the relating to the months in which the tender was stipulated to be received.

(c) In the event the price of materials and/ or wages of labour required for



execution' of the work decreases there shall be downward adjustment of the cost of work so that the price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard formula herein before stated under this clause shall mutatis mutandis apply, provided that no such adjustment for the decrease in the prices of materials and/ or wages of labour aforementioned would be made in case of contracts in which the stipulated period of completion of the work is **eighteen months or less**.

- (d) Employer shall have the discretion to permit the IIEEMA (Indian Electrical & Electronics Manufacturers' Association) Clause for escalation in case of specialized works e.g. lifts and electrical and mechanical installations etc. where the price variation is not similar to building works.

30. Arbitration

- (a) In the event of any question/dispute/difference arising under the agreement or in connection herewith (except as to matters the decision of which is specially provided under this agreement) the same shall be referred to the Delhi International Arbitration Centre for appointment of Arbitrator to adjudicate the dispute.
- (b) The award of the Arbitrator shall be final and binding on the parties. The Arbitrator may give interim award(s) and/or directions, as may be required.
- (c) Subject to the aforesaid provision, the Arbitration and Conciliation Act, 1996 and the rules made hereunder and any modification thereof from time to time being in force shall be deemed to apply to the Arbitration proceedings under this clause.

31. Dismantled Material:

The contractor shall treat all material obtained during dismantling of a structure, services sub systems/ installations, excavation of the site for a work etc., as employer's property and such material shall be disposed of to the best advantage of the Employer according to the instructions issued in writing by the Engineer.

32. Performance Guarantee

Performance Guarantee may be taken from the contractor before the award of work, by the officer authorized to award the contract, if and where considered necessary, to ensure that a part or whole of the contract is completed by the contractor. In case of non-performance this guarantee could be encased.



IV SPECIAL CONDITIONS – I

1. These special condition are meant to amplify the general specifications and general conditions of contract.
2. Work shall be done as per CPWD specification.

In case of any discrepancy the order of precedence in interpretation shall be as under.

- (i) Schedule of quantities
- (ii) Drawings
- (iii) Additional conditions
- (iv) General conditions of contract
- (v) Special condition
- (vi) Additional Technical Specifications
- (vii) CPWD latest Civil and Electrical Specification
- (viii) IS Codes
- (ix) International Codes
- (x) Best Engineering Practice.

3. Steel

- (i) Steel to be issued as stated elsewhere in the contract shall be for reinforcement bars for RCC work. For all other items of steel work the contractor shall procure the same.
 - (ii) Reinforcement bars for RCC work will be issued in available coils and straight lengths. No claim for straightening the bars whatsoever shall be entertained.
 - (iii) Issue of steel of diameters above 10 mm dia will be regulated on sectional weight basis, weight being calculated with the help of the standard sectional weights as given in the CPWD latest specifications for conversion of length to weight. However, for bars up to and including 10 mm dia the following procedure shall be adopted. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The actual weight of steel issued shall be modified to take into account the variations between the actual and the standard coefficient and the contractor's account will be debited by the cost of this modified quantity only.
 - (iv) For theoretical consumption of steel, reinforcement bars will be balanced diameter wise for the purpose of penal recovery as envisaged in the contract.
4. Cement
Cement to be issued as stated elsewhere in the contract shall be only for site work. For factory made products such as Pre-cast tiles, Hollow concrete blocks, RCC pipes etc. cement shall not be issued.
 5. Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall apply for all heights, lifts, leads and depths of the work and nothing extra shall be payable on this account.

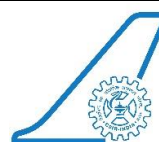


6. The surplus excavated earth which is beyond the requirement of the Employer's work may be allowed by the Employer to be disposed of by the contractor on his own or sell the surplus excavated earth to private parties at his discretion but nothing extra will be paid for the carriage or disposal of surplus earth if the same is not required for any other work of the Employer.



V.ADDITIONAL CONDITIONS

1. The structural and architectural drawings, shall at all-time be properly correlated before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and drawings relating to the relevant item the former shall prevail unless and otherwise given in writing by the Engineer.
2. No payment shall be made to the contractor for any damage caused by rain snowfall, floods or any other natural cause whatsoever during the execution of work. The damage to work will be made good by the contractor at his own cost and no claim on this account shall be entertained.
3. All materials used shall be as per specifications and IS marked wherever applicable. IS marking referred relates to latest BIS code as published by Bureau of Indian Standards up to 30 days before the date of opening the tender.
4. The contractor shall give a performance test of the entire installation(s) as per standard specifications and/ or as directed by the Engineer and will also submit. Test certificates as are required by Municipal. Electrical authority or any other authority. Nothing extra shall be payable for the same other than the fees paid to such authorities which shall be reimbursed on production of receipts.



VI INDENTURE FOR SECURED ADVANCE

This indenture made the _____ day of _____ 20____ between _____ (hereinafter called the contractor which expression shall where the context so admits or implies be deemed to include his heirs, executors, administrators and permitted assignees) of the one part and Council of Scientific & Industrial Research, New Delhi, a Society registered under the Societies Registration Act 1860 (hereinafter called the Employer which expression shall include its successors and assignees and authorised officer of the Society) of the other part.

WHEREAS by an agreement dated _____ (hereinafter called the said agreement) the contractor has agreed AN D WH EREAS the contractor has applied to the Employer that he may be allowed advances on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labour and other charges) AND WHEREAS the Employer has agreed to advance to the contractor the sum of Rs. _____ (Rupees _____) on the security of materials the quantities and other particulars of which are detailed in accounts of secured advances attached to the running account Bill for the said works signed by the contract on _____ and the Employer has reserved to himself the options of making any further advance or advances on the security of other materials brought by the contractor to the site of the said works. Now THIS INDENTURE WITNESSESS that in pursuance of the said agreement and in consideration of the sum of Rs. _____ on or before the execution of these presents paid to the contractor by the Employer (the receipt whereof the contractor both hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid the contractor both hereby convince and agree with the Employer and declare as follows:

1. That the said sum of Rs. _____ advanced by the Employer to the contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.
2. That the materials detailed in the said account of secured advance which have been offered to and accepted by the Employer as security are absolutely the contractor's own property and free from encumbrance of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the contractor indemnifies the Employer against all claims to any materials in respect of which an advance has been made to him as aforesaid.
3. That the materials detailed in the said account of secured advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the contractor solely in the execution of the said works in accordance with the directions of the Engineer and in the term of the said agreement.
4. That the contractor shall make at his own cost all necessary and adequate arrangements



for the proper watch, safe custody and protections against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the contractor's custody and on his own responsibility and shall at all times be open to inspection by the Employer or any officer authorised by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof, the contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Engineer.

5. That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Employer or any officer authorised by him on that behalf.
6. That the advances shall be repayable in full when or before the contractor receives payments from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. However, if any intermediate payments are made to the contractor on account of work done, then on the occasion of each such payment, the Employer will be at liberty to make a recovery from the contractor's bill for such payment by deducting therefrom the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amount of the advances made at these presents were calculated.
7. That if the contractor shall at any time make any default in the performance or observance in any respect of any of the terms or provisions of the said agreement or of these presents, the total amount of the advance or advances that may still be owing to the Employer shall immediately on the happening of such default be repayable by the contractor to the Employer together with interest thereon at twelve percent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the Employer in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the contractor and the contractor hereby covenants and agrees with the Employer to repay and pay the same respectively to him accordingly.
8. That the contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rs. _____ and any further sum or sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents PROVIDED ALWAYS AND it is hereby agreed and declared that notwithstanding anything in, the said agreement and without prejudice to the powers contained therein, if and whenever convenient for payment and repayment herein, before contained, shall become enforceable and the money owing shall not be paid in accordance therewith. The Employer may at any time thereafter adopt all or any of the following courses as he may deem best:;-
 - (a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions in that behalf contained in the said agreement, debiting the contractor with the actual cost of effecting such completion and amount due in respect of advances under these



presents and crediting the contactor with the value of work done as if he had carried out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor he is to pay same to the Employer on demand.

(b) Removed and sell by public action the seized material or any part thereof and out of the money arising .from the sale retain all the sums aforesaid repayable or payable to the Employer under these presents and pay over the surplus (if any) to the contractor.

(c) Deduct all or any part of the money owing out of the security deposit or any sum due to the contractor under the said agreement.

9. That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.

In witness whereof the said _____ and _____ by the order and under the direction of the Employer have hereunto set their respective hands the day and year first above written.

Signed sealed and delivered

By the said contractor: _____

In the presence of

Signature : _____

Name: _____

Address: _____

Signed by _____

By the order and direction

Of the Employer: _____

In the presence of

Signature : _____

Name: _____

Address: _____



VII PERFORMANCE GUARANTEE

To

Council of Scientific and Industrial Research

In consideration of Council of Scientific and Industrial Research (hereinafter) called "The Council" having awarded to MIS _____ a Company registered under the Companies Act 1956 (hereinafter) called the Contractor, a contract for (hereinafter) called the said contract under the terms and conditions of an Agreement dated- made between the Council and the 'Contractor hereinafter called the said agreement and Council agreed to accept the Council and the Contractor as herein provided for Rs.. _____ (Rupees _____ only) from a Scheduled Bank towards due performance of the contract by the Contractor as per the terms and conditions of the contract on the condition that the Bank on demand from the Council and without demur pay to the Council the aforesaid amount.

2. We, _____ Bank Ltd., (hereinafter referred to as the 'bank' do hereby undertake to pay to the Council and amount not exceeding Rs. _____ against any loss or damage caused to or suffered or would be caused to or suffered by the Council by reasons of any breach or breaches of any of the terms of condition of the said agreement by the said contractor.

3. We, _____ Bank Ltd., do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Council by stating the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Council for reasons of any breach by the said contractor(s) of any of the terms conditions contained in the said Agreement or by reason of the Contractor(s) failure to perform the said Agreement. 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. _____.

4. This guarantee shall come into force immediately and continue in force and remain valid till six months after the completion of all works under the said contract which according to the terms of the said contract, should be six months from the probable date of completion viz., the _____ day of _____. If, however, the period of the completion of the works under the said contract is for any reason extended and upon such extension if the Contractor fails, before the terms of this guarantee expires, to furnish a fresh or renewed guarantee for the extended period, the Bank shall pay to Council the said sum of Rs. _____



5. This guarantee shall not be affected by any change in the constitution of the Bank or of the Contractor.

6. Notwithstanding anything hereinafter contained, the liability of the Bank under this guarantee is restricted to Rs. _____ (Rupees _____ only) and the guarantee shall remain in force till _____ day of 20____ unless claim or demand under this guarantee is presented to the Bank within six months from that date all the rights of Council u'1der this guarantee shall be forfeited and the Bank shall be released and discharged from all obligations hereunder.



**Council of Scientific Industrial Research
National Aerospace Laboratories,
P.B No: 1779,
HAL Airport Road, Kodihalli,
Bengaluru – 560017.**

VIII SPECIAL CONDITIONS – II

These special conditions are meant to amplify the general specifications and general conditions of contract.

1. If any discrepancy is noticed between these conditions and specifications, general conditions of contract, drawing, etc., the order of precedence would be mentioned in Contract Document.
2. **Inspection of Site:** The Contractors must visit site before giving tender and must get acquainted with the working conditions. They should include in their rates all preliminary work such as jungle clearance construction of temporary approach roads, cleaning rubbish, pumping out water where necessary to make the area fit for further work etc., to start work and also complete it. .

The contractor will be deemed to have included in their tender rates allowance for all such preliminary works.

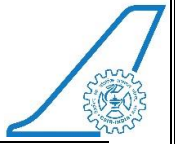
3. **Water Charges for Building Work Including Services:**
Please refer 3 (b) of Contract Document for works.

4. **Rates:**
Please refer Clause (5) of Contract Document.

5. **Increase In Rate on Account Of Increase In Basic Price:**
Please refer Clause (5) and (28) of Contract Document.

6. Rates for doors, windows, glazing, louvers should also include cost of fixing them in RCC columns and walls.
Rates shall also include shutters being fixed side hung, bottom hung, or centrally pivoted.

7. **Work in Patches and Different Shapes, Cement Slurry Under Flooring etc.,**
Even if not specifically mentioned in the schedule of quantities, including preamble of Schedule of quantities, the contractor shall be deemed to have allowed necessary materials, labour, tools and plants etc., required for satisfactory completions of the items of work as indicated in drawings and description given in building specification which shall mean CPWD Specification for works at Delhi Vol, I and II, 1977, unless the item specifies labour only or otherwise. Rate quoted also apply for work in patches strip, small or large areas, and for different shapes. The rates for flooring shall include the cost of cement slurry at bases where required as per specification.



8. Quantities:

All the quantities given in the schedule of Quantities are provisional. The contractors shall be deemed to have given Balanced Rates for each item, irrespective of the quantity to any extent the contractor shall be paid at accepted contract rates only. Council reserves the right to increase or decrease to any extent.

9. Measurements

Under each trade head, various items are given such as RCC Slab, beams, chajjas etc., In case of dispute between the contractor and the employer or any ambiguity as to under which items a particular work is to be measured, the decision of Architect/Engineer shall be final and binding on both the parties to the Contract.

10. Mode of Measurements Not Specified:

If for any items, mode of measurements is not specified the decision of the Architect/Engineer about the mode of measurement shall be final and binding both the parties to the control.

11. Schedule of Rates and Specifications:

"CPWD" Specifications are to be generally followed. However, the contractor shall include in his rates all such items of works which might have been specified as payable extra in CPWD schedule of rates but not specifically included in the tender schedule but are required to be executed to complete the work in accordance with the drawings additional specifications etc., The Employer is not bound to follow the practice and mode of measurements followed by other departments.

12. Work on Holidays:

Contractor shall not carry out work on any Government holidays except with the permission of the Civil Engineer-In-charge. The contract period will be inclusive of such holidays.

13. Labour Wages:

In labour wages either due to market conditions or by notification or legislation nor any claim on that account will be entertained.

14. Cement Consumption:

Please refer Clause (6) of Contract Document.

15. Other Contractors:

The contractor shall afford every facility to other contractors working in the same building or compound. In case of deal in completion of his work due to other contractor's work the contractor shall only have a right to ask for extension of time but no other claims on this or any other account shall be entertained by the Employer.



16. Extension of Time:

Contractor hereby agrees that extension of time required for by the contractor, and granted by the employer shall be treated as an extension of time without any claim of contractor for compensation or damages for any reasons whatsoever including those for which the extension is granted.

17. Drawings, Designs, etc:

Department will make all efforts to give all drawings, designs, decisions etc. time to time and the contractors shall make request, for the same. No claim whatsoever shall however be entertained for compensation of delay in supply of drawings, designs, decisions, running payment etc. from the department. Drawings shown at the time of issue of tenders and forming part of the contract shall indicate scope of work and drawings issued subsequently during the execution of work shall be deemed to be the drawings elaborating the basic scheme. If any detailed drawings show an item for execution, the contract with his claim in any, for final decision. Decision of the Engineer/ Architect, as to whether it is an extra item or not or whether it is covered by contract items and if not, what extra rate should be paid shall be final and binding on both the parties to the contract i.e. contractor and employer.

18. Running Bills:

Minimum value of work for interim certificate shall be contract amount divided by original completion period in months. At the discretion of Civil Engineer a running payment may be allowed for a lesser amount but not more than one running payment will be made in a month. All interim payments will be certified for payment by the Civil Engineer-in-charge of the work and only the final bill will be sent by him to the Engineer I Architect mentioned in the Agreement for certification. Secured Advance payment will not be treated as running bill if paid separately.

19. Security Deposit:

A sum @ 10 % of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of work in addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as performance Security within the period prescribed for commencement of work of ward issued to him. In case of termination of contract, this Security Deposit shall be forfeited and amount necessary to make up this amount shall be recovered from money due to the contractor under this contract, or any other contract with COUNCIL OF SCIENTIFIC & INDUSTRIAL, RESEARCH.

20. Work in Subsoil Water/ Rain Water/ Water:

If during execution of work, sub-soil water is met with, or water enters the working space due to rains or any other cause the contractor shall dewater the same by using pumps or manual labour and also carry out additional work consequent thereupon, including shoring, strutting, work in liquid, slush etc., without extra payment.



21. Heights:

Contractor's rate shall include lifts upto all heights given in drawings or as required during execution. Contractors would satisfy themselves for correctness and allow for variation if necessary. Nothing extra include in their rate allowance for works at extra heights, required double of multiple staging, tall centering, scaffolding, etc., for all items including extra labour if any.

22. Steel in RCC Work:

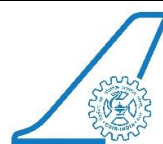
All materials, workmanship and supervising for plain or RCC construction shall be in accordance with Indian Standard 456 latest edition.

23. Concrete Work (Plain and Reinforced):

- a) Concrete members may be required to be finished with plaster or left (fair faced) as per drawing or as directed by Architect/ Engineer, The plaster shall include for facing out the surfaces required to be plastered. Shuttering required for exposed faced concrete shall be measured and paid for separately, over normal shuttering if specifically ordered.
- b) Grooves up to 20mm X 20mm as per design will be made between exposed fair masonry and (fair faces) exposed RCC members without any extra charges, if required, during the execution of work. .
- c) All RCC columns, beams, lintels may be required to be chamfered at the edges upto 20mm or as directed by the Architects/ Engineer for which no extra payment will be made whether such chamfering is shown in drawing or not. Before making the shuttering, the contractor shall have instructions from Architect/ Engineer whether such chamfering is to be done or not.

24. RCC Work:

Mechanical mixers and vibrators will be used for RCC work. Hand mixing and waiving use of Vibrator under unavoidable circumstance, may be allowed by the Civil Engineer in-Charge. Concrete work plain or RCC (labour, material supervision) WILL CONFIRM to IS 456 latest edition. If the item does not give RCC mix by proportion but gives grade concrete, suitable mix that will give required strength by getting preliminary cubes tested but minimum quantity of cement as mentioned must be used. Strength, quality of material workmanship and quality of work should conform to IS 456. Tests cubes will be prepared and got tested by the contractor and when directed by the Civil Engineer from approved Test House. Contractor shall be responsible to ensure that required test results are obtained. In case the concrete is found to be giving weaker test results, the contractor shall have to dismantle and redo the work. However, Architect/ Engineer may accept the substandard work at reduced rates if he is otherwise satisfied about its functional utility and rates thus decided shall be final and binding on both the parties. All charges connected with preparation of moulds, preliminary mix, testing of moulds



at the preliminary mix stage and during the course of work including testing charges will be borne by the contractor. Concrete shall also mean an item of materials for the purpose of testing. Concrete referred to in RCC shall be controlled concrete. Preliminary cubes shall be taken whenever change of material takes place like change of source etc. Preliminary mix may be designed by trial at site or approved at laboratory and the expenditure involved shall be borne by the contractor at the preliminary mix stage and during the course of work including testing charges will be borne by the contractor. Concrete shall also mean an item of materials for the purpose of testing. Concrete referred to in RCC shall be controlled concrete. Preliminary cubes shall be taken whenever change of material takes place like change of source etc. Preliminary mix may be designed by trial at site or at approved laboratory and the expenditure involved shall be borne by the contractor.

25. Drip Groove:

The contractor shall provide drip groove at all ends of slabs/ lintels/ beams if required, to protect rain water from entering inside the boundary of the structure, within quoted rates of RCC work.

26. Projection:

Slab projection beyond the face of wall/ column shall be measured under item RCC work in slabs and not under items RCC work in chajjas.

27. Concealed RCC Beams/ Lintels:

If in RCC SLAB, extra bars or steel cages is provided to act as a lintel or a beam over an opening the same will be measured as slab and not as beam/ lintel. If in case of RCC Wall, extra bars or steel cage is provided to as a lintel or beam over an opening the same will be measured as wall and not as Lintel/ beam. RCC Column integrated in shear wall shall be measured as wall if the same thickness and as RCC column if its thickness is more than that of shear wall.

28. Cantilever Beams, Slabs, Lintels etc.:

Nothing extra will be paid for work in cantilevers and quoted rates shall include work in and connected with cantilevers also, including extra cost for keeping centering and shuttering for a longer period.

29. Grade Concrete:

a) Minimum quantity of cement to be used in different grades of concrete for nominal mix shall be as given below:

M-100 200 Kg per cubic meter



M-150	300 kg	_____do_____
M-200	375 Kg	_____do_____
M-250	500 Kg	_____do_____

} Seven days & 28 days cube test strength shall be given as per ISI for grade concrete even if mix is given by proportion.

1:2:4	RCC mix shall be nominal	M-150
1:1 1/2:3	_____do_____	M-200
1:1:2	_____do_____	M-250

b) Design

Mix: As per IS 456 of Latest edition.

30. Measurements for RCC:

The rates for RCC items are inclusive of rendering and plastering with cement mortar 1:3, not more than 6mm thick. The thickness of RCC work shall be taken before rendering is done.

31. RCC in Steps, Waistes etc,:

The rates are inclusive of inclined surface finish shuttering, cantilevered steps of shapes, and size as per design or zig zag shaped steps.

32. Precast or Cast Insitu RCC Shelves:

Rate for shelves shall include cost of cutting chases in brick or stone work and fixing them and making good. No deduction for bearing of slab in brick or stone work is made. RCC in shelves shall be paid including RCC in bearings.

33. M.S. Reinforcement:

Rate quoted for placing in position and fabrication of mild steel or ribbed Tor steel reinforcement should include for straightening and cleaning including removing the rust of the bars at work site, cutting, cranking, hooking, hoisting at required levels, cost of providing and binding wire of 18 to 20 G. etc. complete and no separate payment will be made on this accounts.

34. Brick Work:

Rate shall include for tapering of bricks over column footing of in an over walls, steps, etc., and for exposed brick work, or any other work. Rate for brick work also includes work in pillars and small horizontal courses.

35. Brick Works: Heights/Depths

The height or width of foundation steps and superstructures will be measured as per actual. The contractors shall use suitable bricks and adjust the thickness and mortar joints to make up the widths or heights as per drawings with due regard to size of bricks available.



36. Scaffolding, Centering and Shuttering:

Contractors shall use external scaffolding to ensure true line in vertical and horizontal Planes, Centering, Shuttering, Scaffolding requiring for execution of this work may vary from single floor height to multi floor heights, which may require multiple staging scaffolding, Centering and Shuttering. Since the payments will be made to the contractor at net quoted rates irrespective of the heights involved the contractors must see and study the drawings carefully before tendering their rates.

37. Exposed Brick Work:

All brick work which will be exposed shall be done in one plane surface on exposed face and all horizontal joints shall be kept truly horizontal in one line and all vertical joints shall be truly vertical. Rates of brick work shall be inclusive of exposed brick work, and nothing extra will be paid on this account.

38. Frames Shutters:

Allowance for curved or tapered or any shape for shutters and frame.

39. Measurements of Shutters of Doors:

Actual area of wooden shutters provided shall be measured. For rolling shutters, only size of opening covered shall be measured.

40. Flush Doors:

Rates shall include forming rebates for double leaf shutters to be provided suitably for double leaf opening.

41. Steel Window Painting:

For payment of painting to steel window on both the sides, the actual area of steel windows as painted shall be multiplied as per IS 1200 and taken as area of painting for payment if not covered by schedule item for steel windows. For wooden doors and windows coefficients given in general specification shall be followed.

42. Paintings:

Where wire gauge shutters are provided in addition to normal shutters for painting to wire gauge shutters, area of wire gauge shutters multiplied by co-efficient shall be paid for. Fixed glazing will be treated as full glazed doors for painting.

43. Glazing:

If glass of required thickness is not available in the market the contractor shall have to use next higher thickness available without any extra payment. Thickness of glass be used is 3mm for area up to 2 sq. ft. and for areas between 2 sq. ft. and 10 sq. ft. the thickness of glass shall be 4mm. If the area of panel is 10 sq. ft. or more the thickness



of glass should be 5.5 mm and the cost should include for providing and fixing the glass as per above details with mastic patty etc. Fixed glazing shall be measured clear between the rebate of frame.

44. Pelmets:

Measurements shall be taken on front face only the sides shall not be measured.

45. Flooring:

Rate for flooring includes work in staircase steps, forming nosing including front and sides if required and work in panels. For flooring in steps only top surface would be measured and not sides and front though quoted rate shall include finishing sides and front as floor.

46. Terrazzo Flooring:

Terrazzo work in tiles- or in situ flooring and dado skirting should be of approved make and will have the desired shade, colour and size of marble chips (white, black, green, brown & chocolate etc.) in specified proportion. The rate quoted should include for flooring in curves etc.

47. Staircases:

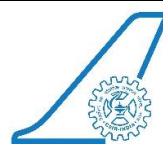
Flooring over steps and in nosing shall be paid under the item of flooring and the contractors rates shall include for extra shuttering for nosing of required shape with or without thread line terrazzo/ plain concrete finish as on steps for exposed of and nosing etc., Finishing on risers of steps shall be paid under the items of skirting/ dado and nothing extra will be paid for work in steps or risers.

48. Plastering and Skirting:

Minimum 1/2" plaster from wall face should be done, skirting should project 1/4" from wall plaster and the quoted rate should include for this irrespective of actual thickness of plaster, dado or skirting. The rate quoted for plastering or skirting should include for the work in circular shape or curved walls etc. and for giving thread line in plaster at junction of RCC and brick work if necessary. The rates should also include for additional thickness required on stone works. No additional payment shall be made for increase in thickness of plaster on uneven surface.

49. Measurements for Flooring Skirting and Dado Plaster and Finishing Items like Snowcem Distemper etc.:

Measurements for all these items shall be taken clear between the walls/ columns. Actual area of skirting, dados and finishing items/ like snowcem, distemper, plastic emulsion, white/ colour wash shall be measured and paid for as per IS 1200. Area of opening, doors and windows shall be deducted on both faces and jambs, sills/ soffits shall be measured as per actuals.



50. Mortice Lock:

These shall be with heavy gauge iron body 2 1/2" in width, with brass levers 4 not. C.P. Iron keys in duplicate with C.P. Iron handles 2 Nos. per lock, cover and locking place of C.P. iron complete.

51. Mortice Latch:

These shall be with heavy gauge iron body 2 1/2" in width C.P. iron handles 2 Nos. per latch, brass safety latch, cover and locking plants of C.P. iron complete. Mortice lock and mortice latch shall be paid for separately.

52. Beading:

Wooden beading for fixing glass panels and over wooden or board panels of panelled shutters will be deemed to be included in the rate of fixing glazing or glazed panelled shutters. Wooden beading around door and window frames will be paid for separately.

53. Screws:

All screws to be steel screws, chromium plated for aluminum and C.P. fitting and oxidized steel for iron fittings.

54. Dimensions:

If fittings, of given dimensions are not manufactured, higher manufactured size shall be used at same cost.

55. Works Programme:

The contractor shall give a phased programme for execution of his work, after award of work and also give his requirement for cement and steel in a phased programme.

56. Works Supervisor:

Contractor shall keep a qualified and experienced Engineer for supervision of building work to ensure best quality work.

57. Essentiality Certificates/ Permits/ recommendation Letter for Material Available at Controlled Rates:

These would be given by the department, if required by the contractor. It will, however, be the responsibility of the contractor to obtain material against the certificates or otherwise, and no claim on this account will be entertained by the department. Contractor shall use materials thus procured exclusively in this work and for misuse if any, he shall be solely responsible.

58. Making Holes in RCC Slabs:

For forming holes up to one sqft size in RCC slab, no deductions in concrete or shuttering



shall be made at the same time nothing extra will be paid for forming such opening including any extra cost of material or labour.

59. Architect/ Engineer:

The words "Architect/ Engineer", wherever appear in the agreement shall be read as "CSIR ARCHITECT".

60 Payment by measurements specified in these conditions as applicable to only those items of schedule of quantities, where quantities are given in Cum/ Sqm/etc. where amount is called for, and given in lump-sum, it shall be deemed to include the works specified against such items.

61. Cement and Steel:

Steel and Cement shall be supplied to contractor as stated in appendix sheet. If for any reason cement and steel is not available, the contractor shall procure the same and complete the work in time after due intimation of the same the Civil Engineer-in-Charge. The quantities brought by the contractor would be replenished to the contractor at issue rates given in appendix when received during or after completion of work but before payment of final bill.

If steel of required diameters is not available but contractor could get substituted diameters by exchanging available diameters, in the interest of work, such an exchange would be authorized with the permission of the Civil Engineer but without any extra cost of department.

Contractors' rates shall be deemed to have been based on issue rates of cement and steel given in the appendix sheet of tender, any they shall have to use materials issued departmentally as per Appendix.

(a) Forming Slits in Facias and Parapet Walls:

Slits shall be formed in RCC or brick work as per design for which nothing extra would be paid either for forming them or for extra labour in plastering it.

62. Regarding Weight of Materials Supplied Departmentally:

When cement is issued in bags, variation in its weight shall be deemed to have been allowed for loss in handling as per clause 6c/ Gen. condo. Each bag shall be deemed to weigh 50 Kg. If bags are tom, underweight or partially set or damaged, the contractor must point out the same in writing while taking delivery, to the issuing authority.

For reinforcement steel (Mild or Tor) round, the weight for issue purpose shall be the actual weight, i.e. P.R.I weight if supplied by wagons direct or the truck weigh bridge weight recorded at producer's works or suppliers stockyard if delivery is by road.

If steel is issued from CSIR lab. Stores the contractor should arrange for necessary labour for weighment and shifting, loading etc. If the store has no arrangement for weighing the contractor will have to take steel to any approved weigh bridge. For this purpose, the truck will be either arranged by concerned laboratory or alternatively, the



contractor may be required to arrange truck for which only transportation charges on actual tripe performed will be paid to him. Steel may alternatively be issue by length multiplied by standard co-efficients, for which labour will be arranged by the contractor.

Since payment for steel would be made on basis of standard co-efficients on length, the contractors should ensure that each dia. of rods issued conforms to standard co-efficients, and in case it is not, he should at once report to the Architect/ Engineer and get standard co-efficient established for specific diameter and specific quantity. Weight of steel shall be measured correct to three decimal places.

Standard co-efficient will be established in presence of (a) contractors representative (b) stores officer or his representative (c) Civil Engineer-in-charge of work. (d) a representative of Administrative Officer, and information supplied to contractors and Architect/ Engineer.

If steel is issued departmentally as stated in Appendix sheet, it shall be meant mild steel rounds and tor steel for holdfast, squares, flats, etc. are to be procured by the contractor.

63. Return of Steel:

While receiving the surplus structural steel back from the contractor after the end of the project the department shall not accept cut pieces less than three meters of length. The contractor should take care while cutting rod that the wastage is minimum i.e. he should cut of required length in such a way that maximum steel is used out of quantity supplied or as directed at site by Engineer. Variation over 5% will be allowed by the Architect/Engineer, if he is satisfied about abnormal wastage.

64. Nomenclature of Item:

Nomenclatures of the items of work mentioned in the priced schedule is only a brief description of work. The work shall have to be executed in accordance with the relevant specifications which shall mean CPWD specifications.

To the satisfaction of Architect/ Engineer in charge of the work. Any omission in description will not absolve the contractor from his responsibilities to complete the work in a satisfactory manner.

- 65.** Where RCC surface are to be plastered to bring them in line with the brick and or stone wall plaster, of the same mix, payment for such plaster will be made under the item of plastering only irrespective of the fact whether there is any increase due to odd or even surface of brick or stone work below and/or adjoining it.

66. Wood Work:

Sizes mentioned in schedule of quantity or in drawings are the finished sizes. Contractor shall allow necessary increase in sizes for planning required. In case the sizes of wooden member fixed are less than the one shown in the drawing of schedule of quantity allowing for tolerance, payment will be made for actual size used at site. The rate



quoted also will include the allowance for curved or tapered or any other shape of the wooden member unless a separate item is provide for it.

67. Random Rubble Masonry:

The rates shall include cost of hammer dressing square edges of walls, jambs, sills etc.

68. Metric Units:

The bill of quantity indicates the unit of Metric System: The mode of measurement of different items of work shall be as per details contained in specification and special conditions, with the equivalent of the units mentioned in Metric system.

69. The Recovery from Running Account Bills:

Recovery for the materials issued departmentally shall be made in full or on the basis of the quantity used in the work as assessed by the Engineer-in-Charge giving a due allowance for wastage. The contractor shall submit once in a month a statement showing the materials received consumed and the balance carried over to subsequent month so that watch could be maintained on the materials for which payment of advance could be considered by the DepC3J!ment.

70. The Fittings:

To be used in the work shall be presented for approval well in advance. Approved fittings shall be kept in the Office of Civil Engineer in a mounted lockable board.

71. The work may be measured in British Units and finally converted in abstract to Metric Units, Alternatively it could be measured in metric units if found convenient at site as per drawings issued.

72 Schedule of fittings generally to be provided to doors, windows and ventilator is given below:

(a)	Butt hinges	100 X 30 X 1.5mm	3Nos.
(b)	Rubber Block	2"/Wooden cleat with 2 hinges	1No
(c)	Tower Bolts (Barrel type)	29mm X 10 mm (shoot dia)	2Nos.
(d)	Tower Bolts (Barrel Type)	150 mm X 10 mm (shoot dia)	1No.

(a) Doors Fittings per Leaf:

(a)	Butt hinges - 10 X 30 X 1.5 mm	3 Nos.
(b)	Sand Block of size 15cm X 5cm X 8cm duly painted	1 No.
(c)	Wooden cleat with hinges 50 X 16 X 1.5 mm of approved quality with paintings etc. complete	1 No.
(d)	Grip handle 10mm (In case of double leaves, 3 grips handles shall be. provided instead of four numbers)	2 Nos.
(e)	Tower bolts (barrel type) 250X 10 mm (shoot dia)	1 No.



- | | |
|--|-------|
| (f) Tower bolt (barrel type) 150 X 10 mm (shoot dia) | 1 No. |
| (g) Sliding door bolt 300mm X 16mm | 1 No. |

(b) Windows Fittings per Leaf:

- | | |
|---|-------|
| (a) Butt hinges 80X25X1.50mm (3 Nos. if height is more than 4'0") | 1 No. |
| (b) MS Hooks and eyes 150 mm | 1 No. |
| (c) Barrel type tower bolt - 100 X 100 mm (shoot dia) | 1 No. |
| (d) Barrel Type tower bolts- 200 X 10 mm (shoot dia) | 1 No. |
| (e) Grip Handle 100 mm | 1 No. |
| (f) Sand block of size 15cm X5cm X8cm painted etc., complete | 1 No. |

(The size of tower bolts shall be 250 X 10 cm, instead of (c) and (d) specified above for windows placed at skirting level) The rate quoted shall include for providing and fixing with 3 cm (minimum) long Iron Screws. The sliding bolts shall be fixed with bolts and nuts. In lieu of sand block 2 Nos. rubber buffers 2" dia. may be required to be provided.

(c) Folding doors per Leaf:

- | | |
|---|--------|
| (a) Butt hinges 100 X30 X1.50 (heavy type) | 3 Nos. |
| (b) Barrel Type, tower bolt 250 X 10 mm (shoot dia) | 1 No. |
| (c) Barrel type tower bolt - 200 X 10 mm (shoot dia) | 1 No. |
| (d) 125 mm Grip plate handle with screw, in addition to this two Rubber buffers | 1 No. |

fixed on walls and one Grip 125 mm plate handle on locking leaf shall also be provided.

(d) Fittings for Ventilators

- | | | |
|------------------|--------------------------------------|--------|
| (a) Central Hung | i. Fin - Light pivots (sets) | 2 Nos. |
| | ii. Fanlight catches | 1 No. |
| (b) Bottom Hung | i. Fanlight catches | 1 No. |
| | ii. Chain with hook | 1 No. |
| | iii. Butt hinges 80 X 25 X 1.50 mm | 2 Nos. |
| (c) Top Hung | i. Fanlight catches | 1 No. |
| | ii. Eyes and hooks 25 mm long S.W.G. | 2 Nos. |
| | iii. Butt hinges 80 X 25 X 1.50 mm | 2 Nos. |

73. Appendix, Notice inviting Tender, Abstract of cost and additional special conditions to water supply & sanitary installation and Electrical, shall form part of special conditions.

Preparation of Running and Final Bills:

The Civil Engineer/Superintending/Junior Engineer shall take measurements in presence of contractors representative and record them in Measurement Book from



time to time and shall prepare abstract for running and final bill including recovery statements. The bill abstract shall be prepared on either standard CPWD form or on contractors letter head, on basis of Civil Engineer's abstract in triplicate. The contractor should sign the bill and Measurement Book with remark "Measurement and bill accepted". However in the final bill, the contractor shall have to certify, the bill accepted in full and final settlement of all claims and demands against this work".

In case, a large amount is blocked in the final bill, pending technical/ audit check, advance up to the extent of 75% of net final amount may be paid to the contractor. With the approval of the Architect/ Engineer at his discretion even after the completion date is over.

74. Bitumen/ tar felting:

The items of Bitumen / Tar felting should be executed through approved specialist firms, agencies and a guarantee of 10 years should be given in the name of Director of Laboratory !Institute where the work is to be executed from a Specialist firm doing work. His security deposits shall be released after a guarantee bond is received and after defect liability period as given in the appendix.

- 75.** The contractor, at his own cost shall arrange for carryout all mandatory tests on materials to be used in the construction, listed in Annexure, and such other test which Architect may require him to carry out.



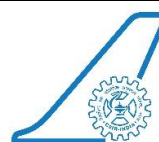
**CSIR - National Aerospace Laboratories,
NWTC Belur Campus,
Bengaluru – 560037.**

IX IMPORTANT NOTES TO CONTRACTOR

1. SCOPE OF WORK

PROVIDING ELECTRICAL SERVICES FOR THE FOLLOWING:

- 1.1 Day to day trouble shooting of electrical system built in all type of LT switch gears, EOT cranes, lathe machines, milling machines, CNC machines, hydraulic power packs, furnace, induction motors, pumps, building power wiring circuits, lighting circuit, control circuit of equipment. Also type street lights / lights / high bay lights / all type of indoor lighting, fans, switch boards, LT power panels, distribution boards, and all type of LT installations etc., as assigned by the Engineer In-charge / HOD.
- 1.2 Arranging mains power supply for scientific equipments, air conditioners, circuit wiring, point wiring, UPS circuit wiring and plug points etc., as per the site requirement as and when required at various lab facilities or as directed by the Engineer In-charge. The required material will be supplied by CSIR-NAL.
- 1.3 Renovation/ replacement of old power and lighting mains, sub circuit wiring, old type of lights, all type of fans and replacement / upgradation of old Al. armoured UG cable and LT switchgears as and when required at various lab facilities within existing building as directed by the Engineer in charge.
- 1.4 Preventive maintenance for all type of LT switch gear / electrical equipment as per the schedule or as directed by the Engineer in charge. As per the preventive maintenance schedule.
- 1.5 Maintenance of building earthing and dedicated earthing as and when required as directed by the Engineer in charge.
- 1.6 Excavation of earth work for trouble shooting of faulty LT cable and same may be refilled after completion of the work as and when required as directed by the Engineer in charge.
- 1.7 Laying of power cable on surface / duct / pipe etc., and making end terminations as and when required as directed by the Engineer In-charge.
- 1.8 Routine cleaning of all electrical equipments, fans, light fixtures, panel boards / DBs etc., as and when required as directed by lab Engineer in charge.
- 1.9 Painting of street light poles/ loop in loop out boxes/ old power panels, PCCs, MCCs & feeder pillar / earth pit CI/MS chamber cover etc., as and when required as directed by the Engineer in charge.



- 1.10 Electrical service for R&D facilities / equipment, trouble shooting of equipment's, also to carry out the preventive maintenance work and arranging power supply to new scientific equipment's as directed by Engineer in charge.
- 1.11 Replacing the burnt switches / MCB, TPN / DP switches with good one in the panel boards and main switchboards. Where ever necessary.
- 1.12 Dismantling of existing burnt/faulty ceiling fans and same shall be replaced with new one or repaired / rewinded as directed by engineer in charge.
- 1.13 **Attending the breakdowns during & after office hours and holidays as and when required without additional cost.** Attending any breakdown on an emergency basis by first restoring the power from the other circuit, repairing & restoring to normal operation.
- 1.14 Attending all types of breakdown assigned by Engineer in charge in respect of Electrical installation works.
- 1.15 Report the status of the works carried out during day-to-day maintenance to the Site Engineer / Engineer - In-charge daily.
- 1.16 CSIR-NAL will provide necessary spares, consumables such as switches, MCB's, cables, fixtures, insulation tape, fans, wires, electronic drives repairing of any faulty equipment if any and any other spares required for maintenance purpose etc. as and when required.
- 1.17 Observe all safety norms, standard operating Procedures etc. as per IE rules and regulation.
- 1.18 **All above scope of work shall be executed deploying following category man power on all CSIR – NAL, Bengaluru working days of every calendar month i.e. Monday to Friday as directed by the Engineer In-charge / Head Electrical. Also in case of any emergency breakdowns / preventive maintenance / renovation works during holidays and after office hours in working days should be attended with same personal without any additional cost. Accordingly, it is advised that, the contractor has to consider their wages and other allowances while quoting.**
- 1.19 **The following category manpower, their qualification and experience as follows.**

Sl.No	Duty Timings	No. of persons	Designation
01	8.30 hrs – 17.00 hrs	One	Engineer (highly skilled)
02	8.30 hrs – 17.00 hrs	Three	Electrician (skilled)
03	8.30 hrs – 17.00 hrs	Two	Helper (Unskilled)



Qualification & experience for Engineer : Graduate Engineer possessing Degree in Electrical / Electrical & Electronics Engineering from recognized (AICTE / UGC / autonomous / Deemed) university with an experience of minimum 1 year in internal and external building electrical maintenance work and also know about to draw the electrical AutoCAD drawing or Three year full time Diploma holder in Electrical & Electronics Engineering from recognized Technical board with an experience of not less than 3 year in internal and external building electrical maintenance work and also know about to draw the electrical AutoCAD drawing.

Qualification & experience for Electrician: Qualified in ITI Electrician trade with NCVT certificate and having experience not less than 1-year in building internal and external electrical maintenance work.

Qualification & experience for office assistant: Minimum 12th class pass from any state/central board. Having knowledge of computer applications, 1 or 2 years' experience worked as an office assistant in any organization.

Qualification & experience for helper : Minimum 8th Standard Pass.

1.20 **Duty & Responsibility of Engineer:**

- Engineer shall interact with engineer in charge and execute scope of work notified in the document and any other works assigned from time to time through their support staff i.e. Electrician / helpers as and when required.
- Preparation of preventive maintenance schedule and same shall be carried out with prior approval from Engineer in charge.
- Indenting of required materials for attending repair/replacement/renovation work through engineer in charge and complete the work within scheduled time including recording of material usage as required.
- Preparation of electrical Auto CAD drawing Single line diagram for power and lighting distribution, electrical installation layout/block diagram and control circuit etc., as directed by Engineer in charge.
- To keep the all the meters, tools and safety equipment's safe custody at work shop after completion of work.
- Any other work assigned by Engineer In-charge / Head Electrical time to time.
- Internal office files movements and maintaining incoming and outgoing files records as directed by the Engineer in charge / Head / Group leaders.
- Typing work in computer for office records letter etc., as directed by Engineers / Head Electrical as and when required.
- Maintaining stock all stationery materials at office. These materials will be issued from central stores from time to time.
- Any other work assigned by Engineer-In-charge / Head Electrical from time to time.

1.21 **Duty & Responsibility of Electrician:**



- Attending day to day breakdown for electrical installation and equipment's with in schedule time as assigned by the supervisor/Engineer in charge same shall be report after completion work.
- Carrying out the preventive maintenance as per the schedule as assigned by the Supervisor / Engineer in charge.
- Renovation / Upgradation of building power and lighting installation etc., as specified in the scope of work as and when required as assigned by the supervisor / engineer In-charge.
- Replacement all type of old light fixture/ceiling fan / switch gear etc., with in specified time as assigned by Engineer in charge.
- To keep the all the meters, tools and safety equipment's safe custody at work shop after completion of work.
- To attend cable fault, cable tracing & assist for cable jointing.
- Any other work assigned by Engineer In-charge / Head Electrical time to time.

1.22 **Duty & Responsibility of Helper:**

- Test earth pits, earth excavation for identifying of faulty cables
- Assistance to electricians as and when required.
- Painting and street light pole, old LT panels as and when assign by the engineer
- Cleaning of light fixture and all type of fans with in specified time as assigned by the engineer in charge.
- Shifting of old scrap electrical items to central stores from time to time as assigned by the engineer.
- Any other work assigned by Engineer In-charge / Head Electrical time to time.



2. **IMPORTANT NOTES TO CONTRACTOR**

- 2.1 The contractor shall deploy the qualified, experienced personnel as indicated in sl.no 1.20 for attending to scope of work under clause no.1.0 at CSIR-NAL NAL, Kodihalli, Bengaluru. The no. personnel shall be deployed as per clause no 1.20.
- 2.2 The successful tenderer, shall prepare a detailed maintenance schedule and finalize the same with the approval of Engineer – In charge / Dy. Head Electrical/Head of Electrical CSIR-NAL, Kodihalli, Bengaluru as per the requirement before execution.
- 2.3 The contractor shall ensure that all the personnel engaged are adequately trained in the use of Fire Fighting Equipments maintained in the work premises.
- 2.4 The contractor shall provide necessary one **FIRST AID KIT** and same should be maintained in the Electrical maintenance workshop. Contractor shall ensure that all the personnel engaged by him are adequately trained in administering First-aid services in case of emergencies.
- 2.5 Sensitive research is being carried out in the areas of National security at National Aerospace Laboratories. Therefore, the workers engaging the contractor shall be approved by the Director or his nominee. The decision of the Director is final with regard to this matters. The contractor has to submit Police verification reports of all the employees allotted for work at CSIR-NAL as per the security needs.
- 2.6 The contractor shall issue letters of identification to all the personnel engaged by him for maintenance duties and copies of all such letters along with the Photos and Police verification/Notary Affidavit of such persons shall be furnished to the concerned CSIR-NAL authorities, well in time for reference. In case of any change of personnel, the same should be intimated to Head electrical and Engineer- in charge before such occurrence.
- 2.7 The contractor shall ensure that all the personnel engaged are experience and capable of rectifying normal trouble shooting electrical equipment and controls QUICKLY and EFFICIENTLY so as to keep the duration of interruption at the barest minimum levels.
- 2.8 The firm shall be responsible for replacement of any of the staff falling sick, proceeding on leave or otherwise absent from the duty. The firm has to deploy an alternate staff without any additional cost.
- 2.9 Any other incidental / emergency maintenance and repair works assigned by Head, Electrical / Engineer- in- charge as and when required during the contract period shall be attended without any additional cost.
- 2.10 The staffs of the firm are subject to the security checks and restrictions of the laboratory regularization from time to time.



- 2.11 For the acts of negligence / mal-operation / deliberate acts of misconduct by the personnel engaged by the contractor, the contractor is liable to pay penalty as decided by the CSIR-NAL authorities. The contractor can offer his explanation for consideration. The decision will be taken up by the Director is final and binding. The staffs engaged by the firm shall be liable for legal action, if they are suspected to be directly or indirectly involved in any theft or otherwise. The firm shall be liable for all losses due to theft or otherwise from the laboratories, which are manifestly due to its staffs and the firm shall make the value of the material so lost good. The firm shall be solely responsible for any other police case or action by the police authorities relating to the staffs engaged by him.
- 2.12 The schedule breakdown/day to day maintenance/preventive maintenance works shall be carried out all CSIR-NAL working days as directed by Engineer in charge/Dy. Head/Head Electrical except lunch hours. The contractor shall ensure that in case of any leave of deployed man power, suitable replacement man power should be deployed without additional financial implication to CSIR-NAL, Bengaluru.
- 2.13 Any staff whose work conduct is found unsatisfactory should be replaced immediately. The firm may, if so required shall change his staff periodically, and bring the same to the notice of the Head Electrical/Engineer-in-charge of the department immediately. The firm is entirely responsible for the staff's integrity and good behavior while on duty. If any misbehavior misconduct of any worker is noticed / reported, Head Electrical/Director, CSIR-National Aerospace Laboratories, shall have the right to direct the firm to remove forthwith such staff and provide suitable replacement as required.
- 2.14 The staffs of the firm are subject to the security checks and restriction of the laboratory. Firm's staff shall wear their company uniform & photo ID card while on duty inside the laboratories for identification.
- 2.15 The contractor must provide safety shoes and dress code / uniform for their all staffs deployed for this work, they must wear the shoes and follow dress code / uniform while on duty. **The rate of the same shall be included in the offer. There is no separate payment allowed for supply of safety shoes, uniform and other tool kits.**
- 2.16 The contractor is responsible for any accident or other compensation payable to the staff engaged for the above works. The CSIR-NAL shall have no liability in this matter whatsoever.
- 2.17 The contractor shall agree to indemnify the employer against all claims arising out of action under the Employees State Insurance Act or Workmen's Compensation Act or any other civil or criminal law in force so far as they relate to the labour force employed by him and claims arising out of such employment.

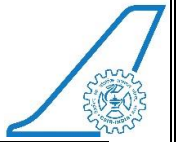


- 2.18 **The tools and plant like:** Tools specified in the list shall be provided by the contractor / vendor. The department will provide trolleys and ladders as and when required. The same has to be maintained in good condition and returned to CSIR-NAL after the completion of the work. The contractor should ensure that his staff should carefully handle all the properties of the employer without causing any damages. The contractor shall make the repair/replacement at his own cost, if any damage caused for the property of the installations.
- 2.19 Contractor should ensure payment to be disbursed to the deployed staff on or before 7th of every month irrespective of the fact that previous monthly RA bill is paid or not by the Establishment. **The Tenderers are instructed to consider the minimum wages to be paid to their deployed staff members as per Ministry of Labour & Employment, Govt. of India and all relevant statutory like Labour cess, GST any other charges, while quoting the tender from time to time for entire period of contract.** Also if any wages increased by the authorities, such payment/arrears if any, will not be payable by CSIR-NAL. However, it is directed that bidder shall include considering any increment in wages during the tenure of the contract at the time quoting.
- 2.20 **If the tender is below the mentioned wages plus statutory deductions, such tender is liable for rejections.** The first RA bill will be paid against the contractor's invoice/bill on completion of the first month and subsequent RA bill will be paid on production of the receipts of statutory payments made to concerned authorities.
- 2.21 Monthly minimum wages including paid holiday (Section 13 of Minimum Wages Act 1948) for the man power deployed for electrical maintenance service contract including weekly off as per Minimum wages of Central sphere Order No: F.No.1/7(1)/2024-LS-II issued by Chief Labour Commissioner, Ministry of Labour & Employment, Govt. of India Dated.01/04/2024 for "Construction or Maintenance of Electric lines".
- 2.22 The contractor may arrange for suitable insurance coverage against accidents etc for their staffs. Contractor and their staffs are not eligible for any compensation from CSIR-NAL for whatever may be. Contractor should provide suitable insurance coverage to all staffs who are not under ESI and proof of the same should be submitted to the Engineer In-charge / Head Electrical.



3. RESPONSIBILITIES OF CSIR-NAL

- 3.01 Providing office space with furniture.
- 3.02 Providing all stationary and other office materials as and when required.
- 3.03 Providing required special tools and special instruments for the scope of work. As and when required.
- 3.04 Providing necessary Electrical material, spares, consumables such as switches, MCB's, cables, fixtures, insulation tape, fans, wires, chokes, rewinding of faulty fans & motors and any other spares required for maintenance purpose etc. as and when required.
- 3.05 Providing services of manufacturers specialists whenever required for attending to major repairs / overhauls etc.
- 3.06 Providing landline phones to the electrical work shop. There is no mobile are allowed inside CSIR-NAL premises.



4. STANDARDS APPLICABLE

The works to be under taken shall conform to be following standards / guidelines:

- 4.01 Tender specifications and CSIR guidelines on works contract.
- 4.02 CPWD manuals.
- 4.03 Indian Electricity Rules as amended from time to time.
- 4.04 IS code of practice for low voltage wiring installations.
- 4.05 IS code of practice for 3043 earthing.
- 4.06 KERC, KPTCL and BESCO guidelines.
- 4.07 Karnataka state pollution board guidelines.
- 4.08 Central Electricity authority guidelines.
- 4.09 National Safety codes for electrical works.
- 4.10 Latest Central / Karnataka state Labour rules & regulation.



5. **SAFETY PROCEDURES**

The contract work includes the maintenance of Industrial/laboratory electrical installations at 433V and 230V level, the contractor / vendor is required to provide safety measures throughout the contract period. Work force deployed shall have adequate knowledge in handling the power system at specified level. The following guidelines / information have to be followed in addition the standard practice.

- 5.01 Safe operation of the installation under contract is sole responsibility of the contractor.
- 5.02 Safety of the maintenance personal engaged by the contractor is sole responsibility of the contractor /vendor.
- 5.03 The contractor shall ensure that all personnel engaged by them are adequately trained for the use of firefighting equipment.
- 5.04 The contractor shall ensure that all personnel engaged by them are adequately trained for the use of FIRST AID KIT maintained in the campus in case of requirement. The contractor shall maintain one standard FIRST AID KIT at site for the use of his personnel.
- 5.05 Up keeping of the various maintenance registers at electrical maintenance work shop as per the Engineer In-charge instructions.
- 5.06 The contractor should ensure that all personnel engaged by them are polite and possess good manners while on duty and while dealing with department scientific, technical & all staffs.
- 5.07 No damage shall happen to the department property, equipments, systems and if happened by any action by the contractor or his personnel's during contract period, the contractor is bound to set right / repair or make good the loss according to the decision taken by Engineer In-charge / Head Electrical.



6. WORKING TOOLS AND DOCUMENTS TO BE MAINTAINED AT SITE.

6.01 The contractor shall ensure that all personnel engaged by them are provided with necessary working tools throughout the contract period. The following minimum tools and equipments shall be made available at site apart from any other tools required for day –to-day works.

Sl. No	Item description	Qty
1.	Cutting pliers	2 Nos
2.	Screw driver set	2 sets
3.	Box spanner set & screw spanner	2 sets
4.	Other hand tools	1 set
5.	Rain coat	5 set
6.	Hand drilling machines	2 No
7.	Wall cutting machine with blade	2 No
8.	Star screw driver set	2 set
9.	Test lamps double	2 Set
10.	Hammers	4 No
11.	Clamp meter / Multi meter	2 No
12.	Megger	1 No
13.	Earth tester	1 No
14.	Crow bar	1 No
15.	Mumty	1No

6.02 Copy of letter of acceptance & agreement.

6.03 Details of manpower, certificates, qualifications proof and licenses.

6.04 All breakdown and preventive maintenance schedules, registers / files as required.

6.05 The above mentioned meters shall be calibrated as and when the due date expires.

6.06 Any other relevant documents.
