



Government of India
Indira Gandhi Centre for Atomic Research
Reactor Facilities Group
Technical Services Division
Reactor Chemistry Section

Tender Document

for

***Maintenance Contract for Online Monitors of FBTR During 2023-2025 at
IGCAR, Kalpakkam***

Tender No.IGCAR/RFG/OMG/TSD/RCS/2023/1

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PART-I
(TECHNICAL BID)



SECTION-1
Government of India
Department of Atomic Energy
Indira Gandhi Centre for Atomic Research
REACTOR FACILITIES GROUP

NOTICE INVITING E-TENDER

E-tender in TWO parts is invited on behalf of the President of India by the Superintending Engineer & Director, RFG, Kalpakkam 603 102, Chengalpattu District, Tamilnadu from reputed and experienced contractors or who are in the approved list of the appropriate class of Central Public Works Department, State Public Works Department, Railways, Military Engineers Services, City Development Authority/Municipal Corporation of City with proven technical and financial capabilities and who have satisfactorily completed (#)Three similar works each costing not less than the amount equal to 40% of the estimated cost put to tender, [or] Two similar works, each costing not less than the amount equal to 60% of the estimated cost put to tender [or] One similar work of aggregate cost not less than the amount equal to 80% of the estimated cost during past seven years ending previous day of last date of submission of tenders.

Note: The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to previous day of last date of submission of tender.

NIT No.: IGCAR/RFG/OMG/TSD/RCS/2023/1

| | |
|---|--|
| Name of work | Maintenance Contract for Online Monitors of FBTR During 2023-2025 at IGCAR, Kalpakkam |
| Estimated Cost | Rs. 7.5 Lakhs |
| Time Allowed | Initially for a period of 2 years. Extendable for a further period of one year or part thereof on mutual consent |
| Earnest Money Deposit | The bidder to deposit a total amount of Rs. 15,000/- towards Earnest Money (EMD) in the form of Demand Draft/ Banker's Cheque /Deposit at Call Receipt issued by a Scheduled bank, in favour of PAY AND ACCOUNTS OFFICER, IGCAR, Kalpakkam payable at Kalpakkam. |
| Security Deposit | 2.5% of tendered value |
| Performance Guarantee | 5% of tendered value |
| Cost of Tender Document | Nil |
| Tender processing fee | E-payment through electronic mode only accepted. For further details, please see www.tenderwizard.com/DAE. |
| Dates of availability of Tender Documents for view and download | From 01-05-2023 (10:00 Hours) to 15-05-2023 (15:00 Hours) on website www.tenderwizard.com/DAE . |
| <i>Please note that the tender will be available for download between the dates as prescribed above. Agencies interested in participating must register in the webportal and pay the prescribed registration charges as per requirements, should pay tender processing fee online, all within the dates prescribed above. <u>Only agencies who have registered in the above mentioned webportal can participate in e-tender.</u> Detailed NIT is also available on website www.igcar.gov.in for view only.</i> | |

| | |
|--|--|
| Free viewing of Tender Documents in PDF format. | Click “TENDERS OF DAE” on Home page of Website www.tenderwizard.com/DAE . If interested in participating in the tender, download Technical & Financial Bids in Excel Format as under. |
| Purchase of tender Documents in Excel Format for participation in tendering. | <p>Login in the Home page of the website www.tenderwizard.com/DAE with your User ID / Password & Class III Digital Signature Certificate.</p> <p>Click on “UNAPPLIED” button; then Click on “REQUEST” icon (blue colour); Pay TENDERPROCESSING FEE online. Click on “SUBMIT” button. Now click on “INPROGRESS” button. In status column you will find the tender is RECEIVED. You will be able to download required Tender Documents by clicking “EDIT ATTACHMENT” icon for any number of times till last date of submission.</p> <p>Please refer Help Manual for submission of Tender / contact Help Desk at daehelpdesk@gmail.com for any queries.</p> |
| Last date and time of closing of online submission of tenders: | 22-05-2023 (14:30 Hours) |
| Date and time of online opening of Technical Bid | 22-05-2023 (15:00 Hours) at Office of Superintending Engineer & Director, RFG, IGCAR, Kalpakkam. |
| Date of verification of credentials for e-Tendering mode | 22-05-2023 to 26-05-2023 Note: Original documents substantiating all the eligibility criteria should be produced for verification during evaluation process. If the bidders fail to submit original credential for verification within the prescribed period as mentioned above, those tenders will be summarily rejected. |
| Evaluation of Part-I (Technical bid) | Part-I evaluation for qualifying the bidders will be done for opening Part-II (Financial bid) based on credentials submitted |
| Date of opening of Financial Bids of qualified bidders | Date will be notified later. |
| Procedure to be followed for submission of EMD, cost of tender document & Eligibility documents | <p>Tenderers shall place EMD, tender document fee and e-payment receipt of tender processing fee in a single sealed envelope superscripted as “EMD and TENDER FEE” with name of work and submitted at the office of Director, RFG on or before the date and time of closing of online submission of tenders.</p> <p>Copy of certificate of work experience, audited balance sheet, bank solvency certificate and other documents mentioned below shall be scanned and uploaded to the e-tendering website within the period of tender submission and certified copy of each shall be deposited in a separate sealed envelope</p> |

The security deposit at 5% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum amount to security deposit of 2.5% of the tendered value of the work. In addition the contractor shall be required to deposit of 5% of the tendered value of the contract as performance security in the prescribed form (as specified in the Annexure) within a period of fifteen days of issue of letter of intent.

TENDERS NOT ACCOMPANYING THE FOLLOWING ARE LIABLE TO BE SUMMARILY REJECTED

1. Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.
2. Proof of registration with Government / Semi Government organizations like CPWD, MES, BSNL, Railways, State PWDs etc. in appropriate class OR having experience in execution of similar nature of works. Scanned copy shall be uploaded.
3. Experiences of having successfully completed works during the last seven years ending last day of the month previous to the one in which applications are invited as follows: Three each similar completed works costing not less than the amount equal to 40% of the estimated cost put to tender, [or] Two each similar completed works, costing not less than the amount equal to 60% of the estimated cost put to tender [or] One similar completed work of aggregate cost not less than the amount equal to 80% of the estimated cost.

Similar work shall mean **“Experience in operation or maintenance of chemical lab instruments involving water and steam system”**

Note:

1. Eligible similar nature of works should have been executed in India only.
 2. Works got executed on back to back basis through another contractor will not be treated as eligible works.
 3. In case of the work done under private sector, the completion certificate shall be supported with the copies of TDS certificate.
 4. The value of executed works shall be brought to current costing level by enhancing the actual value of work **at simple rate of 7% per annum**, calculated from the date of completion to last date of submission of tenders.
- A. Should have an average annual financial turnover of at least 100% of estimated cost during the immediate last 3 consecutive financial year ending 31.03.2021. **Scanned copy of certificate from Chartered Accountant is to be uploaded.** Should not have incurred any loss for more than two years during the last five years ending previous financial year (2022). Details shall be furnished duly supported by figures in balance sheet/profit & loss account for the last 5 years duly certified by Chartered Accountant as uploaded by the applicant to Income tax department as per proforma as specified in Form – A.

The bidding capacity of the contractor should be equal to or more than the estimated cost of the work put to tender. The bidding capacity shall be worked out by the following formula:

$$\text{Bidding Capacity} = [A \times N \times 2] - B$$

Where,

A = Maximum turnover in construction works executed in any one year during the last five years taking into account the completed as well as works in progress. The value of completed works shall be brought to current costing level by enhancing at a simple rate of 7% per annum.

N = Number of years prescribed for completion of work for which bids has been invited.

B = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited.

- B. Should have a solvency of 40% of estimated cost obtained from competent authorities as per proforma specified in Form – B shall be uploaded. The solvency certificate should be valid on the day of tender opening.
- C. Applicant should upload the details of all works of similar class completed in the proforma as specified in **Form –C**.
- D. List of projects under execution or awarded shall be uploaded as per proforma specified in **Form –D**.
- E. Performance report of works referred to in Forms ‘C’ & ‘D’ shall be uploaded as per proforma specified in **Form –E**.
- F. Details regarding structure and organisation of the firm shall be uploaded as per proforma specified in **Form –F**.
- G. Details regarding manpower possessed shall be furnished as per proforma **Form –G** shall be uploaded.
- H. PAN Certificate in the latest approved form -Details of sales tax registration including details of commercial tax office with which they are remitting this tax.
- I. The contractor should be registered under Goods & Service Tax (GST) and GST as applicable as per the extant order on the subject on the above work shall be paid by the Contractor to concerned Department.
- J. The bidder should be registered with Employees Provident Fund Organization and Employees State Insurance Corporation and furnish the certificates of Registration with EPFO and ESIC or Acknowledgement of having applied for registration with EPFO and ESIC establishing bidder’s eligibility and qualification.
- K. Bidder’s profile shall invariably contain (i) EPF registration number and ESI registration number or (ii) Particulars of Acknowledgement of having applied for registration with EPFO and ESIC establishing bidder’s eligibility and qualification.
- L. Certificates (Scanned copy of original certificates to be uploaded)
- i. Performance Certificates
 - ii. TIN Registration
 - iii. Goods & Service Tax (GST) registration certificate
 - iv. PAN (Permanent Account Number) Registration
 - v. Registration certificate in CPWD / State PWD / MES OR having experience in execution of similar nature of works
 - vi. Form A to Form I

- vii. Registration with EPFO and ESIC
- viii. Undertaking A to D of Annexure-I, Annexure-II and Annexure-III

NOTE:

- 1) The Originals of the above certificates shall be produced as and when called for. Irregularities if any observed will lead to rejection of the offer irrespective of the stage at which it is observed. Such bidders will be debarred for bidding in all works of DAE in future.
- 2) Firms will be debarred for a period of two years if it is determined that the bidder has breached the code of integrity as per Rule 175 and Rule 151 of GFRs 2017.
- 3) Firms will be debarred for a period of two years for any actions or omissions by the bidder for violation of code of integrity. It is also possible that the firm may be debarred concurrently by more than one Department.
- 4) Past performance:-
Even though any bidder may satisfy the above requirements, he would be liable to disqualification if he has:
 - a) Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document.
 - b) Record of poor performance such as abandoning work, not properly completing the contract, or financial failures/weakness etc.
 - c) Any effort on the part of the bidder or his agent to exercise influence or to pressurise the employer would result in rejection of his bid. Canvassing of any kind is prohibited.
- 5) Bidders debarred for bidding in any of the DAE units are not eligible to participate in the tender.

M. UNDERTAKING as under for e-tendering mode:-

I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in DAE in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Performance Guarantee. (Scanned copy to be uploaded at the time of submission of bid).

- 4) Information and Instructions for tenderers posted on website shall form of tender document for e-tendering mode.
- 5) The tender document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.tenderwizard.com/DAE free of cost for e-tendering mode.
- 6) The bid can only be submitted after uploading the mandatory scanned documents such as Demand Draft or Pay order or Banker`s Cheque or Deposit at call Receipt or Fixed Deposit Receipts of any Scheduled Bank towards EMD in favour of "PAY AND ACCOUNTS OFFICER,

IGCAR, Kalpakkam” and Processing Fee by e-payment as mentioned in www.tenderwizard.com/DAE.

- 7) **Those contractors not registered on the website www.tenderwizard.com/DAE, are required to get registered for e-tendering mode. Registered contractors only can download & submit / upload tenders**
- 8) The intending bidder must have valid class-III digital signature to submit the bid for e-tendering mode.
- 9) On opening date, the contractor can login and see the bid opening process for e-tendering mode.
- 10) For e-tendering mode, contractor must ensure to quote rate of each item. The column meant for quoting rate in figures appears in YELLOW colour and the moment rate is entered, it turns SKY BLUE. **If any cell is left blank the same shall be treated as “0”**. Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as “0” (ZERO).
- 11) The Department reserves the right to accept / reject any prospective application without assigning any reason thereof.
- 12) Short listing of the agencies shall be subject to thorough verification of their credentials and inspection of works carried out by them, through a Technical Evaluation Committee of experts, constituted by IGCAR, if required.
- 13) IF ANY INFORMATION FURNISHED by the applicant is found to be incorrect at a later stage, they shall be liable to be debarred from tendering / taking up works in IGCAR.
- 14) In case of successful tenderer, the tenderer is required to deposit an amount equal to 5% of the tendered value of the contract as irrevocable performance guarantee in the form of bank guarantee from any of the scheduled bank, Fixed Deposit Receipt or by demand draft from State bank of India or Canara Bank drawn in favour of **“Pay & Accounts Officer”, IGCAR, Kalpakkam** payable at Kalpakkam within a period of 15 days of issue of letter of intent. The letter of award of work will be issued only after the above said performance guarantee in any one of the prescribed forms is received and accepted failing which the Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money absolutely.

In addition to the above, the successful tenderer is required to remit security deposit amounting to 2.5% of the tendered value which shall be deducted at 5% of the gross amount of the bill from each running bill, till total security deposit is recovered. Contractor should have valid ESI & EPF registration. The employers contribution as per extent Government orders shall be paid by the contractor which shall be reimbursed on production of documentary evidence. Hence the quoted rates shall not be inclusive of ESI/EPF employers contribution.

- 15) Tenderer to note that tenders with any condition including that of conditional rebate shall be rejected forthwith. (Applicable for single part tenders only)
- 16) Bidders shall not be under a declaration of ineligibility for tender quoting and fraudulent practice.
- 17) Documentary evidence of adequate financial standing.
- 18) Information regarding projects in hand, current litigation, orders regarding exclusion, expulsion or block entry if any to be furnished.

- 19) The capacity of the contractor to take up a new project under consideration in addition to his present commitments must be clearly brought out. He should also furnish the details referring as to have both physically and financially capable of executing this contract in the stipulated time as per milestones projected in addition to executing the other commitments.
- 20) Copies of original documents detailing the constitution or legal status, place of regulation and principle place of business, written power of attorney of the regulatory of the bond to commit the bidders.
- 21) Qualification and experience of key site management and technical personnel proposed for the contract.
- 22) Evidence of adequacy of working capital for this contract. Access to lines of credit and availability of other financial resources.
- 23) Information regarding any litigation, current or during the last five years, in which the bidder is involved, the parties concerned and disbursed amount.
- 24) Tender offer shall be valid for 120 days from the last date of closing of online submission of tender.
- 25) Contractor should have valid ESI & EPF registration. The employer's contribution as per extant government orders shall be paid by the contractor which shall be reimbursed on production of documentary evidence. Hence, the quoted rate shall not be inclusive of ESI & EPF employer's contribution.

Superintending Engineer & Director, RFG on behalf of President of India does not bind himself to accept the lowest or any other tender and reserves to himself the authority to reject any or all of the tenders or to allot parts of the works to different agencies without assigning any reasons there for. All tenders, in which any of the prescribed conditions is not fulfilled, shall be summarily rejected.

A. Lizan

B. Sushik
12/14/2023

Superintending Engineer & Director, RFG
Indira Gandhi Centre for Atomic Research
[For and on behalf of President of India]

List of Documents to be scanned & uploaded within the period of bid submission for e-tendering mode: (Scanned copy of original certificates to be uploaded)

- 1 Financial Turn Over certified by CA
- 2 Profit & Loss statement certified by CA
- 3 Latest Bank Solvency Certificate
- 4 List of SIMILAR WORKS completed in last 7 years indicating: I) Agency for whom executed II) Value of Work, III) Stipulated and actual time of completion.
- 5 List of WORKS in Hand indicating: I) Agency II) Value of Work, III) Stipulated time of completion / present position.
- 6 List of Technical Staff
- 7 Certificates:
 - i) Registration certificates
 - ii) Certificates of Work Experience / Performance Certificates / Completion certificates.
 - iii) TIN Registration Certificate
 - iv) Goods & Service Tax (GST) registration certificate
 - v) PAN (Permanent Account Number) Registration
 - vi) EPFO & ESIC Registration
- 8 Undertaking A to D of Annexure I, Annexure II & Annexure III
- 9 Earnest Money Deposit- Original DD/BG/FDR
- 10 e-payment through online electronic mode towards cost of Processing Fee.
- 11 Form of Tender

Scanned copy on Contractor's letter head to be uploaded

Annexure - I

UNDERTAKINGS TO BE FURNISHED BY THE TENDERER

1. Undertaking – A

"I Son of
..... Residing at
.....hereby give an
undertaking that I have read and I am aware of all the clauses and sub clauses of tender
forms and I confirm that I will abide by all the terms and conditions available in this tender
document. My Income tax Permanent Account Number (PAN) is

(Seal of the Firm)

*(Dated Signature of Contractor or his
authorized Power of Attorney)*

2. Undertaking – B

"I Son of
..... Residing at
.....
..... hereby give an undertaking that I have give an undertaking that
none of my relative(s) as defined below is/are employed in DAE as per details given in
tender document. In case at any stage, it is found that the information given by me is false /
incorrect, IGCAR shall have the absolute right to take any action as deemed fit without any
prior intimation to me"

The near relatives for this purpose are defined as;

1. Members of a Hindu undivided family
2. They are husband and wife
3. The one is related to the other in the manner as father, mother, son(s) son's wife (daughter-in-law), daughter(s) daughter's husband (son-in-law), brother(s) and brother's wife, sister(s) and sister's husband (brother-in-law)

(Seal of the Firm)

*(Dated Signature of Contractor or his
authorized Power of Attorney)*

UNDERTAKING – C

I / We have read and examined the Notice Inviting Tender, General Rules & Directions, Form of Tender, Special conditions, Safety code for works contract, General condition of Contract, Schedule F, Specifications, Schedule of Construction, drawings & all other contents in the tender documents for the work AND ACCORDINGLY I / We, hereby tender for execution of the work specified for the President of India within the time specified in Schedule “F”, viz., Schedule of Quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule 1 of General Rules & Directions and in Clause - 11 of the General Clauses of Contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

(Seal of the Firm)

*(Dated Signature of Contractor or his
authorized Power of Attorney)*

UNDERTAKING – D

I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in DAE in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Performance Guarantee.

(Seal of the Firm)

*(Dated Signature of Contractor or his
authorized Power of Attorney)*

Annexure - II

Declaration by Contractor

This is to certify that;

- 1) I / We have submitted the tenders in the proforma as downloaded directly from the website which are same as available in the website and there is no change in the format, number of pages, etc.
- 2) I / We have not made any modifications / corrections / additions etc., in the tender documents downloaded from web by me / us.
- 3) I / We have checked that no page is missing and all pages as per the index are available and that all pages of tender document submitted by us are clear and legible.
- 4) I / We have submitted the cost Tender processing fee.
- 5) I / We have submitted requisite EMD in the prescribed form.
- 6) In case at later stage, it is noticed that there is any difference in my / our tender documents with the original documents, IGCAR shall have the right to cancel the tender / work, forfeit the Performance Guarantee & Security Deposit, take appropriate action as per the prevailing rules in force and IGCAR shall not be bound to pay any damages to me / us on this account.

Dated

(Contractor)
(Signature with seal)

Annexure III

Declaration

I(Name of the contractor/agency) hereby declare compliance towards all the labour codes, legislations and statutory conditions or any other acts dealing with minimum wages, EPF,ESI, bonus, industrial relations and social security and authorise Indira Gandhi Centre for Atomic Research to recover any payment that arises due to failure to comply with any of the labour codes, legislations and statutory conditions or any other acts dealing with minimum wages, EPF,ESI, bonus, industrial relations and social security etc. nd all other acts mentioned in the tender document.

Place:

Date:

Signature of Tenderer/Authorised signatory
Name & seal of the Tenderer

FORM 'A' : FINANCIAL INFORMATION

I. Financial Analysis - Details to be furnished duly supported by figures in balance sheet/ profit and loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (copies to be attached).

| Particulars | Financial Year | | | | |
|--|----------------|---------|---------|---------|---------|
| | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 |
| i) Gross Annual turnover Rupees (In Lakhs) | | | | | |
| ii) Profit/Loss Rupees (In Lakhs) | | | | | |
| iii) Certified by | | | | | |

| | |
|--|--|
| Name and address of Chartered Accountant | |
|--|--|

II. Financial arrangements for carrying out the proposed work.

Viz. line of credit, Working Capital, Liquid Capital, Fixed Deposits etc. - Upload scanned copy of statement

III. The scanned copies of following certificates are to be uploaded.

- Profit & Loss account certified by CA & as submitted to Income Tax Department.
- Solvency Certificate from banker's of applicant. Banker's certificates should be on letterhead of the Bank. In case of partnership firm, certificate should include names of all partners as recorded with the Bank as said in the Form 'B'.
- Value Added Tax Registration Certificate.
- Permanent Account Number (PAN).

| |
|------------------------------|
| |
| Name of authorized signatory |

Note: Further details if required may be asked from the contractor after opening of the bids. There is no need to upload the entire voluminous balance sheet.

Scanned copy on Banker's letter head to be uploaded

FORM – B :FORM OF BANKER’S CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s./Shri _____ (with address) a customer of our bank are / is respectable and can be treated as good for any engagement upto a limit of Rs _____ (Rupees _____).

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature)

For the Bank

Note:

- (1) Bankers certificates should be on letter head of the Bank.
- (2) In case of partnership firm, certificate should include names of all partners as recorded with the Bank.

Scanned copy of certificates containing following information from the clients to be uploaded

FORM-E : PERFORMANCE REPORT OF WORKS REFERRED TO IN FORM "C"
(Separate certificate for each work/ Project)

1. Name of work/Project & Location
2. Agreement No.
3. Estimated Cost
4. Tendered Cost
5. Date of start
6. Date of completion
 - (i) Stipulated date of completion
 - (ii) Actual date of completion
 - (iii) Present position of work, if in progress.
7. Amount of compensation levied for delayed completion, if any.
8. Amount of reduced rate items, if any.
9. Performance Report.

| | |
|--------------------------|--------------------------|
| a) Quality of work | Very Good/Good/Fair/Poor |
| b) Financial soundness | Very Good/Good/Fair/Poor |
| c) Technical Proficiency | Very Good/Good/Fair/Poor |
| d) Resourcefulness | Very Good/Good/Fair/Poor |
| e) General behaviour | Very Good/Good/Fair/Poor |
| f) Time Consciousness | Very Good/Good/Fair/Poor |

Dated:

**Executive Engineer or equivalent
Signature with Seal**

FORM 'F' : STRUCTURE & ORGANISATION

1 Name & Postal Address of the applicant:

2 Telephone No./Telex No./Fax No.

3 Legal status of the applicant (Please tick and attach attested copies of original document defining the legal status)
(a) An individual; (b) A proprietary firm; (c) A firm in partnership
(d) A limited company or Corporation

4 Particulars of registration with various Government bodies (attach attested photocopy)

| Dept./Organisation & Place of registration | Registration No. |
|--|------------------|
| | |
| | |
| | |
| | |

5 Names and Titles of Director & Officers with designation proposed to be concerned with this work

6 Designation of individuals authorised to act for the organisation

7 Was the applicant ever required to suspend construction for a period of more than six months continuously after you commenced the construction? If so, give the name of the project and reasons of suspension of work.

8 Has the applicant or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment.

9 Has the applicant, or any constituent partner in case of partnership firm, ever been debarred / black listed for tendering in any organisation at any time? If so give details.

- 10 Has the applicant, or any constituent partner in case of partnership firm , ever been convicted by a court of law? If so, give details.

- 11 In which fields of Engineering construction the applicant has specialisation and interest?

- 12 Any other information considered necessary but not included above.

Name and address of the authorized signatory

Form - H : Bidding Capacity Form

| | |
|---|--|
| Maximum turnover in works executed In any one year during the last five years taking into account the completed as well as works in progress. The value shall be brought to current costing level by enhancing at a simple rate of 7% per annum = (A} | |
| Year in which maximum turnover occurred | |
| Is audit report for the same is attached.(Yes/No) | |
| Number of years prescribed for completion of work for which bids has been invited = (N) N = completion period in months / 12 | |
| Value of existing commitments and ongoing works to be completed during the period of completion of works for which bids have been invited = (B) | |
| Bidding capacity = (AxNx2)-B | |

Signature of Bidder(s)

FORM I : CHECK LIST

BEFORE SUBMITTING THE TENDER, THE TENDERER MUST CHECK THE FOLLOWING:

Say 'Yes' or 'No'

1. Have you uploaded the mandatory scanned documents such as Demand Draft or Banker's Cheque or Fixed Deposit Receipts of any Scheduled Bank towards EMD?
2. Have you filled schedule of quantities and unit rates in the price bid?
3. Do you agree to all the *conditions* of contract in to (Wherever you differ you should bring it out in the covering letter)
4. Have you included all the necessary equipment instruments tools/tackles & labor, storage space etc. for completion of the job, whether specifically mentioned or not?
- 5.. Are you registered with central/state /PWD/ MES/RAILWAYS?
6. Are you related to any officer IGC or Constituent of the DA E'?

Address of Tenderer:

Phone number -----

Signature of Bidder(s)

SECTION – II

FORM OF AGREEMENT AND GENERAL RULES AND DIRECTIONS FOR THE GUIDANCE OF THE TENDERERS

ITEM RATE TENDER AND CONTRACT FOR WORKS

(General PWD code, Paragraph 95)

1. All the works proposed for execution by the contract will be notified in a form of invitation to tender posted in public places and signed by Superintending Engineer & Director, RFG, IGCAR, Kalpakkam / Engineer-in-charge

This form will indicate the work to be carried out as well as the date of submitting and opening of the tender, and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender and amount of security deposit to be deposited by the successful tenderer and the percentage, if any, to be deducted from the bills, copies of the specifications, designs and drawings and any other related documents required in connection with the work, signed for the purpose of identification by Superintending Engineer & Director, RFG / Engineer-in-charge, Indira Gandhi Centre for Atomic Research shall also be open for inspection by the tenderer at the office of the Superintending Engineer & Director, RFG / Engineer-in-charge during office hours.

2. In the event of the tender being submitted by a firm, it must be signed separately by each member thereof, or in the event of the absence of any partner, it must be signed on his behalf by a person holding power of attorney authorizing him to do so; such power of attorney shall be produced with the tender, and it must disclose that the firm is registered under Indian Partnership Act.
3. Receipts for payments made on account of a work when executed by a firm must also be signed by the several partners except where the contractors are described in their tender as a firm, in which case the receipt must be signed in the name of the firm by one of the partners, or some other person having authority to give effectual receipts for the firm.
4. Any person who submits the tender must fill up the prescribed form stating that at what rate he is willing to undertake each item of work. Tenders which propose any alteration in the works specified in the said form of invitation to tender, or in the time allowed for carrying out the work or which contain any other condition of any sort including conditional or unconditional rebates of any sort will be liable for rejection. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tenders shall have the name and number of the works to which they refer, written on the envelopes.
5. The rate(s) or amount(s) must be quoted in Indian rupees both in words and figures and shall remain firm throughout the period of the contract or till the work is completed whichever is the later. The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paise and considering more than fifty paise as rupee one.

6. Superintending Engineer, RFG / Engineer-in-charge or his duly authorized representative will open the tenders individually in the presence of any intending tenderer or his authorized representative who may be present at the time stated in the notice and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, the tenderer who shall thereupon for the purpose of identifications sign copies of the specifications and other documents mentioned in Rule 1. The security deposit will be recovered from the contractors running bills at the rate of 5% of the value of the work done commencing from the first running bill itself.
- 7 In the event of the tender being rejected, the earnest money forwarded with such unaccepted tenders shall thereupon be returned to respective bidders.
- 8 The officer inviting tender shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest tender.
- 9 The receipt of an accountant or a clerk for any money paid by the contractor will not be considered as an acknowledgement of payment to the Superintending Engineer, RFG / Engineer-in-charge and the contractor shall be responsible for seeing that he procures a receipt signed by the Accounts Officer or duly authorized Cashier of IGCAR, Kalpakkam.
- 10 The memorandum of the work tendered shall be filled and completed in the office of the engineer before the tender form is issued. If a form is issued to the tenderer without having been so filled in and completed, he shall request the office to have this done before he completes and delivers his tender.

The tenders shall sign declaration under the official's secret ACT 1923, for maintaining secrecy of the tender documents, drawings other records connected with the work given them. The unsuccessful tenders shall return all the drawings given to them.
- 11 Rates quoted by the contractor in Item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words, However, if discrepancy is found that the rate which correspond to the amount worked out by the contractor shall be taken as correct.
- 12 Incase of any tender where unit rate of any item / items appear unrealistic, such tender will be consider as unbalanced and incase the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.
- 13 Whether the rates quoted by the contractor in figures and in words tallies, the amount is not worked out correctly the rate quoted by the contractor shall be taken as correct and not the amount.
- 14 **In event no rate has been quoted for any item(s) then rate for such item(s) will be considered as zero.**
- 15 If it is found that the tender is not submitted in proper manner or contains too many corrections and/or absurd rates, or amount, it will be open for the Government to take suitable disciplinary action against the contractor.
- 16 The contractor shall give a list of both gazetted and non-gazetted IGCAR employees related to him.
17. The tender shall be valid for a minimum period of 120 days from the date of opening of technical bid.

18. The tender document including the drawings shall be signed by the tendered and returned along with his offer for this work.

ITEM RATE TENDER FOR WORKS

I/We have examined the notice inviting tender, technical specifications, drawings, form of agreement and general rules and direction for guidance of the contractor, special conditions of contractor, clauses of contract, schedule of quantities and other documents and rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution for the President of India of the work specified in the underwritten memorandum within the time specified in such memorandum at the rates specified therein, and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1, hereof and in Clause-11 of the conditions of contract and with such materials are provided for, by and in all respects in accordance with, such conditions so far as applicable.

MEMORANDUM

- | | |
|--------------------------|--|
| a. General description | : Maintenance Contract for Online Monitors of FBTR During 2023-2025 at IGCAR, Kalpakkam |
| b. Estimated cost | : Rs. 7.50 Lakhs |
| c. Earnest money | : Rs.15,000/- |
| d. Security deposit | : 2.5% of the tendered value of the work |
| e. Performance Guarantee | : 5% of the tendered value of the work |

The security deposit equal to 2.5% of the contract value will be collected by deductions from the running bills of the contractor at the rate of 5% of the gross amount of the bill. The security deposit will be accepted in the form of Government securities or Fixed Deposit Receipt of Schedule Banks or State Bank of India. The performance guarantee equal to 3% (three percent) of the contract value is required to be deposited within 15 days from the date of LOI, in the form of fixed deposit receipts or Guarantee bonds of any Scheduled Bank or State Bank of India.

The security Deposit / performance guarantee shall be endorsed in favour of the Pay and Accounts Officer, IGCAR, Kalpakkam – 603 102.

- a. Time allowed for the work : **Initially for a period of 24 Months. Extendable for further period of One year or part thereof on mutual consent.**

Should this tender be accepted in whole or in part, I/We hereby agree:

i) to execute all the work referred in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered up to a maximum of percentage mentioned, at the rates quoted in the tender document and those in excess of the limit at the rates to be determined in accordance with the provisions contains in clause 12.2 & 12.3 of the Tender form.

Further, I/We agree that in case of forfeiture of both Earnest money (If deposited) & Performance guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

DECLARATION

I/We, hereby declare that I/We shall treat the tender documents, drawings and other records connected with the work as Secret/Confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the state.

Dated the day of 2023

TENDERER (S) *SIGNATURE

+ Witness

Address

.....

.....

.....

Occupation.....

ACCEPTANCE

The above tender is hereby accepted by me for and on behalf of the President of India.

Dated the day of 2023

@SIGNATURE

* Signature of contractor before submission of tender

+ Signature of witness to contractor’s signature

@ Signature of the Officer who accepted

ADDITIONAL RULES AND DIRECTIONS FOR THE GUIDANCE OF TENDERERS

- 1) The tender shall be valid for a minimum period of 120 (one hundred and twenty) days from the date of opening of financial bid.
- 2) The tender document including the drawings shall be signed by the tendered and returned along with his offer for this work.

SECTION-III

SPECIAL CONDITIONS OF CONTRACT

1. LOCATION OF SITE

The Indira Gandhi Centre for Atomic Research (IGCAR) is located on East Coast Road at Kalpakkam about 80 km away from Chennai in Tamil Nadu.

2. SCOPE OF THE CONTRACTOR

All the works shall be carried out in accordance to the technical specification mentioned in the tender with good scientific practice and quality.

All tools & tackles and labour required for completion of the work is in the scope of the contractor.

The contractor shall make his own arrangements for boarding, lodging and transport of his labour from and to the site.

The contractor shall make arrangements for taking comprehensive insurance for his workmen and submit a copy to dept. for verification.

Upkeep of the area after completion of work and removal/disposal of debris are in the scope of the contractor.

3. SPECIFICATION

The work shall conform to the contract specifications enclosed.

4. PROGRESS AND COMPLETION:

The entire work shall be completed within the period as specified in the Tender schedule elsewhere including monsoon period from fifteenth day after the date on which the written order to commence the work is issued.

a) The contractor shall furnish sufficient forces and shall work such hours, including night shifts and overtime operations, as may be necessary to ensure the progress of the work in accordance with the schedule and its completion within the time specified in this contract. If in the opinion of the Engineer, the contractor refuses or fails to comply with his obligations set forth in the preceding sentence, the contractor shall take such steps as may be necessary to improve this progress and the Engineer may require him to increase the number of shifts and/or overtime operations, days of work, size of forces. All such action taken by the contractor pursuant to the direction of the Engineer shall be without additional cost to the department.

Failure of the contractor to meet his obligations set-forth in the paragraph above, under this provision shall be ground for determination by the Engineer that the contractor is not progress the work with such diligence as will ensure completion within the time specified. Upon such determination the Engineer shall take necessary steps to increase the labour forces as he deems fit to ensure completion of works in accordance with the schedule at the contractor's expense.

b) It shall be the responsibility of the contractor to mark the actual progress of the works in progress report from at the end of every two weeks, and the calculated progress for the job as a whole, and shall submit three copies to the Engineer.

The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be deemed to be of the essence of the contract

on the part of the contractor and shall be reckoned from the fifteenth day of the date on which the work order to commence the work is issued to the contractor and all work shall be completed in accordance with the schedule attached to the specifications. Monsoon or inclement weather will not be considered reason for extension of time. The contractor shall submit a time schedule keeping the phasing of the work generally in line with the schedule for the approval of the Engineer and such an approved programme shall be strictly adhered to by the contractor.

6. **SEQUENCE OF WORK:**

The contractor shall execute the finishing work as per the sequence given by the Engineer from time to time. It shall be the contractor's responsibility to transport all equipment and materials to the job site at his own expenses.

7. **CO-OPERATION WITH OTHER CONTRACTORS:**

The contractor shall afford all facilities and give complete co-operation for the execution of various other works, if required to be carried out simultaneously by other agencies while his own work is in progress. The co-ordination will be effected in consultation with the Engineer-in-charge of the work. Other contractors are also likely to be authorized by the owners to work in the same area during the work such as (i) Electrical (ii) Instrumentation (iii) Fabrication shop and (iv) Industrial Safety and other miscellaneous works.

8. **INSPECTION**

The work shall be conducted under the general discretion of the Engineer and is subject to inspection by his appointed Inspectors to ensure strict compliance with the terms of the contract. No failure of the Engineer or his designated representative during the progress of the work to discover or to reject materials or work not in accordance with the requirement of this contract shall be deemed an acceptance thereof, or a waiver of defects therein, and no payment by the Engineer, or partial/entire occupancy of the premises, shall be construed to be an acceptance of work or materials which are not strictly in accordance with the requirement of this contract. No change whatsoever to any provision of the specifications shall be made without written authorization from the Engineer.

9. **WITHDRAWAL OF TENDER**

If any tenderer withdraws his tender within the validity period or makes any modification in the terms and conditions of the tender which are not acceptable to the Department, then the Government shall without prejudice to any other right or remedy be at liberty, to forfeit 50% (fifty percent) of this earnest money absolutely. Further the tenderer shall not be allowed to participate in the re-tendering process of the works.

10. **MODE OF MEASUREMENT:**

Mode of measurement when not specified in the tender shall be in accordance with the relevant Indian Standard specifications and where not spelt out in I.S.S., the Engineer's decision shall be final and binding on the contractor.

11. **SCHEDULE OF QUANTITIES:**

The schedule of quantities is to be read in conjunction with these special conditions, general conditions of contract, specifications and materials to be supplied by the Department.

The quantities stated are to be considered approximate only and the unit prices entered in the schedule of quantities shall apply to the actual quantities in the completed work, up to a Deviation of as specified elsewhere in the contract value of the work.

Each tender should contain not only the rates but also the value of each item of work entered in a separate column and all the items should be totalled up in order to show the aggregate value of the entire tender. All corrections in the tender schedule shall be duly attested by the dated initials of the tenderer. Corrections which are not attested may entail the rejection of the tender. The tender document should be signed and returned without detaching any part of the document.

12. SCHEDULE OF RATES:

Rates quoted shall include labour, tools, transport, taxes, duties, octroi levies, general risks of liabilities and all that is necessary for the satisfactory completion of the job, other than services and materials supplied free by the Government. The rates quoted by the tenderer in the schedule shall be inclusive of GST. Unless otherwise stated in the schedule of quantities rates for all items shall be for the complete work including supplying and fixing of all materials etc. The contractor when called for by the department should furnish detailed analysis in support of the rates quoted by him against each item of the tender. The Department reserves the right to utilize the analysis thus supplied in settling any deviations or claims arising on this contract. The rates shall be firm and shall not subject to the exchange variations, labour conditions or any conditions whatsoever other than what is provided in the contract.

13. PLAN OF OPERATION & CO-OPERATION:

The contractor for work under the contract shall be required to co-ordinate his work with that of other contractors performing works at the site and also in the same area. So far as practicable all contractor shall have equal rights to use the facilities made available for the joint use of the contractors. In case of disagreement regarding such use, the decision of the Engineer shall govern.

The contractor shall afford all facilities and give complete co-operation for the execution of various other works, if required to be carried out simultaneously by other agencies while his own work is in progress. The co-ordination will be effected in consultation with the Engineer-in-Charge of the work. Other contractors are also likely to be authorized by the owners to work in the same area during the work such as (i) Electrical (ii) Instrumentation (iii) Fabrication Shop and (iv) Industrial Safety and other miscellaneous works.

14. TRAFFIC INTERFERENCE: - NA -

15. GOVERNMENT LABOUR LAWS:

The contractor has to follow strictly the Government labour acts which are in force at present and all necessary facilities and arrangements for labour will have to be made by the contractor.

16. EARNEST MONEY DEPOSIT:

The bidder to deposit a total amount of **Rs. 15,000/-** towards Earnest Money (EMD) in the form of Demand Draft/ Banker's Cheque /Deposit at Call Receipt issued by a

Scheduled bank, in favour of **PAY AND ACCOUNTS OFFICER, IGCAR, Kalpakkam** payable at Kalpakkam.

17. **SECURITY DEPOSIT:**

A sum @ 5% of the gross amount of the bill shall be deducted from each running bill of the contractor till sum will amount to security deposit of 2.5% of the tendered 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 letter of award issued to him. However, security deposit may be released against bank guarantee issued by a scheduled bank of its accumulation to a minimum amount of Rs.5 lakhs subject to the condition that amount of any bank guarantee except last one, shall not be less than Rs.5 lakhs.

18. **SUB CONTRACTORS:**

The contractor shall within fifteen days, after the date of award of this contract notify the Engineer in writing of the names of all subcontractors proposed for the work and the extent and character of the work to be done by each. If, for sufficient reason, at any time during the progress of the work, the Engineer determines that any sub-contractor is incompetent or undesirable, who will notify the contractor accordingly and the contractor shall take steps immediately to cancel such sub-contract. Subletting by contractors shall be subject to the same regulations. Nothing contained in this contract shall create any contractual relations between any subcontractor and the department.

19. **ACCOMMODATION:**

The Engineer will not provide any quarters for the accommodation of contractor's personnel. No land will be made available within the project area for the staff and labour quarters for the contractor. The contractors have to make his own arrangement for leasing suitable land for housing his personnel and the cost on this account should be included in his rate structures. The contractor shall make his own arrangements at his cost for water supply, sanitation, access roads, electrification and general cleanliness of his camps, as required by labour laws in force. All arrangements regarding sanitation, water supply, electric supply and cleanliness shall be tidy and workman like and shall be not approved by the Engineer prior to the construction of the camps, warehouse, shed, shop and office facilities as required by the contractor shall be provided by him at his own expenses, and shall be approved by the Engineer.

After the work is over, all these temporary facilities shall be removed by the contractor at his own expense to the satisfaction of the Engineer, within 30 days from the date of completion of work.

20. **TEMPORARY BUILDINGS: - NA-**

21. **STORAGE:**

All materials shall be stored as to prevent deterioration or contamination by foreign matters and to ensure the preservation of their quality and fitness for the work. If

the storage arrangement is not to the Engineer's satisfaction, the Engineer may direct the contractor to make such arrangements as he considers necessary and in the event of non-compliance, he would reserve the right to make proper arrangements departmentally or through other agencies at contractor's cost. All materials shall be stored in adequate quantities well in advance to meet the schedule.

22. SECURITY RULES:

The contractors may please note that the identify cards shall have the photos of the personnel concerned for control of entry of personnel and all similar matters. The contractor and his personnel shall abide by all security measures imposed by the Engineer or his duly authorized representative from time to time. In view of the security requirements, all the employees of the contractor shall obtain Police Verification Certificate (PVC) for entry into IGCAR premises to complete the security formalities.

23. EMPLOYEES:

It is to be ensured that all the employee and workers employed by the contractor and also by the sub-contractor are law abiding citizens, with clean record. Anti-social elements rowdies and persons with adverse police records should not be employed as far as possible on the works at Kalpakkam.

It is to be ensured by the contractor that the correct personnel particulars and addresses of the employees and workers employed by the contractor and sub-contractors are available with them.

24. EMERGENCY PREPAREDNESS:

It may be noted that the Government as a part of the emergency preparedness for any eventual site emergency civil defense which would require the entire or part of the contractor's personnel and labour to be evacuated from the site without any advance notice as and when deemed necessary. This may result in temporary stoppages of work with possible loss of time and productivity not likely to exceed 1 day. This aspect shall be taken into account while quoting their rates and the department will not entertain any claim/compensation on this account. However, the department may grant suitable extension of time only.

25. DEDUCTION OF INCOME TAX:

As per Section 194 (C) of Income Tax Act, as amended by letter No. 275/9£, 72/9- TJ (Circular No.86) dated 19-5-1972 received from Ministry of Finance (Department of Revenue and Insurance), New Delhi, the Income Tax @ 2% (two percent only) and 2.5% (Two point five percent only) surcharge and 2% education cess on IT and surcharge on income tax as applicable on the gross value of the work done will be recovered from the bills. A certificate for the amount so recovered will be issued by the Department to the contractor.

26. DEPARTMENT NOT LIABLE FOR DAMAGES TO PLANT:

a. The Department shall not at any time be liable for the loss of or injury to any of the said work and temporary work of materials.

b. If any plant or equipment or machinery purchased out of advances taken from the Department, equipment or machinery shall have to be issue by the contractor at least to the extent of such advance and pledged in the name of the Department until all such advances shall have been paid to the Department.

27. **URGENT REPAIRS:**

If by reason of any accident or failure or other event occurring to, in connection with the works or any part thereof either during the period of maintenance any remedial or other work on repair shall in the opinion of the Engineer-in-Charge be urgently necessary for security and the contractor is unable or unwilling, Engineer-in-charge at once to do his own or other workmen to such work or repair as may consider necessary. If the work or repair so done is work which in the opinion of the Engineer-in-charge, the contractor was liable to do at his own expenses under the contract, all the costs and charge properly incurred by the Engineer-in-charge in doing so, shall on demand, be paid by contractor or may be deducted from any moneys due to which may become due to the Contractor provided always that the Engineer-in-charge shall be soon after the occurrence of any such emergency as may be reasonably practicable notify the contractor thereof in writing.

28. **GOVERNMENT LABOUR ACTS/LAWS:**

The contractor has to follow strictly the Government Labour Acts, which are in force at present and introduced from time to time, such as, Acts enforced by Regional Provident Fund Commissioner. Directorate of ESIS and Enforcement Officer of Contract Labour Act, and all necessary arrangement for labour, security insurance will have to be made by the Contactor at his own cost.

SECTION – IV
GENERAL CONDITIONS OF CONTRACT

DEFINITIONS

1. The '**Contract**' means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of the President of India and the Contractor, together with the documents referred to therein including these conditions, the specifications and instructions, issued from time to time by the Engineer-in-charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
2. In the contract, the following expressions shall, unless the context otherwise requires have the meanings, hereby respectively assigned to them:
 - i) The expression '**works or work**' shall, unless there be something either in the subject or context repugnant to such construction be construed and taken to mean the works by or by virtue of the contract, contracted to be executed whether temporary or permanent and whether original, altered, substituted or additional.
 - ii) The '**Site**' shall mean the land/or other places on, into or through which work is to be executed/under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
 - iii) The '**Contractor**' shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of 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 firm or company.
 - iv) The '**President**' means the President of India and his successors.
 - v) The '**Engineer-in-Charge**' means the Engineer Officer, who shall supervise and be in charge of the work and who shall sign the contract on behalf of the President of India as mentioned in "Schedule-F" hereunder.
 - vi) '**Government**' or '**Government of India**' shall mean the President of India.
 - vii) The term S.E represents Superintending Engineer of the Reactor Facilities Group, Indira Gandhi Centre for Atomic Research, Kalpakkam.
 - viii) **Market Rate** shall be the rate as decided by the Engineer-in-Charge on the basis of the cost of material and labour at site where the work is to be executed plus the percentage mentioned in Schedule-F, to cover all overhead and profits.
 - ix) '**Contract Price**' means the sum named in the Tender subject to such additions there to or deductions there from as may be made under the provisions herein before contained.
 - x) '**Temporary work**' means all temporary works of every kind required in or about the execution, completion and maintenance of the works.
 - xi) Words imparting the singular number includes the plural number and vice versa according to the context.
 - xii) Accepting Authority shall mean the authority mentioned in Schedule "**F**".

- xiii) **Excepted Risks** are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Government, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by Government of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to Government's faulty design of works.
- xiv) **Schedule(s)** referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard Schedule of Rates of the government mentioned in the Schedule-F hereunder, with the amendments thereto issued up to the date of receipt of the tender.
- xv) **Department** means CPWD or any department of Government of India, which invites tenders on behalf of President of India as specified in Schedule-F.
- xvi) **District specification** means the specifications followed by the state Government in the area where the work is to be executed.
- xvii) **Tendered value** means the value of the entire work as stipulated in the letter of award

Scope and Performance

3. Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender wherever required include feminine gender and vice versa.
4. Headings and Marginal notes to these General conditions of Contract shall not be deemed to part thereof or be taken into consideration in the interpretation or construction thereof of the contract.
5. The contractor shall be furnished, free of cost one certified copy of the contract documents, except standard specification, Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.

Works to be carried out

6. The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of works. The descriptions given in Schedule Quantities (Schedule-A) shall unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognised principles.

Sufficiency of Tender

7. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise

provided, cover all obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works.

Discrepancies and Adjustment of Errors

8. The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.

8.1 In the case of discrepancy between the schedule of Quantities, the specifications and/or the Drawings, the following order of preference shall be observed.

- i. Description of Schedule of Quantities.
- ii. Particular Specification and Special conditions, if any.
- iii. Drawings.
- iv. Specifications and Standards referred to in the Tender.
- v. C.P.W.D Specifications.
- vi. Indian Standard Specifications of BIS.

8.2 If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.

8.3 Any error in description, quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of his obligations under the contract.

Signing of Contract

9. The successful tenderer/contractor, on acceptance of his tender by Accepting authority, shall, within 30 days from the stipulated date of start of the work, sign the contract consisting of :-

- a) The notice inviting tender, all the documents including additional conditions, specifications and drawings, if any forming part of the tender as issued at the time of invitations of tender and acceptance thereof together with any correspondence leading thereto like, technical clarifications, minutes of meeting of discussions and /or price negotiation, minutes of meeting, etc having bearing on the execution of the contract.
- b) Agreement format as prevalent in IGCAR/GSO and CPWD form as mentioned in Schedule –F consisting of:
 - i) Various standard clauses with corrections upto the date stipulated in Schedule –F along with annexures thereto.
 - ii) CPWD Safety code and Atomic Energy Regulatory Board Safety Code
 - iii) Model Rules for the protection of health, sanitary arrangements for workers employed by CPWD/Department or its contractors.
 - iv) CPWD Contractor’s Labour Regulations.
 - v) List of acts and omissions for which fines can be imposed.
- c) No payment for the work done will be made unless contract is signed by the contractor.

CLAUSES OF CONTRACT

CLAUSE 1: PERFORMANCE GUARANTEE

- i) The contractor shall submit an irrevocable PERFORMANCE GUARANTEE of 3% (Three percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and / or without prejudice to any other provisions in the contract) within the period specified in Schedule-F from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-charge upto a maximum period as specified in Schedule-F on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-charge. This guarantee shall be in the form of Cash (in case guarantee amount is less than Rs.10,000/-) or Deposit at Call receipt from State Bank of India (SBI), Kalpakkam or Canara Bank (CB), Kalpakkam /Banker's Cheque from the above banks / Demand Draft from the above banks / Pay order of the above banks payable at Kalpakkam (in case guarantee amount is less than Rs.1,00,000) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed as **Appendix-'A'** hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government as part of the performance guarantee and the Bank 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 Government to make good the deficit.
- ii) **In case of failure by the contractor to furnish the performance guarantee within the specified period indicated in Schedule-F, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money absolutely.**
- iii) The Performance Guarantee shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged 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.
- iv) The Engineer-in-charge shall not make a claim under the performance guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
 - a. Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-charge may claim the full amount of the Performance Guarantee.
 - b. Failure by the contractor to pay President of India any amount due, either as agreed by the contractor or determined under any of the Clauses/conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.

- v) In the event of the contract being determined or rescinded under provisions of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the President of India.

APPENDIX-'A'

FORM OF PERFORMANCE SECURITY BANK GUARANTEE BOND

In consideration of the President of India represented by Director, Indira Gandhi center for Atomic Research (hereinafter called a "the Government") having agreed to exempt at address..... (hereinafter called "the said contractor") from the demand, under the terms and conditions of an Agreement No. ... DT. made between the Government and the said Contractor(s) for the work at Reactor Facilities Group, IGCAR, Kalpakkam - 603 102 (hereinafter called "the said Agreement") of security deposit for the due fulfillment by the said contractor(s) of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs. _____/- (Rupees _____).

1. We the..... (hereinafter referred to as "the Bank") at the request of the said contractor(s) do hereby undertake to pay to the Government an amount not exceeding Rs. _____/- (Rupees _____). on demand by Government.

2. We, the (name of bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor(s). 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. _____/- (Rupees _____).

3. We undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

4. The payment so made us as under this bond shall be valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.

5. We, the(name of bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Agreement have been fully paid and its claim satisfied or discharged or till Engineer-in charge on behalf of the Government certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

6. We, the(name of bank) further, agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to the extend time of performance by the said contractor(s) from time to time or to postpone for anytime or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the Government or any indulgence by the

Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
7. This Guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).

8. We, the(name of bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.

9. "This Guarantee shall be valid up to(date) unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs. _____/- (Rupees _____).and unless a claim in writing is lodged with us within Six months of the date of expiry or the extended date of expiry of this Guarantee, all our liabilities under this Guarantee shall stand discharged."

Dated theday of..... 2014 for the(name of bank)

NOTE: The claim period of all bank guarantees shall be for a period of six months from the expiry date.

Clause - 1 A – Recovery of Security Deposit:

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit Government at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 5% of the gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. Such deductions will be made and held by Government by way of Security Deposit unless he/they has/have deposited the amount of Security at the rate mentioned above in cash or in the form of Government Securities or fixed deposit receipts. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government as part of the security deposit and the Bank 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 Government to make good the deficit.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from interest arising therefrom, or from any sums which may be due to or may become due to the contractor by Government on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in cash or fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks or Government Securities (if deposited for more than 12 months) endorsed in favour of the Engineer –in-Charge, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the Earnest Money if deposited in cash at the time of tenders will be treated a part of the Security Deposit.

The security deposit as deducted above can be released against bank guarantee issued by a scheduled bank, on its accumulation to a minimum of Rs. 5 lakh subject to the condition that amount of such bank guarantee, except last one, shall not be less than Rs. 5 lakh.

NOTE-1: Government papers tendered as security will be taken at 5% (five percent) below its market price or at its face value, whichever is less. The market price of Government paper would be ascertained by the Divisional Officer at the time of collection of interest and the amount of interest to the extent of deficiency in value of the Government paper will be withheld if necessary.

NOTE-2: Government Securities will include all forms of Securities mentioned in rule No.274 of the G.F. Rules except fidelity bond. This will be subject to the observance of the condition mentioned under the rule against each form of security.

NOTE 3: Note 1&2 above shall be applicable for both Clause 1& 1A.

CLAUSE 2: COMPENSATION FOR DELAY

If the contractor fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the authority specified in Schedule-F (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day/ month (as applicable) that the progress remains below that specified in Clause 5 or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified.

Compensation @ 1.5% per month of delay to be computed on per day basis for delay of work

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the tendered value of work or of the Tendered Value of the item or group of items of work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the contractor under this or any other contract with the Government. In case, the contractor does not achieve a particular milestone mentioned in Schedule-F, or the rescheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be with-held, to be adjusted against the compensation levied at the final grant of Extension of Time. With-holding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the with-held amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be with-held. However, no interest, whatsoever, shall be payable on such with-held amount.

CLAUSE 2A – INCENTIVE FOR EARLY COMPLETION= - DELETED

CLAUSE 3: DETERMINATION OF CONTRACT: POWERS OF ENGINEERS-IN-CHARGE:

Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date for completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i) If the Contractor having been given by the 'Engineer' a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in any inefficient or otherwise improper or un-workman like manner shall omit to comply with the requirements of such notice for a period of seven days thereafter,
- ii) If the Contractor has, without reasonable cause, suspend the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the 'Engineer' (which shall be final and binding) he will be unable to secure completion

- of the work by the date of completion and he continues to do so after a notice in writing or seven days from the Engineer in charge.
- iii) if the Contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge.
 - iv) If the contractor persistently neglects to carry out his obligations under the contract and/or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
 - v) If the contractor shall offer or give or agree to give to any person in Government service or to any other person on his behalf any gift or consideration or any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to any act in relation to the obtaining or execution of this or any other contract for Government.
 - vi) If the contractor shall enter into contract with government in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and terms of payment thereof have been previously disclosed in writing to the Engineer-in-Charge.
 - vii) If the contractor shall obtain a contract with Government as a result of wrong tendering or other non-bonafide methods of competitive tendering
 - viii) If the contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.
 - ix) 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 creditor shall be appointed or if circumstances shall arise which entitle the Court or creditor to appoint a receiver or a manager or which entitle the Court to make a winding up order.
 - x) If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
 - xi) If the contractor assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer-in-Charge.
 - xii) If the work is not started by the contractor within 1/8th of the stipulated time.

When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of President of India shall have powers:

- (a) To determine the contract as aforesaid (of which termination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government.
- (b) After giving notice to the contractor to measure up the work of the Contractor and to take such whole, or the balance or part thereof as shall be unexecuted out of his hands and to give it to another contractor to complete the work. The Contractor, whose contract is determined or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above courses being adopted by the Engineer-in-Charge, the Contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advance on account or with a view to the execution of the work or the performance of 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 thereto for actually performed under this contract unless and until the Engineer-in-Charge has 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.

CLAUSE 3A: WORK CANNOT BE STARTED EITHER PARTY MAY CLOSE THE CONTRACT

In case, the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work, either party may close the contract. In such eventually, the Earnest Money Deposit and the Performance Guarantee of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

CLAUSE 4: CONTRACTOR LIABLE TO PAY COMPENSATION EVEN IF ACTION NOT TAKEN UNDER CLAUSE- 3.

In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause 3 hereof, shall have become exercisable and the same shall not be exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the Contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the proceeding Clause, he may, if he so desires, after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plants, materials and stores, in or upon the works, or the site thereof, belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work or any part thereof, paying or allowing for the same in account at the contract rates or in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the Contractor, clerk of the works, foreman or other authorised to remove such tools, plants, materials or stores from the premises (within a time specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and at his risk in all

respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

CLAUSE 4A : CLAIM FOR IDLE LABOUR - DELETED

CLAUSE 5: TIME AND EXTENSION FOR DELAY OF WORK

The time allowed for execution of the works or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in Schedule-F or from the date of handing over of the site whichever is later. If the contractor commits default in commencing the execution of the work as aforesaid, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the Earnest money & Performance guarantee absolutely.

5.1 As soon as possible after the Contract is concluded the Contractor shall submit a time and Progress Chart for each mile stone and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of section of the work and may be amended as necessary by agreement between the Engineer-in-charge and the contractor within the limitations time imposed in the contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) **complete the work.**

5.2 If the work(s) be delayed by:-

- a. Force majeure, or
- b. Abnormally bad weather, or
- c. Serious loss or damage by fire, or
- d. Civil commotion, local commotion or workmen, strike or lockout, affecting any of the trades employed on the work, or
- e. Delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the contract, or
- f. Non availability of stores, which are the responsibility of Government to supply or
- g. Non availability or break down of tools and Plant to be supplied or supplied by the Government, or
- h. Any other cause which, in the absolute discretion of the authority mentioned in Schedule-F is beyond the Contractor's control.

then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in Charge to proceed with the works.

5.3 Request for rescheduling of Mile stones and extension of time, to be eligible for consideration shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

5.4 In any such case the Engineer in Charge may give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension shall be communicated to the Contractor by the Engineer-in-charge in writing, within 3 months of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-charge and this shall be binding on the contractor.

CLAUSE 6: MEASUREMENTS OF WORK DONE

Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement the value in accordance with the contract work done.

All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the contract.

All measurements and levels shall be taken jointly by the Engineer-in-charge or his authorised representative and by the contractor or his authorised representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer-in-Charge and the Contractor or their representatives in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

If for any reason the contractor or his authorised representative is not available and if the work of recording measurements is suspended by the Engineer-In-Charge or his representative, the Engineer-in-charge and the Department shall not entertain any claim from the contractor for any loss or damages on this account. If the contractor or his authorised representative does not remain present at the time of such measurements after the contractor or his authorised representative has been given notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Contractor.

The Contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available, then a mutually agreed method shall be followed.

The Contractor shall give, not less than seven days' notice to the Engineer-in-Charge or his authorised representative in-charge of the work, 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 covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorised representative in charge of the work who 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 measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing the same shall be uncovered at the Contactor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer-in-Charge or his authorised representative may cause either themselves or through another officer of the department to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated therein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

CLAUSE 6A: COMPUTERISED MEASUREMENT BOOK

Engineer-in-Charge shall, except as otherwise provided, ascertain and determine measurement the value of work done in accordance with the contract.

All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the department so that a complete record is obtained of all the items of works performed under the contract.

All such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Engineer-in-Charge or his authorized representative as per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Engineer-in-Charge, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer-in-Charge for dated signatures by the Engineer-in-Charge and the contractor or the representatives in token of their acceptance.

Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/test checked from the Engineer-in-Charge and/or his authorized representative. The contractor will, thereafter incorporate such changes as may be done during these checks/test checks in his draft computerized book, duly bound, and with its page's machine numbered. The Engineer-in-Charge and/or his authorized representative would thereafter check this MB, and record the necessary certificates for their checks/test checks.

The final, fair, computerized measurement book given by the contractor, duly bound, with its page's machine numbered, should be 100% correct, and no cutting or overwriting in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound, after getting the earlier MB cancelled by department. Thereafter, the MB shall be taken in the Divisional Office records, and allotted a number as per the register of computerised MBs. This should be done before the corresponding bill is submitted to Division Office for payment. The contractor shall submit two spare copies of such computerized MB's for the purpose of reference and record by the various officers of the department.

The contractor shall also submit to the department separately his computerized Abstract of Costs and the bill based on these measurements, duly bound, and its page's machine numbered along with two spare copies of the "bill". Thereafter, this bill will be processed by the Division Office and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Engineer-in-Charge or his representative.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specification notwithstanding any provision in the relevant Standard method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.

The Contractor shall give not less than seven days' notice to the Engineer-in-Charge or his authorised representative in-charge of the work before covering up or otherwise placing beyond the reach of checking and/or test checking the measurement of any work in order that the same may be checked and/or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of checking and/or test checking measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorised representative in charge of the work who 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 checking and/or test checking measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer-in-Charge or his authorised representative may cause either themselves or through another officer of the department to check the measurements recorded by contractor and all provisions stipulated therein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that checking and/or test checking the measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

CLAUSE 7: PAYMENT ON INTERMEDIATE CERTIFICATE TO BE REGARDED AS ADVANCES

No payments shall be made for work, estimated to cost Rupees Twenty thousand or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over than Rupees Twenty thousand, the interim or running account bills shall be submitted by the Contractor for the work executed on the basis of such recorded measurements on the format of the Department in triplicate on or before the date of every month fixed for the same by the Engineer-in-Charge. The Contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/adjustment of advances of material collected, if any, since the last such payment is less than the amount specified in Schedule-F, in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Engineer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of work. In the event of the failure of the contractor to submit the bills, Engineer-in-Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Engineer-in-Charge certifying the sum to which the contractor is considered entitled by way of interim payment as such rates as decided by the Engineer-in-Charge. The amount admissible shall be paid by 10th working day after the of presentation of the bill by the Contractor to Engineer-in-Charge or his Assistant Engineer together with the account

of the material issued by the department, or dismantled materials, if any. In the case of works outside the head quarters of the Engineer-in-Charge, the period of ten days will be extended to fifteen working days.

All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any way respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion interim payment shall continue to be made as herein provided, without prejudice to the right of the department to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

The Engineer-in-Charge in his sole discretion on the basis of a certificate from the Assistant Engineer to the effect that the work has been completed upto the level in question make interim advance payments without detailed measurements for work done (other than foundations, items to be covered under finishing items) up to lintel level (including sunshade, etc.) and slab level, for each floor working out at 75 % of the assessed value. The advance payments so allowed shall be adjusted in the subsequent interim bill by taking detailed measurements thereof.

CLAUSE 8 - COMPLETION CERTIFICATE AND COMPLETION PLANS

Within ten days of the completion of the work, the Contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge shall inspect the work and if there is no defect in the work, shall furnish the Contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor, 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, and not until the work shall have been measured by the Engineer-in-Charge. If the Contractor shall fail to comply with the requirements of this clauses as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of the work, the Engineer-in-Charge may at the expense of the Contractor remove such scaffolding, surplus materials and rubbish etc. and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the Contractor shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

CLAUSE 8 A: CONTRACTOR TO KEEP SITE CLEAN

When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all other items of work in the contract. In case the contract fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days notice in writing to the contractor.

CLAUSE 8 B: COMPLETION PLANS TO BE SUBMITTED BY THE CONTRACTOR

The contractor shall submit completion plan as required vide General Specifications for Electrical Works (Part I: Internal) 2005 and (Part II: External) 1994 as applicable within thirty days of completion of the work.

In case, the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay sum equivalent to 2.5% of the value of the work subject to a ceiling of Rs.15000 (Rupees Fifteen Thousand Only) as may be fixed by the Superintending Engineer concerned and in this respect the decision of the Superintending Engineer shall be final and binding on the contractor.

CLAUSE 9 PAYMENT OF FINAL BILL

The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and items of dispute, for quantities and rates as approved by the Engineer-in-Charge, will, as far as possible be made within the period specified hereunder, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorised Assistant Engineer, complete with account of materials issued by the Department and dismantled materials.

- i) If the tendered value of work is upto Rs. 15 lakhs: Three (3) Months
- ii) If the tendered value of work exceeds Rs. 15 lakhs Six (6) Months

CLAUSE 9A: PAYMENT OF CONTRACTOR'S BILLS TO BANKS

Payments due to the Contractor may, if so desired by him, be made to his bank, registered financial, cooperative or thrift societies or recognised financial institutions instead of direct to him provided that the Contractor furnishes to the Engineer-in-Charge (1) an authorisation in the form of a legally valid document such as power of attorney conferring authority on the bank; registered financial, cooperative or thrift societies or recognised financial institutions to receive payment and (2) his own acceptance of the correctness of the amount made out as being due to him by Government or his signature on the bill or other claim preferred against Government before settlement by the Engineer-in-Charge of the account or claim by payment to the bank, registered financial, cooperative or thrift societies or recognised financial institutions. While the receipt given by such banks; registered financial, cooperative or thrift societies or recognised financial institutions shall constitute a full and sufficient discharge for the payment, the Contractor shall, wherever possible present his bills duly receipted and discharged through his bank, registered financial, cooperative or thrift societies or recognised financial institutions.

Nothing herein contained shall operate to create in favour of the bank; registered financial, cooperative or thrift societies or recognised financial institutions any rights or equities vis-a-vis the President of India.

CLAUSE 10: MATERIALS SUPPLIED BY GOVERNMENT

Materials which Government will supply are shown in Schedule-B, which also stipulates quantum, place of issue and rate(s) to be charged in respect thereof. The Contractor shall be bound to procure them from the Engineer-in-Charge.

As soon as the work is awarded, the contractor shall finalise the programme for the completion of work as per Clause-5 of this contract and shall give his estimates of materials required on the basis of drawings/or schedule of quantities of work. The Contractor shall give in writing his requirement to the Engineer-in-Charge which shall be issued to him keeping in view the progress of work as assessed by the Engineer-in-Charge, in accordance with the agreed phased programme of work indicating monthly requirements of various materials. The contractor shall place his indent in writing for issue of such materials at least 7 days in advance of his requirement.

Such materials shall be supplied for the purpose of the contract only and the value of the materials so supplied at the rates specified in the aforesaid schedule shall be set off or deducted, as and when materials are consumed in items of work (including normal wastage) for which payment is being made to the contractor, from any sum then due or which therefore become due to the contractor under the contract or otherwise or from the security deposit. At the time of submission of bills, the contractor shall certify that the balance of materials supplied is available at site in original good condition.

The contractor shall submit along with every running bill (on account or interim bill) material wise reconciliation statements supported by complete calculations reconciling total issue, total consumption and certified balance (diameter/section wise in the case of steel) and resulting variations and reasons therefore. Engineer-in-Charge shall (whose decision shall be final and binding on the contractor) be within his rights to follow the procedure of recovery in Clause 42 at any stage of the work if reconciliation is not found to be satisfactory.

The contractor shall bear the cost of getting the material issued, loading, transporting to site, unloading, storing under cover as required, cutting assembling and joining the several parts together as necessary. Notwithstanding anything to the contrary contained in any other clause of the contract and (or the CPWA code) all stores/materials so supplied to the contractor or procured with the assistance of the Government shall remain the absolute property of the Government and the contractor shall be trustee of the stores/materials, and the said stores/materials shall not be removed/disposed off from the site of the work on any account and shall be at all times open to inspection by the Engineer-in-Charge or his authorised agent. Any such stores/materials remaining unused shall be returned to the Engineer-in-Charge in as good a condition in which they were originally supplied at a place directed by him, at a place of issue or any other place specified by him as he shall require, but in case it is decided not to take back the stores/materials the contractor shall have no claim for compensation on any account of such stores/materials so supplied to him as aforesaid and not used by him or for any wastage in or damage to in such stores/materials.

On being required to return the stores/materials, the contractor shall hand over the stores/materials on being paid or credited such price as the Engineer-in-Charge shall determine, having due regard to the condition of the stores/materials. The price allowed for credit to the contractor, however, shall be at the prevailing market rate not exceeding the amount charged to him, excluding the storage charge, if any. The decision of the Engineer-in-Charge shall be final conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to throwing himself open to account for contravention of the

terms of the licences or permit and/or for criminal breach of trust, be liable to Government for all advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach. Provided that the contractor shall in no case be entitled to any compensation or damages on account of any delay in supply or non-supply thereof all or any such materials and stores provided further that the contractor shall be bound to execute the entire work if the materials are supplied by the Government within the original scheduled time for completion of the work plus fifty percent thereof or schedule time plus six months whichever is more if the time of completion of work exceeds twelve (12) months but if a part of the materials only has been supplied within the aforesaid period then the contractor shall be bound to do so much of the work as may be possible with the materials and stores supplied in the aforesaid period. For the completion of the rest of the work, the contractor shall be entitled to such extension of time as may be determined by the Engineer-in-Charge whose decision in this regard shall be final and binding on the contractor.

The contractor shall see that only the required quantities of materials are got issued. Any such material remaining unused and in perfectly good/original condition at the time of completion or determination of the contract shall be returned to the Engineer-in-Charge at the stores from which it was issued or at a place directed by him by a notice in writing. The contractor shall not be entitled for loading, transporting, unloading and sacking or such unused material except for the extra lead, if any involved, beyond the original place of issue.

CLAUSE 10 A: MATERIALS TO BE PROVIDED BY THE CONTRACTOR

The contractor shall, at his own expense, provide all materials, required for the works other than those, which are stipulated, to be supplied by the Government.

The contractor shall, at his own expense and without delay, supply to the Engineer-in-Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within thirty days or supply of samples or within such further period as he may required intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval, fresh samples complying with the specifications laid down in the contract. When the materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analysed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer-in-Charge. The contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing materials.

The Contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may required for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Engineer-in-Charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in-Charge or his authorised representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials,

manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

The Engineer-in-Charge shall have full powers to required the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to required other proper materials to be substituted thereof and in case of default the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.

The contractor shall at his own expense, provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in Schedule-F.

CLAUSE 10 B:

I) SECURED ADVANCE ON NON PERISHABLE MATERIALS

The Contractor on signing an indenture in the form to be specified by the Engineer-in-charge, shall be entitled to be paid during the progress of the execution of the work up to 90% of assessed value of any materials which are in the opinion of the 'Engineer-in-Charge' non-perishable, non-fragile and non-combustible and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but 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 sub clause are incorporated in the work, the amount of such advance shall be recovered/deducted from the next payment made under any of the clause or clauses of this contract.

Such secured advance shall also be payable on other items of perishable nature, fragile and combustible with the approval of the Engineer-in-Charge provided the contractor provides a comprehensive insurance cover for the full cost of such materials. The decision of the Engineer-in-Charge shall be final and binding on the contractor in this matter. No secured advance, shall however, be paid on high-risk materials such as ordinary glass, sand, petrol, diesel, etc.

II) PLANT MACHINERY AND SHUTTERING MATERIALS ADVANCE

An advance for plant, machinery, shuttering materials required for the work and brought to site by the Contractor may be given if requested by the contractor in writing within one month of bringing such plant and machinery to site. Such advances shall be given on such plant and machinery, which in the opinion of the Engineer-in-charge will add to the expeditious execution of work and improve the quality of work. The amount of advance shall be restricted to 5 % of the tender value. In case of new plant and equipment to be purchased for the work, the advance shall be restricted to 90% of the price of such new plant and equipment paid by the contractor for which the contractor shall produce evidence satisfactory to the Engineer-in-charge. In the case of second hand and used plants and equipment, the amount of such advance shall be limited to 50% of the depreciated value of plant and equipment as may be decided by the Engineer-in-charge. The contractor shall, if so required by the Engineer-in-charge, submit the statement of value of such old plant and equipment duly approved by a registered Valuer recognized by the Central Board of Direct Taxes under the Income Tax Act, 1961. No such advance shall be paid on any plant and equipment of perishable nature and on any plant and equipment of a value less than Rs.50,000/-. Seventy-five percent of such amount of advance shall be paid after the plant &

equipment is brought to site and balance twentyfive per cent on successfully commissioning the same.

Leasing of equipment shall be considered at par with purchase of equipment and shall be covered by tripartite agreement with the following:

1. Leasing company which gives certificate of agreeing to lease equipment to the contractor.
2. Engineer in charge, and
3. The contractor

This advance shall further be subject to the condition that such plant and equipment (a) are considered by the Engineer-in-Charge to be necessary for the works; (b) and are in and are maintained in working order; (c) hypothecated to Government as specified by the Engineer-in-Charge before payment of advance is released. The contractor shall not be permitted to remove from the site such hypothecated plant and equipment without prior written permission of the Engineer-in-Charge. The contractor shall be responsible for maintaining such plant and equipment in good working order during the entire period of hypothecation failing which such advance shall be entirely recovered in lump sum. For this purpose, steel scaffolding and formwork shall be considered as plant and equipment.

The contractor shall insure the Plant and Machinery for which mobilisation advance is sought and given, for a sum sufficient to provide for their replacement at site. Any amounts not recovered from the insures will be borne by the contractor.

IV) INTEREST AND RECOVERY

The mobilisation advance and plant and machinery advance in (ii) and (iii) above bear simple interest at the rate of **10** percent per annum and shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount of such advance. Recovery of such sums advanced shall be made by the deduction from contractor's bills commencing after first ten percent of the gross value of work is executed and paid, on pro-rata percentage basis to the gross value of work billed beyond 10 percent in such a way that the entire advance is recovered by the time eighty percent of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount upto the date of recovery of the instalment.

V). If the circumstances are considered reasonable by the Engineer-in-Charge, the period mentioned in (II) and (III) for request by the contractor in writing for grant of mobilization advance and plant and equipment advance may be extended in the discretion of the Engineer-in-Charge.

VI) The said bank guarantee for advances shall initially be made for the full amount and valid for the contract period, and be kept renewed from time to time to cover the balance amount and likely period of complete recovery together with interest.

CLAUSE 10 C: DELETED

CLAUSE 10 CA: DELETED

CLAUSE 10CC:

PAYMENT DUE TO INCREASE/DECREASE IN PRICES/WAGES AFTER RECEIPT OF TENDER FOR WORKS

If the prices of materials (not being materials supplied or services rendered at fixed prices by the Department in accordance with Clauses 10 and 34 thereof) and/or wages of labour required for execution of the work increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contract shall accordingly be varied, subject to the condition that such compensation for escalation in prices shall be available only for the work done during the stipulated period of the contract including the justified period extended under the provisions of Clause-5 of the contract without any

action under Clause-2. However, for the work done during the justified period extended as above, the compensation as detailed below will be limited to prices/wages prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less. No such compensation shall be payable for a work for which the stipulated period of completion is equal to or less than the time specified in Schedule-F. 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 stipulated date of receipt of tender including extension, if any.
- ii) The cost of work on which the escalation will be payable shall be reckoned as below:
 - a) Gross value of work done up to this quarter A
 - b) Gross value of work done up to the last quarter B
 - c) Gross value of work done since previous quarter (A-B) C
 - d) Full assessed value of Secured Advance fresh paid in this quarter D
 - e) Full assessed value of Secured Advance recovered in this quarter E
 - f) Full assessed value of Secured Advance for which escalation is payable in this quarter (D-E) F
 - g) Advance payment made during this quarter G
 - h) Advance payment recovered this quarter H
 - i) Advance payment for which escalation is payable in this quarter (G-H) I
 - j) Extra items/deviated quantities paid as per Clause 12 based on prevailing market rates during this quarter: J

then

$$M = [C] + [F] + [I] - [J]$$

$$N = 0.85 M$$
 - k) Less cost of material supplied by the department as per Clause 10 and recovered during this quarter K
 - l) Less cost of services rendered at fixed charges as per Clause 34 and recovered during this quarter L

Cost of work for which escalation is applicable $W = N - (K+L)$

CLAUSE 10D: DISMANTLED MATERIAL GOVERNMENT PROPERTY

The Contractor shall treat all materials obtained during the dismantling of a structure, or excavation of the site for a work, etc. as Government's property and such materials shall be disposed off to the best advantage of Government according to the instructions in writing issued by the Engineer-in-Charge.

CLAUSE 11: WORK TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS DRAWINGS, ORDERS ETC.

The Contractor shall execute the whole and every part of the work in the most substantial and workman like manner and both as regards materials and otherwise in every respect in strict accordance with the specifications. The Contractor shall also confirm exactly, fully and faithfully to the design drawings and instruction in writing in respect of the work signed by the Engineer-in-Charge and the Contractor shall be furnished free of charge one copy of the contract documents together with specifications designs, drawings and instructions as are not included in standard specifications of Central Public Works Department specified in Schedule-F or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred elsewhere in the contract.

The contractor shall comply with the provisions of the contract and with care and diligence execute and maintain the works and provided all labour and materials, tools and plants including for measurement and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as

the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all works and methods of construction.

CLAUSE 12: DEVIATIONS/VARIATIONS EXTENT AND PRICING

The Engineer-in-Charge shall have power (i) to make any alterations in, omissions from, additions to, or substitutions for, the original specifications, drawings, designs, and instructions that may appear to him to be necessary or advisable during the progress of the work and (ii) to omit a part of works in case of non-availability of the portion of the site or for any other reasons and the Contractor shall be bound to carry out the work in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions, or substitutions shall form a part of the contract as if originally provided therein and any altered, additional or substituted work for which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the Contractor on the same conditions in all respect including price on which he agreed to do the main work except as hereafter provided.

12.1 The time for the completion of the work shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the contractor, as follows:

- (i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus
- (ii) 25 percent of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

12.2 DEVIATION, EXTRA ITEMS AND PRICING

In case of extra item(s) the contractor may within fifteen days of receipt of order or occurrence of the item (s) claim rates, supported by proper analysis, for the work and the Engineer-in-Charge shall within one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

DEVIATION, SUBSTITUTED ITEMS AND PRICING

In case of substituted items, the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the aforesaid para.

- a) If the market rate for the substituted items so determined is more than the market rate of the agreement item (to be substituted) the rate payable to the Contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of the substituted items and the agreement item (to be substituted).
- b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of the substituted item and agreement item (to be substituted).

DEVIATION, DEVIATED QUANTITIES, PRICING

In case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in the Schedule –F, the contractor may within fifteen days of receipt of the order or occurrence of the excess, claim revision of rates, supported by proper analysis, for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis ,after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

12.3 The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down Schedule-F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to market rates.

12.4 The contractor shall send to the Engineer-in-Charge once every three months an upto date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. However, the Superintending Engineer may authorize consideration of such claims on merits.

12.5 For the purpose of operation of Schedule-F the following works shall be treated as works relating to foundation:

- i) For buildings, compound walls plinth level or 1.2 meters (4 feet) above ground level whichever is lower excluding items of flooring and D.P.C but including base concrete below the floors.
- ii) For abutments, piers, retaining walls of culverts and bridges, walls of water reservoirs the bed of floor level.
- iii) For retaining walls where floor level is not determinate 1.2 metres above the average ground level or bed level.
- iv) For Roads all items of excavation and filling including treatment of sub-base.

12.6 Any operation incidental to or necessarily has to be in contemplation of tenderer while filling tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

CLAUSE 13: FORECLOSURE OF CONTRACT DUE TO ABANDONMENT OR REDUCTION IN SCOPE OF WORK

If at any time after acceptance of the tender, Government shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-charge shall give notice in writing

to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates full amount for works executed at site and, in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure:

- i) Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office, storage accommodation and water storage tanks.
- ii) Government shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however, Government shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain. For materials taken over or to be taken over by Government cost of such materials as detailed by Engineer-in-Charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.
- iii) If any materials supplied by Government are rendered surplus, the same except normal wastage shall be returned by the contractor to Government at rates not exceeding those at which these were originally issued less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractor. In addition, cost of transporting such materials from site to Government stores, if so required by Government, shall be paid.
- iv) Reasonable compensation for transfer of T&P from site to contractor's permanent stores or to his other works, whichever is less. If T&P are not transported to either of the said places, no cost of transportation shall be payable.
- v) Reasonable compensation for repatriation of contractor's site staff and imported labour to the extent necessary.

The contractor shall, if required by the Engineer-in-Charge furnish to him books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition.

The reasonable amount of items on (i), (iv) and (v) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, ie. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of contractor's materials at site taken over by the Government as per item (ii) above. 'Provided always that against any payments due to the contractor on this account or otherwise, the Engineer-in-Charge shall be entitled to recover or be credited with any outstanding balances due from the contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the Government from the contractor under the terms of the contract.

CLAUSE 14: CANCELLATION OF CONTRACT IN FULL OR PART (*Deleted- Merged with Clause-3*)

CLAUSE 15: SUSPENSION OF WORK

- i) The contractor shall, on receipt of the order in writing of the Engineer-in-Charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons.
- a) on account of any default on the part of the contractor or;
 - b) for proper execution of the works or part thereof for reasons other than the default of the contractor, or
 - c) for safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.

- ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:
- a) the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and;
 - b) If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the Engineer-in-Charge may consider reasonable in respect of salaries and / or wages paid by the contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within fifteen days of the expiry of the period of 30 days.
- iii) If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason (a) in sub-para (i) above, the contractor may after receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer-in-Charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by Government or where it affects whole of the works, as an abandonment of the works by Government, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in-Charge. In the event of the contractor treating the suspension as an abandonment of the contract by Government, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer-in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover

indirect expenses of the contractor provided the contractor submits his claim support by details to the Engineer-in-Charge within 30 days of the expiry of the period of 3 months.

Provided, further, that the contractor shall not be entitled to claim any compensation from Government for the loss suffered by him on account of delay by Government in the supply of materials in schedule 'B' where such delay is covered by difficulties relating to the supply of wagons, force majeure including non-allotment of such materials by controlling authorities, acts of God, acts of enemies of the state/ country or any reasonable cause beyond the control of the Government.

CLAUSE 16: ACTION IN CASE WORK NOT DONE AS PER SPECIFICATIONS

All works under or in course of execution or executed in pursuance of the contract shall at all times be open and accessible to the inspection and supervision of the Engineer-in-Charge, his authorised subordinates in charge of the work and all the superior officers, officer of the Quality Assurance unit of Department or any organisation engaged by the Department for Quality Assurance and of the Chief Technical Examiner's Office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-Charge or his authorised subordinates in-charge of the work or to the Chief Engineer-in-Charge of Quality Assurance or his subordinate officers or the officers of the organization engaged by the Department for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract the contractor shall, on demand in writing which shall be made within twelve months (six months of the completion of the work costing Rs.10 lakh and below except road work) of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles 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 require 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 charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in is demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.

In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the authority specified in Schedule- F may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/ or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

CLAUSE 17: CONTRACTOR LIABLE FOR DAMAGES, DEFECTS DURING MAINTENANCE PERIOD

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence enclosure, water pipe, cables, drains, electric or telephone post or wires, trees grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after a certificate final or otherwise of its completion shall have been given by the Engineer-in-Charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after the issue of the certificate final or otherwise, of completion or work, or till the final bill has been prepared and passed whichever is later. Provided that in the case of road work if in the opinion of the Engineer-in-Charge, half of the security deposit is sufficient, to meet all liabilities of the contractor under this contract, half of the security deposit will be refundable after six months and the remaining half after twelve months of the issue of the said certificate of completion or till the final bill has been prepared and passed whichever is later.

In case of Maintenance and Operation works of E&M services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance contract whichever is earlier.

CLAUSE 18: DELETED

CLAUSE 18 A : RECOVERY COMPENSATION PAID TO WORKMAN

In every case in which by virtue of the provisions sub-section (1) of Section 12, of the Workmen's Compensation Act, 1923, Government is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Government will recover from the contractor the amount of the compensation so paid; and, without prejudice to the rights of the Government under sub-section (2) of Section 12, of the said Act, Government shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit of from any sum due by Government to the contractor whether under this contract or otherwise. Government shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the contractor and upon his giving to Government full security for all costs for which Government might become liable in consequence of contesting such claim.

CLAUSE 18 B: ENSURING PAYMENT AND AMENITIES TO WORKERS IF CONTRACTOR FAILS

In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, Government is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and

health amenities require to be provided under the above said Act and the rules under Clause 19H or under the C.P.W.D. Contractor's Labour Regulations, or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by C.P.W.D. Contractors, Government will recover from the contractor the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the Government under sub-section (2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, Government shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Government to the contractor whether under this contract or otherwise Government shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the Government full security for all costs for which Government might become liable in contesting such claim.

CLAUSE 19: LABOUR LAWS TO BE COMPLIED BY THE CONTRACTOR

The contractor shall obtain a valid license under the Contract Labour (R&A) Act 1970, and the Contract Labour (Regulation and abolition) Central rules 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service Act), 1996 and the building and other Constructions Workers Welfare Cess Act, 1996.

Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of work.

CLAUSE 19 A

No labour below the age of 18 (Eighteen) years shall be employed on the work.

CLAUSE 19 B: PAYMENT OF WAGES

Payment of wages:

- i) The contractor shall pay to labour employed by him either directly or through sub-contractor, wages not less than fair wages as defined in the C.P.W.D. Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- ii) The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- iii) In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Central Public works Department contractor's Labour Regulations made by Government from time to time in regard to payment of wages, wage period, deductions from wages

recovery of wages not paid and deductions unauthorisedly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.

- iv) a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.
b) Under the provision of Minimum Wages (Central) Rules 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-Charge concerned.
- v) The contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages act, 1948, Employees Liability Act, 1938, Workmen's Compensation act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made thereunder from time to time.
- vi) The contractor shall indemnify and keep indemnified Government against payments to be made under and for the observance of the laws aforesaid and the C.P.W.D. Contractor's Labour Regulations without prejudice to his right to claim indemnify from his sub-contractors.
- vii) The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
- viii) Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.
- ix) The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

CLAUSE 19 C: SAFETY PROVISIONS FOR LABOUR & PENALTY ON DEFAULT

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per C.P.W.D. Safety Code framed from time to time and shall at his own

expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid he shall be liable to pay a penalty of Rs.200/- for each default and in addition the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the cost incurred in that behalf from the contractor.

CLAUSE 19 D:

The contractor shall submit by the 4th and 19th of every month, to the Engineer-in-Charge a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively:

1. The number of labourers employed by him on the work,
2. Their working hours,
3. The wages paid to them.
4. The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and
5. The number of female workers who have been allowed maternity benefit according to Clause 19F and the amount paid to them.

Failing which the contractor shall be liable to pay to Government a sum not exceeding Rs.200 for each default or materially incorrect statement. The decision of the Divisional Officer shall be final in deducting from any bill due to the contractor the amount levied as fine and be binding on the contractor.

CLAUSE 19 E: HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS

In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with all the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by the Central Public Works Department and its contractors.

CLAUSE 19 F

Leave and pay during leave shall be regulated as follows:

1. Leave:

- (i) in the case of delivery – maternity leave not exceeding 8 weeks, 4 weeks up to and including the day of delivery and 4 weeks following that day,
- (ii) in the case of miscarriage – upto 3 weeks from the date of miscarriage.

2. Pay:

- (i) in the case of delivery – leave pay during maternity leave will be at the rate of the women's average daily earnings, calculated on total wages earned on the days when full time work was done during a period of three months immediately preceding the date on which she gives notice that she expects to be confined or at the rate of Rupees one only a day whichever is greater.
- (ii) in the case of miscarriage –leave pay at the rate of average daily earning calculated on the total wages earned on the days when full time work was

done during a period of three months immediately preceding the date of such miscarriage.

3. Conditions for the grant of Maternity Leave:

No maternity leave benefit shall be admissible to a woman unless she has been employed for a total period of not less than six months immediately preceding the date on which she proceeds on leave.

4. The contractor shall maintain a register of Maternity (benefit) in the prescribed form as shown in annexure –I and II, and the same shall be kept at the place of work.

CLAUSE 19 G

In the event of the contractor(s) committing a default or breach of any of the provisions of the Central Public Works Department, Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements for the workers as amended from time to time or furnishing any information or submitting or filling any statement under the provisions of the above Regulations and Rules which is materially incorrect, he/they shall, without prejudice to any other liability, pay to the Government a sum not exceeding Rs.200/- for every default breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractor(s) defaulting continuously in this respect, the penalty may be enhanced to Rs.200/- per day for each day of default subject to a maximum of 5 percent of the estimated cost of the work put to tender. The decision of the Engineer-in-Charge shall be final and binding on the parties.

Should it appear to the Engineer-in-Charge that the contractor(s) is/are not properly observing and complying with the provisions of the C.P.W.D. Contractor's Labour Regulations and Model Rules and the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (R&A) Central Rules 1971, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as "the said Rules") the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and /observe the said Rules and to provide the amenities to the work people as aforesaid, the Engineer-in-charge shall have the power to provide the amenities herein before mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his / their own expense and to approved standards all necessary huts and sanitary arrangements required for his/their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said huts and sanitary arrangements be re-modeled and / or reconstructed according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the contractor(s).

CLAUSE 19 H

The contractor(s) shall at his/their own cost provide his/ their labour with a sufficient number of huts (hereinafter referred to as the camp) of the following specifications on a suitable plot of land to be approved by the Engineer-in-Charge.

- i) a) The minimum height of each hut at the eaves level shall be 2.10 m (7 ft.0) and the floor area to be provided will be at the rate of 2.7 sq.m (30 sq.ft) for each member of the worker's family staying with the labourer.
- b) The contractor(s) shall in addition construct suitable cooking places having a minimum area of 1.80 m x 1.50m (6"x5") adjacent to the hut for each family.
- c) The contractor(s) shall also construct temporary latrines and urinals for the use of the labourers each on the scale of not less than four per each one hundred of the total strength, separate latrines and urinals being provided for women.
- d) The contractor(s) shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitably screened.
- ii) a) All the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local materials as may be approved by the Engineer-in-Charge.

In case of sun-dried bricks, the walls should be plastered with mud gobi on both sides. The floor may be kutcha but plastered with mud gobi and shall be at least 15 cm (6") above the surrounding ground. The roofs shall be laid with thatch or any other materials as may be approved by the Engineer-in-Charge and the contractor shall ensure that throughout the period of their occupation the roofs remain water-tight.
- b) The contractor(s) shall provide each hut with proper ventilation.
- c) All doors, windows, and ventilators shall be provided with suitable leaves for security purposes.
- d) There shall be kept an open space of at least 7.2m (8 yards) between the rows of huts which may be reduced to 6 m (20 ft) according to the availability of site with the approval of the Engineer-in-Charge. Back to back construction will be allowed.
- iii) **Water Supply:** The contractor(s) shall provide adequate supply of water for the use of labourers. The provisions shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or river, tanks which may be of metal or masonry, shall be provided. The contractor(s) shall also at his/their own cost make arrangements for laying pipe lines for water supply to his / their labour camp from the existing mains wherever available, and shall pay all fees and charges therefore.
- iv) The site selected for the camp shall be high ground, removed from jungle.
- v) **Disposal of Excreta:** The contractor(s) shall make necessary arrangements for the disposal of excreta from the latrines by trenching or incineration which shall be according to the requirements laid down by the Local Health Authorities. If trenching or incineration is not allowed the contractor(s) shall make arrangements for the removal of the excreta through the Municipal Committee/ authority and inform it about the number of labourers employed so that arrangements may be made by such Committee/ authority for the removal of the excrete. All charges on this account shall be borne by the contractor and paid direct by him to the

Municipality/ authority. The contractor shall provide one sweeper for every eight seats in case of dry system.

- vi) **Drainage:** The contractor(s) shall provide efficient arrangements for draining away sullage water so as to keep the camp neat and tidy.
- vii) The contractor(s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.
- viii) **Sanitation:** The contractor(s) shall make arrangements for conservancy and sanitation in the labour camps according to the rules of the Local Public Health and Medical Authorities.

CLAUSE 19 I

The Engineer-in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractor's employ upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements.

CLAUSE 19 J

It shall be the responsibility of the contractor to see that the building under constructions is not occupied by anybody unauthorisedly during construction, and is handed over to the Engineer-in-Charge with vacant possession of complete building. If such building though completed is occupied illegally, then the Engineer-in-Charge shall have the option to refuse to accept the said building/buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay a levy up to 5% of tendered value of work may be imposed by the Superintending Engineer whose decision shall be final both with regard to the justification and quantum and be binding on the contractor.

However, the Superintending Engineer, through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.

CLAUSE 19 K: EMPLOYMENT OF SKILLED / SEMISKILLED WORKERS

The contractor shall, at all stages of work, deploy skilled/semiskilled tradesmen who are qualified and possess certificate in particular trade from CPWD training Institute/Industrial Training Institute/ National Institute of Construction Management and Research (NICMAR)/national Academy of Construction, CIDC or any similar reputed and recognized Institute managed/certified by State/Central Government. The number of such qualified tradesmen shall not be less than 20 % of total skilled/semiskilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized institute to Engineer-in-charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Engineer-in-Charge. Failure on the part of contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate of Rs.100 per such tradesman per day. Decision of Engineer-in-Charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding.

Provided always, that the provisions of this clause, shall not be applicable for works with estimated cost put to tender being less than Rs. 5 Crores.

CLAUSE 20: MINIMUM WAGES ACT TO BE COMPLIED WITH

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

CLAUSE 21: WORK NOT TO BE SUBLET. ACTION IN CASE OF INSOLVANCY

The contract shall not be assigned or sublet without the written approval of the Engineer-in-charge. And if the contractor shall assign or sublet 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, 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 agent to any public officer or person in the employ of Government in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in charge on behalf of the President of India shall have power to adopt the course specified in Clause 3 hereof in the interest of Government and in the event of such course being adopted the consequences specified in the said Clause 3 shall ensue.

CLAUSE 22: SUMS PAYABLE BY WAY OF COMPENSATION

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

CLAUSE 23: CHANGES IN FIRM'S CONSTITUTION TO BE INTIMATED

Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made 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 before the contractor enters into any partnership agreement where-under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

CLAUSE 24: WORKS TO BE UNDER DIRECTION OF ENGINEER-IN-CHARGE

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

CLAUSE 25: SETTLEMENT OF DISPUTES & ARBITRATION

Except where otherwise provided in the contract all question and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other

question, claim, right, matter of thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter.

- i) If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge on any matter in connection with or arising out of the contract of carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Superintending Engineer shall give his written instructions or decision within a period of one month from the receipt of the contractor's letter.

If the Superintending Engineer fails to give his instruction or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the Superintending Engineer, the contractor may, within 15 days of the receipt of Superintending Engineer's decision, appeal to the chief Engineer who shall afford an opportunity to the contractor to be heard, if the latter so desires, and to offer evidence in support of his appeal. The Chief Engineer shall give his decision within 30 days of receipt of contractor's appeal. If the contractor is dissatisfied with this decision, the contractor shall within a period of 30 days from receipt of the decision, give notice to the chief Engineer for appointment of arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.

- ii) Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by the Chief Engineer, CPWD, in charge of the work or if there be no Chief Engineer, the administrative head of the said CPWD. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Chief Engineer of the appeal.

It is also a term of this contract that no person other than a person appointed by such Chief Engineer CPWD or the administrative head of the CPWD, as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of this contract that if the contract does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 120 days of receiving the intimation from the Engineer-in-Charge that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the Government shall be discharged and released of all liabilities under the contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or

re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs.1,00,000/- the arbitrator shall give reasons for the award.

It is also a term of the contract that if any fees are payable to the arbitrator these shall be paid equally by both the parties.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

CLAUSE 25A: NO ARBITRATION FOR DECISION ON SUB-STANDARD WORK

DELETED (NOT APPLICABLE)

CLAUSE 26: CONTRACTOR TO INDEMNIFY GOVT. AGAINST PATENT RIGHTS

The contractor shall fully indemnify and keep indemnified the President of India against any action, claim or proceeding relating to infringement or use 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 Government in respect of any such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify the President of India 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 Engineer-in-Charge in this behalf.

CLAUSE 27: LUMP SUM PROVISIONS IN TENDER

When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-Charge payable of measurement, the Engineer-in-Charge may at his discretion pay the lump-sum amount entered in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of the clause.

CLAUSE 28: ACTION WHERE NO SPECIFICATIONS ARE SPECIFIED

In the case of any class of work for which there is no such specifications as referred to in Clause 11, such work shall be carried out in accordance with the Bureau of India Standards

Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers specifications, if not available then as per District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

CLAUSE 29: WITH-HOLDING AND LIEN IN RESPECT OF SUMS DUE FROM CONTRACTOR

- i) Whenever any claim or claims for payment of a sum of money arises out of under the contract or against the contractor, the Engineer-in-Charge or the Government shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer-in-Charge or the Government 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 being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the Government 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 may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in-Charge of the Government or any contracting person through the Engineer-in-Charge pending finalization of adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or Government will be kept withheld or retained as such by the Engineer-in-Charge or Government till the claim arising out of or under the contract is determined by the arbitrator (if the contract is governed by the arbitration clause) 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 Engineer-in-Charge or the Government 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 found payable to any partner / limited company as the case may be, whether in his individual capacity or otherwise.

- ii) Government 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 overpaid in respect of any work done by the contractor under the contract or any work claimed 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 Government to recover the same from him in the manner prescribed in sub-clause (i) 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 Government to the contractor, without any interest thereon whatsoever.

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

CLAUSE 29A: LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS

Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the Government or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or Government or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge or the Government or with such other person or persons.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the Government will be kept withheld or retained as such by the Engineer-in-Charge or the Government or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the 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 on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

CLAUSE 30: EMPLOYMENT OF COAL MINING OR CONTROLLED AREA LABOUR NOT PERMISSIBLE - DELETED

CLAUSE 31: UNFILTERED WATER SUPPLY

The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

- i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-Charge.
- ii) The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are in the opinion of the Engineer-in-Charge, unsatisfactory.

CLAUSE 31A: DEPARTMENTAL WATER SUPPLY, IF AVAILABLE

Water if available may be supplied to the contractor by the department subject to the following conditions:

- i) The water charges shall be free of cost for the work done.
- ii) The contractor(s) shall make his/their own arrangement of water connection and laying of pipelines from existing main of source of supply.
- iii) The Department do not guarantee to maintain uninterrupted supply of water and it will be incumbent on the contractor(s) to make alternative arrangements for water at his/ their own cost in the event of any temporary break down in the Government, water main so that the progress of his/their work is not held up for want of water.

No claim of damage or refund of water charges will be entertained on account of such break down.

CLAUSE 32: ALTERNATE WATER ARRANGEMENTS

- i) Where there is no piped water supply arrangement and the water is taken by the contractor from the wells or hand pump constructed by the Government no charge shall be recovered from the contractor on that account. The contractor shall, however, draw water at such hours of the day that it does not interfere with the normal use for which the hand pumps and wells are intended. He will also be responsible for all damage and abnormal repairs arising out of his use, the cost of which shall be recoverable from him. The Engineer-in-charge shall be the final authority to determine the cost recoverable from the contractor on this account and his decision shall be binding on the contractor.
- ii) The contractor shall be allowed to construct temporary wells in Government land for taking water for construction purposes only after he has got permission of the Engineer-in-Charge in writing. No charges shall be recovered from the contractor on this account, but the contractor shall be required to provide necessary safety arrangements to avoid any accidents or damage to adjacent buildings, roads and service lines. He shall be responsible for any accidents 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.

CLAUSE 33: RETURN OF SURPLUS MATERIALS

Notwithstanding anything contained to the contrary in this contract, where any materials for the execution of the contract are procured with the assistance of Government either by issue from Government stocks or purchase made under orders or permits or licenses issued by Government the contractor shall hold the said materials economically and solely for the purpose of the contract and not dispose of them without the written permission of the Government and return, if required by the Engineer-in-Charge, all surplus or unserviceable materials that may be left with him after the completion of the surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on being paid or credited such price as the Engineer-in-Charge shall determine having due regard to the condition of the materials. The price allowed to the contractor however shall not exceed the amount charged to him be final and conclusive. In the event of breach of the aforesaid condition the contractor license or permit and/or for criminal breach of trust, be liable to Government for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.

CLAUSE 34: HIRE OF PLANT & MACHINERY - DELETED

CLAUSE 35: CONDITION RELATING TO USE OF ASPHALTIC MATERIALS -DELETED

CLAUSE 36: EMPLOYMENT OF TECHNICAL STAFF AND EMPLOYEES

Contractors Superintendence, Supervision, Technical Staff & Employees

- i) The contractor shall provide all necessary superintendence during execution of the work and as along thereafter as may be necessary for proper fulfilling of the obligations under the contract.

The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-

Charge the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work. Minimum requirement of such technical representative(s) and their qualifications and experience shall not be lower than specified in Schedule 'F'. The engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative(s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal the contractor shall appoint another such representative(s) according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative and other technical representative(s) shall be appointed by the contractor soon after receipt of the approval from Engineer-in-Charge and shall be available at site before start of work.

All the provisions applicable to the principal technical representative under the clause will also be applicable to other technical representative(s). The principal technical representative and other technical representative(s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself/themselves as required, to the Engineer-in-Charge and/or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative(s) shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and other technical representative(s) shall be actually available at site fully during all stages of execution of work, during recording/checking/test checking of measurements of works and whenever so required by the Engineer-in-Charge and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative(s) in the site order book and shall affix his/their signature in token of noting down the instructions and in token of acceptance of measurements/checked measurements/test checked measurements. The representative(s) shall not look after any other work. Substitutes, duly approved by Engineer-in Charge of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative(s) by more than two days.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) or agent is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the contractor as specified in Schedule 'F' and the decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded/test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint a suitable technical Principal technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is/are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative (s) along with every on account bill/

final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

- ii) The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff of are competent to give proper supervision to the work

The contractor shall provide and employ skilled, semiskilled and unskilled labor as is necessary to proper and timely execution of the work.

The Engineer-in-Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-in-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

CLAUSE 37: LEVY/ TAXES PAYABLE BY CONTRACTOR

- i) Sales Tax/GST or any other tax on materials in respect of this contract shall be payable by the contractor and Government shall not entertain any claim whatsoever in this respect.
- ii) The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.
- iii) If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Government of India and does not any time become payable by the contractor to the State Government. Local authorities in respect of any material used by the contractor in the works then in such a case, it shall be lawful to the Government of India and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the contractor.

CLAUSE 38: CONDITIONS FOR REIMBURSEMENT OF LEVY/ TAXES IF LEVIED AFTER RECEIPT OF TENDERS

- i) All tendered rates shall be inclusive of all taxes and levies payable under respective statutes. However, pursuant to the Constitution (46th Amendment) Act, 1982. If any further tax or levy is imposed by statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/ levies the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Superintending Engineer (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.
- ii) 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 Government and/or the Engineer-in-Charge and further shall furnish such other information/ document as the Engineer-in-Charge may require from time to time.

- iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy, pursuant to the Constitution (Forty Sixth Amendment) Act 1982, give a written notice thereof to the Engineer-in-Charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

CLAUSE 39 TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR

Without prejudice to any of the rights or remedies under this contract if the contractor dies, the Divisional Officer on behalf of the President of India shall have the option of terminating the contract without compensation to the contractor.

CLAUSE 40 IF RELATIVE WORKING IN DEPARTMENT THEN THE CONTRACTOR NOT ALLOWED TO TENDER

The contractor shall not be permitted to tender for works in the department (responsible for award and execution of contracts) in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of the Superintending Engineer and Assistant Engineer (both inclusive.) He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted Officer in the department or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of this Department. **If however the contractor is registered in any other department, he shall be debarred from tendering in department for any breach of this condition.**

Note: By the term 'near relatives' is meant wife, husband, parents and grandparents, children and grandchildren, brother and sisters, uncles, aunts and cousins and their corresponding in-laws.

CLAUSE 41 NO GAZETTED ENGINEER TO WORK AS CONTRACTOR WITHIN ONE YEARS OF RETIREMENT

No engineer of gazetted rank or other gazetted officer employed in engineering or administrative duties in an engineering department of the Government of India shall work as a contractor or employee of a contractor for a period of one year after his retirement from government service without the previous permission of Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of Government of India as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.

CLAUSE 42 RETURN OF MATERIAL AND RECOVERY FOR EXCESS MATERIAL ISSUED

- i) After completion of the work and also at any intermediate stage in the event of non-reconciliation of materials issued, consumed and in balance (see Clause 10), theoretical quantity of materials issued by the Government for use in the work shall be calculated on the basis and method given here under: -
- a) Quantity of cement & bitumen shall be calculated on the basis of quantity of cement & bitumen required for different items of work as shown in the Schedule of Rates mentioned in Schedule 'F'. In case any item is executed for which standard constants for the consumption of cement or bitumen are not available in the above mentioned schedule / statement or cannot be derived from the same shall be calculated on the basis of standard formula to be laid down by the Engineer-in-Charge.
 - b) Theoretical quantity of steel reinforcement or structural steel sections shall be taken as the quantity required as per design or as authorized by

Engineer-in-Charge, including authorized lappages, chairs, etc. plus 3% wastage due to cutting into pieces, such theoretical quantity being determined and compared with the actual issues each diameter wise, section-wise and category-wise separately.

- c) Theoretical quantity of G.I & C.I or other pipes, conduits, wires and cables, pig lead and G.I/MS sheets shall be taken as quantity actually required and measured plus 5% for wastage due to cutting into pieces (except in the case of G.I/MS sheets it shall be 10%), such determination & comparison being made diameter-wise & category-wise.
 - d) For any other material as per actual requirements.
- ii) Over the theoretical quantities of materials so computed a variation shall be allowed as specified in Schedule 'F'. The difference in the net quantities of material actually issued to the contractor and the theoretical quantities including such authorised variation, if not returned by the contractor or if not fully reconciled to the satisfaction of the Engineer-in Charge within fifteen days of the issue of written notice by the Engineer-in-Charge to this effect shall be recovered at the rates specified in Schedule 'F', without prejudice to the provision of the relevant conditions regarding return of materials governing the contract. Decision of Engineer-in-Charge in regard to theoretical quantities of materials, which should have been actually used as per the annexure of the standard schedule of rates and recovery at rates specified in Schedule 'F' shall be final & binding on the contractor.
- For non-scheduled items the decision of the Superintending Engineer regarding theoretical quantities of materials which should have been actually used, shall be final and binding on the contractor.
- iii) The said action under this clause is without prejudice to the right of the Government to take action against the contractor under any other conditions of contract for not doing the work according to the prescribed specifications.

CLAUSE 43 COMPENSATION DURING WAR LIKE SITUATIONS

The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation the contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site collect and property, stack or remove in 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 or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge. Such payments being in 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 compensation shall be assessed by the divisional officer up to Rs.5000/- and by the Superintending Engineer concerned for a higher amount. The contractor shall be paid for the damages / destruction suffered and for the restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Engineer-in-Charge regarding the quality and quantity

of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.

Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the A.R.P Officers or the Engineer-in-Charge (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work.

In the event of contractor having to carry our reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Divisional Officer.

CLAUSE 44 APPRENTICES ACT PROVISIONS TO BE COMPLIED WITH

The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and order issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Superintending Engineer may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said act.

CLAUSE 45 RELEASE OF SECURITY DEPOSIT AFTER LABOUR CLEARANCE - DELETED

Section – V
Scope of Work & Technical Specification

1. SCOPE

The scope of work involves maintenance of online monitors in water and steam system.

2. LOCATION OF SITE

The Indira Gandhi Centre for Atomic Research (IGCAR) is located on East Coast Road at Kalpakkam about 80 km away from Chennai in Tamil Nadu.

3 SCOPE OF THE CONTRACTOR

- The contractor shall engage required skilled labour.
- **The technical personnel employed should have the educational qualification of B.Sc (Chemistry).**
- All the works shall be carried out in accordance to the specification mentioned in the tender with good scientific practice and quality.
- All tools and labour required for completion of the work is in the scope of the contractor.
- The contractor shall make his own arrangements for boarding, lodging and transport of his labour from and to the site.
- The contractor shall make arrangements for taking comprehensive insurance for his workmen and submit a copy to dept. for verification.
- Upkeep of the area after completion of work and removal/disposal of debris are in the scope of the contractor.

4 SCOPE OF THE DEPARTMENT

- Department will provide all the material required for the work. The materials will be in the custody of the Engineer and the contractor shall collect the materials required for particular work. Department will provide hand trolley / Battery truck for transportation of material.

5 QUOTATION

The contractor shall quote strictly in accordance with the schedule of quantities.

6 PERIOD OF CONTRACT

The work shall commence after issue of work order. The contract is valid for a period of **24 months**.

7 COORDINATION OF WORK

The work shall be carried by the contractor in close coordination with FBTR and other agencies who may be working in the same premise /vicinity of other works. In this regard the decision of the Engineer-in-charge regarding any dispute shall be final and binding on the contractor.

8. PAST EXPERIENCE

The contractor should have carried out similar works in the past and produce documentary proof for verification at the time of tendering. And the contractor shall have necessary infrastructure and skilled manpower to handle the job.

PAYMENT TERMS

Payment will be made on pro-rata basis.

9. ENTRY OF CONTRACTOR'S PERSONNEL INTO IGCAR

In view of the security requirements, all the employees of the contractor shall obtain Police Verification Certificate (PVC) for entry into IGCAR premises to complete the security formalities.

10. INDUSTRIAL SAFETY

You shall be fully responsible for the safety of workmen during the course of the work. You shall provide all kinds of protective gears for the workmen. You shall be responsible to satisfy the requirements as demanded industrial safety professionals of this tender. SAFETY FIRST, THERE WILL NOT BE ANY COMPROMISE ON SAFETY ASPECTS.

11. ARBITRATION CLAUSE

In the event of any dispute or difference, it shall be referred to the sole arbitration of the Superintending Engineer, **RFG, IGCAR Kalpakkam**, as per Indian Arbitration Act 1996 as amended from time to time and his decision shall be final and binding on both the parties.

13 MEDICAL FACILITY

The contractor shall arrange adequate facilities for Medical Aid Treatment for his staff and workers engaged on this work, subject to availability, the contractor may be permitted to use, free of charge the IGCAR First Aid Facility. All the contractor employees are to submit medical fitness certificate from a Registered Medical practitioner to work at construction plants/elevated platforms etc.

14. MINIMUM WAGES ACT

The contractors shall strictly comply with all provisions of Labour Laws given in Clause 19 9A) to (i) Clause 20 and Annexure – II and III of the section –IV of the tender.

The contractor shall strictly follow all provisions of minimum wages act (S) (Central or State whichever is more advantageous to workers). Contract Labour (Regulations & Abolitions) Act or any other (S) applicable to construction workers in this area. The contractor must obtain License from the Licensing Authority.

15 CANTEEN FACILITY

Existing private canteen facilities can be availed against payment.

TECHNICAL SPECIFICATION OF WORK

Online pH, chloride, silica, sodium and dissolved oxygen monitors have been installed at various sampling points in steam-water system of FBTR. Being high pure water and steam system, these monitors provide real-time healthiness continuously. Hence, regular maintenance, as specified in the price bid, is required in Round-The-Clock shift.

SECTION – VI
SAFETY CODE FOR CONTRACTORS

1. INTRODUCTION

Many of the works of Department of Atomic Energy at its various sites are executed by the contractors. During these works, contractors personnel are likely to be exposed to different types of hazards. Similarly, unsafe acts of contractors personnel may generate hazards for Departmental staff and/or workmen of other contractors working at the site. Such unsafe acts may also pose danger to the existing installations and even to members of public. This guide is prepared to facilitate safe working during execution of contract works.

2. GENERAL SAFETY PROVISIONS

The Contractor shall take all safety precautions during the execution of awarded work and shall maintain and leave the site safe at all times. At the end of each working day and at all times when the work is temporarily suspended, he shall ensure that all materials, equipment and facilities will not, cause damage to existing property, personal injury or interfere with the other works of the project or Station. The contractor shall comply with all applicable provisions of the safety regulations, cleanup programme and other measures that are in force at the site.

The Contractor shall provide and maintain all lights, guards, fencing, warning signs, caution boards and other safety measures and provide for vigilance as and where necessary or as required by the Engineer-in-charge or by any duly constituted authority for the protection of workers or for the safety of others. The caution boards shall also have appropriate symbols.

Adequate lighting facilities such as flood lights, hand lights and area lighting shall be provided by the Contractor at the site of work, storage area of materials and equipment and temporary access roads within his working area.

The contractor shall obtain written approval of the Engineer-in-charge to the lighting scheme and place of tapping prior to its installation.

The contractor shall plan his operations so as to avoid interference with the other Departmental works, other contractors or Sub-Contractors at the site. In case of any interference, necessary coordination shall be sought by the contractor from the Department for safe and smooth working.

The Contractor and his sub-contractor, if any shall comply with the instructions given by the Safety Engineer or his authorized nominee regarding safety precautions, protective measures, housekeeping requirements, etc. The Safety Engineer with due intimation to Engineer-in-Charge shall have the right to stop the work of the Contractor, if in his opinion proceeding with the work will lead to an unsafe and dangerous condition. Engineer-in-Charge shall get the unsafe condition removed or provide protective equipment at the contractors cost. The contractor can employ his own safety Engineer or nominate one of his officers for liaison with Departmental Safety Engineer for ensuring compliance of all safety rules. Contractor shall ensure that all his workmen are aware about the nature of risk involved in their work and have adequate training for carrying out their work safely. The contractor shall be held responsible for non-compliance of any of the safety measures and delays, implications, injuries, fatalities and compensation arising out of such situations of incidents.

3. TRAFFIC

The contractor shall conduct his operations so as to interfere as little as possible with the use of existing roads at or near locations where the work is being performed.

When interference to traffic is inevitable, notice of such interference shall be given to the Engineer-in-charge well in advance (at least 48 hours) with the details of start of the work and time required, storage of materials, and details of the proposed methods of providing the required facilities for safe and continuous use of roads and obtain his clearance.

The contractor shall, at his own expense, make such approved temporary provisions as are required to maintain atleast one lane of traffic by bridging the excavation, providing ramps over surface obstructions or providing suitable temporary bye-pass around the obstructions. The Contractor shall exercise full care to ensure that no damage is caused by him or his workmen, during the operation, to the existing water supply, sewerages, power or telecommunication lines or any other services or works. The contractor shall be required to provide and erect before construction, substantial barricades, guard-rails, and warning signs. He shall furnish, place and maintain adequate warning lights, signals, etc., as required by Engineer-in-charge.

4. SAFE MEANS OF ACCESS

Adequate and safe means of access and exit shall be provided for all work places, at all elevations. Using of scaffolding members (avoiding a ladder) for approach to high elevations shall not be permitted.

Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short duration work as can be done safely from ladders. Ladder shall be of rigid construction having sufficient strength for the intended loads and made either of good quality wood or metal and all ladders shall be maintained well for safe working condition. An extra mazdoor shall be engaged for holding the ladder if ladder is not securely fixed. If the ladder is used for carrying materials as well, suitable foot holds and hand holds shall be provided on the ladder. The ladder shall be given an inclination not steeper than 1 in 4 (1 horizontal and 4 vertical). Ladders shall not be used for climbing carrying materials in hands. While climbing both the hands shall be free.

Scaffolding or staging more than 3.5m above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a standard guard rail properly attached, bolted, braced or otherwise secured at least 1.0m high above the floor or platform of such scaffolding or staging. The guard rail shall extend along the entire exposed length of the scaffolding with only such opening as may be necessary for the delivery of materials. Standard railing shall have posts not more than 2m apart and an intermediate rail halfway between the floor or platform of the scaffolding and the top rail. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure. Scaffolding and ladder shall conform to relevant IS specification (IS: 3696-1966). Timber/Bamboo scaffolding shall not be used.

Working platforms of scaffolds shall have toe boards at least 15cm in height to prevent materials from falling down.

A sketch of the scaffolding proposed to be used shall be prepared and approval of the Engineer-in-Charge obtained prior to start of erection of scaffolding. All scaffolds shall be examined by Engineer-In-Charge before use.

Working platform, gangways and stairways shall be so constructed that they shall not sag unduly or unequally and if the height of the platform or gangway or stairway is more than 3.5m above ground level or floor level, they shall be closely boarded, shall have adequate width for easy movement of persons and materials and shall be suitably guarded as described in 3.3 above.

The Planks used for working platform shall not project beyond the end supports to a distance exceeding four times the thickness of the planks used. The planks shall be rigidly tied at both ends to prevent sliding and slippage. The thickness of the planks shall be adequate to take load of men and materials and shall not collapse.

Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent fall of persons or materials by providing suitable fencing or railing, the minimum height of which shall be 1.0m, along with 15 cm high sheet obstruction at floor level along the railing.

Safe means of access shall be provided to all working platforms and other elevated working places. Every ladder shall be securely fixed. No single portable ladder shall be over 9m in length. For ladders upto 3m in length the width between side rails in the ladder shall in no case be less than 300mm. For longer ladders this width shall be increased by at least 20mm for each additional metre of length. Step spacing shall be uniform and shall not exceed 300 mm.

Adequate precautions shall be taken to prevent danger from electrical lines and equipment. No scaffolding, ladder, working platform, gangway runs, etc. shall exist within 3 metres of any uninsulated electric wire. Whenever electric power and lighting cables are required to run through, (pass on) the scaffolding or electrical equipments are used, such scaffolding structures shall have minimum two earth connections with earth continuity conforming to IS code of practice.

5. PERSONAL PROTECTIVE EQUIPMENT:

All necessary personal protective equipment as considered necessary by the Engineer-in-charge shall be kept available by contractor for the use of the persons employed on the site and maintained in a condition suitable for immediate use. Also the contractor shall take adequate steps to ensure proper use of equipment by those concerned. The personal protective equipments are to be provided by the contractor.

a) All persons employed at the construction site shall use safety helmets. For other types of works, persons working in that area shall also use safety helmets, if advised by safety Engineer/Engineer-in-charge.

b) Workers employed on mixing asphaltic materials, cement and lime mortars shall use protective goggles, protective foot wear and hand gloves. Use of proper respirators shall be an advantage.

c) Persons engaged in welding and gas cutting works shall use suitable welding face shields. The persons who assist the welders shall use suitable goggles. Protective goggles shall be worn while chipping and grinding.

d) Stone breakers shall use protective goggles. They shall be seated at sufficiently safe intervals of distance.

e) Persons engaged in or assisting in shot blasting operations and cleaning the blasting chamber shall use suitable gauntlets, overalls, dust-proof goggles, boots and protective hood supplied with fresh air at the minimum rate of 9 m³/hr.

f) All persons working at heights more than 4.5m above ground or floor and exposed to risk of falling down shall use safety belts, unless otherwise protected by cages, guard railings, etc. In places where the use of safety belts is impractical, suitable net of adequate strength fastened to substantial supports shall be employed.

g) All powered two-wheeler motorcycle and scooter drivers and their pillion riders shall wear crash helmets inside the project/plant sites.

h) When workers are employed in sewers and inside manholes which are in use, the contractor shall ensure that the man-holes are opened and are adequately ventilated atleast for an hour. After it has been well-ventilated, the atmosphere inside the space shall be checked for the presence of any toxic gas or oxygen deficiency and recorded in the get register before the workers are allowed to into the man-holes. The man-holes opened shall be cordoned off with suitable railing and provided with warning signals or caution boards to prevent accidents. There shall be proper illumination in the night.

8. HOUSE KEEPING

The contractor shall at all times keep his work spot, site office and surroundings clean and tidy from rubbish, scrap, surplus materials and unwanted tools and equipment.

No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The Engineer-in-charge may require the contractor to remove any materials which are considered to be of danger or cause inconvenience to the public. If necessary, the Engineer-in-charge may cause them to be removed at the contractor's cost.

At the completion of the work, the Contractor shall have removed from the work premises all scaffoldings, surplus materials, rubbish and all huts and sanitary arrangements used/installed for his workmen on the site.

The Engineer-in-charge has the right to stop work if the Contractor fails to improve upon the housekeeping after having been notified.

14. FIRE SAFETY

All necessary precautions shall be taken to prevent outbreak of fires at the site. Adequate provisions shall be made to extinguish fires should they still break out.

Adequate number of contract workmen shall be given education and training in fire fighting and extinguishing methods.

15. SAFETY WORK PERMIT

In order to ensure safety of work for hazardous operation (such as entry into confined spaces, welding/cutting on equipment/pipes where explosion hazard is present, works on high voltage and main medium voltage lines, blasting etc.,)

Special Safety work permits (SWP) shall be raised. The SWP's shall also to be obtained for any other work as recommended by Safety Engineer. The Contractor shall strictly ensure all the safety conditions and requirements stipulated in the Safety work permit. The decision of the Safety Engineer shall be final in this regard.

16. WORK IN RADIATION AREA

The contractor shall follow the stipulated procedure regarding work in the radiation area and other works related with radiography.

17. WORK IN AND AROUND WATER BODIES

When the work is done near any place where there is risk of drowning, all necessary rescue equipment such as life buoys and life jackets shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision shall be made for prompt first-aid treatment of all injuries likely to be sustained during the course of the work. Persons who do not know swimming shall not be engaged alone for any work where risk of drowning exists. Sufficient number of life buoys or life jackets shall be provided.

18. MEDICAL FACILITIES

The contractor shall arrange adequate facilities for medical aid and treatment for his staff and workers engaged on the work site including the first-aid facilities if they are not available at the project site.

First-aid appliances including sterilized dressing, cotton wool and antiseptic cream shall be made available at a readily accessible places at every work site. These shall be maintained in good order under the charge of a responsible person.

At large work places where hospital facilities are not available within easy reach of the works, first-aid posts shall be established and be manned by a trained compounder. An ambulance shall be available during the entire period of work for attending to injury cases.

19. SAFETY OFFICER/SAFETY COORDINATOR

The contractor shall have a Safety Officer or a supervisor to be designated as a Safety Coordinator in order to specifically look into the implementation of different safety requirements of the contract work. The person thus designated will in general co-ordinate with the Engineer-in-charge on matters of safety and in particular ensure that the Safety Guide is complied with fully. His name shall be displayed on the Notice Board at a prominent place at the work site.

20. REPORTING OF ACCIDENT

All accidents leading to property damage and/or personnel injuries shall be reported to the Engineer-in-charge immediately who shall inform SARCOP to be followed up with detailed accident reports in prescribed form.

Contractor shall also submit a monthly statement of accidents to Engineer-in-charge by 4th of every month showing details of accident, nature of injury including disability, days lost, treatment required, etc., and the extent of property damage.

21. PUBLIC PROTECTION

The Contractor shall make all necessary provisions to protect the public. He shall be bound to bear the expenses for defense of every action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of any precaution required to taken to be protect the public. He shall pay any damage and cost which may be awarded in any such suit, action or proceeding to any such person, or the amount which may be fixed as a compromise by any such person.

22. OTHER STATUTORY PROVISIONS

Notwithstanding the above clauses from 1 to 21 there is nothing in these to exempt the Contractor from the provisions of any other Act or Rules in force in the Republic of India. In particular, all operations involving the transport, handling, storage and use of explosives shall be as per the standing instructions and conform with the Indian Explosives Act, 1884 and the explosive Rules, 1983. Handling, transport, storage and use of compressed gas cylinders and pressure vessels shall conform with the Gas Cylinder Rules 1981 and Static and Mobile Pressure Vessels (Unfired) Rules 1981. In addition, The Indian Electricity act 1910 and Indian Electricity Rules 1956, the Atomic Energy Act, 1962, the Radiation Protection Rules, 1971, Radiation Protection Manual of Nuclear Facilities and the Atomic Energy (Factories) Rules, 1988 and various rules and Act related to mining shall also be strictly complied with.

HEIGHT PASS

Height pass for all workers & supervising staff engaged by contractor shall be obtained which includes a medical test by qualified doctor by contractor and physical test by department safety officer for all works where these workers /supervisors need to be work above a height of +/-3.5m, which is mandatory as per safety requirement.

ANNEXURE

GUIDELINES AND GENERAL PROCEDURES FOR SUPPLY AND USE OF ELECTRICITY AT SITE

1. GENERAL

Following safety requirements shall be complied with before the contractor uses the power supply.

1.1 The Contractor shall submit a list of licensed electrical staff to be posted at site.

1.2 It shall be the responsibility of the Contractor to provide and maintain complete installation on the load side of the supply point with regard to the safety requirements at site. All cabling and installation shall comply with the appropriate statutory requirements given below and shall be subject to approval of the Departmental Engineer-in-charge/Electrical Engineer.

a) Indian Electricity Act, 1910.

b) Electricity (Supply) Act, 1948.

c) Indian Electricity Rules, 1956.

d) National Electric Code, 1985.

e) Other relevant rules of Local Bodies and Electricity Boards.

After installation of the electrical power wiring works by the contractor, form of completion certificate as per IS:732 (Form SGCW-1) shall be submitted by the contractor duly signed by the authorized valid licensed electrical contractor and /or supervisor along with one copy of the contractor's license and/or competency certificate of supervisor issued by the Electricity Board/Government Electricity Organisations as per the enclosure.

The power supply shall be regulated as per the terms and conditions of the supply of the respective electricity boards.

1.3 (a) For purposes of electrical load and power planning by the electrical section, the contractor shall furnish along with the tender, the estimated load requirement of electric power for the execution of the contract works in terms of maximum Kilo Watt or KVA demand during various periods/months of the contract period along with the details of the construction electrical equipment/machinery with their individual load details and location/locations of power supply required for availing temporary electric power supply in the standard proforma enclosed (form SGCW -2).

(b) The electric power supply will be generally made available at one point in the works site of the Contractor by the department.

(c) Where distribution boards are located at different places the Contractor shall submit schematic drawing indicating all details like size of wires, Over Head or cable feeders, earthing etc., The position and location of all equipments and switches shall be given.

1.4 The Contractor shall make his own arrangements for main earth electrode and tapings thereof. The existing earth points available at site can be used at the discretion of the Departmental Electrical Engineer with prior permission. Method of earthing, installation and earth testing results shall conform to relevant I.S. Specifications (IS-3043).

1.5 All three phase equipment shall be provided with double earthing. All light fixtures and portable equipment shall be effectively earthed to main earthing.

1.6 All earth terminals shall be visible. No gas pipes and water pipes shall be used for earth connection. Neutral conductor shall not be treated as earth wire.

1.7 The Contractor shall not connect any additional load without prior permission of Departmental Electrical Engineer. For obtaining additional power required, test reports of the tests mentioned in (d) of Form SGCW-1 shall be submitted.

1.8 Joints in earthing conductors shall be avoided. Loop earthing of equipment shall not be allowed. However tapings from an earth bus may be done.

1.9 The entire installation shall be subjected to the following tests before energization of installation including portable equipment.

- a) Insulation resistance test.
- b) Polarity test of switches.
- c) Earth continuity test.
- d) Earth electrode resistance.

The test procedures and their results shall conform to relevant IS Specifications. The contractor shall submit a test report for his complete installation every 2 months or after rectifying any faulty section in the specimen test report. One such test report for the complete installation shall be submitted before onset of monsoon.

2. The following are provided for general guidance of the Contractor and shall be read as specific requirement, in addition to complying with Indian Electricity Act, Indian Electricity Rules and IS Specifications.

2.1 Installation

a) Only persons having valid wireman's license/competency certificate shall be employed for carrying out electrical work and repair of electrical equipment, installation and maintenance at site. The job shall be supervised by a qualified licensed Supervisor.

b) Electrical equipment and installations shall be installed and maintained as to prevent danger from contact with live conductors and to prevent fires originating from electrical causes like short circuits, overheating etc. Installation shall not cause any hindrance to movement of men and materials.

c) Materials for all electrical equipment shall be selected with regard to working voltage, load and working environment. Such equipment shall conform to the relevant standards.

d) The minimum clearance to be maintained for all overhead lines along roads and across roads shall be as per the statutory requirements as listed in clause 1.2 of Annexure.

e) Grounding conductor of wiring system shall be of copper or other corrosion-resistant material. An extra grounding connection shall be made in appliances/equipment where chances of electric shock is high.

f) Electric fuses and/or circuit breakers installed in equipment circuits for short circuit protection shall be of proper rating. It is also recommended that high rupturing capacity (HRC) fuses be used in all circuits. For load of 5 KW or more earth leakage circuit breaker shall be provided in the circuits.

g) Wherever cables or wires are laid on poles, a guard wire of adequate size shall be run along the cables/wires and earthed effectively. Metallic poles as a general rule shall be avoided and if used shall be earthed individually. Anticlimbing guards and danger notices shall be provided on poles. Each equipment shall have individual isolating switches.

h) Wires and cables shall be properly supported and an approved method of fixing shall be adopted. Loose hanging of wires & cables shall be avoided. Lighting and power circuits shall be kept distinct and separate.

i) Reinforcement rods or any metallic part of structure shall not be used for supporting wires and cables, fixtures, equipment, earthing etc.

j) All cables and wires shall be adequately protected mechanically against damages. In case the cable is required to be laid underground, it shall be adequately protected by covering the same with bricks. Plain cement Concrete (PCC) tile or any other approved means.

k) All armored cables shall be properly terminated by using suitable cable glands. Multi stranded conductor cables shall be connected by using cable lugs/sockets. Cable lugs shall preferably be crimped. They shall be of proper size and shall correspond to the current rating and size of the cable. Twisted connections will not be allowed.

- l)** All cable glands, armoring and sheathing of electric cables, metal circuits and their fittings, metallic fittings and other non-current carrying parts of electrical equipment and apparatus shall be effectively grounded.
- m)** All the Distribution Boards, Switch Fuse units, Bus bar chambers, ducts, cubicles etc. shall have MS enclosures and shall be dust, vermin and water proof. The Distribution Boards, switches etc. shall be so fixed that they shall be easily accessible. Changes shall be done only after the approval of the Departmental Electrical Engineer.
- n)** The contractor shall provide proper enclosures/covers of approved size and shape for protection of all the switch board, equipment etc. against rain. Exposed live parts of all electrical circuits & equipment shall be enclosed permanently. Crane trolley wires and other conductors which cannot be completely insulated shall be placed such that they are inaccessible under normal working conditions.
- o)** Iron clad industrial type plug outlets are preferred for additional safety.
- p)** Open type Distribution Boards shall be placed only in dry and ventilated rooms; they shall not be placed in the vicinity of storage batteries or otherwise exposed to chemical fumes.
- q)** Isolating switches shall be provided close to equipment for easy disconnection of electrical equipment or conductors from the source of supply when repair or maintenance work has to be done on them.
- r)** In front of distribution boards a clear space of 90 cm shall be maintained in order to have easy access during an emergency.
- s)** Adequate working space shall be provided around electrical equipment which require adjustment or examination during operation.
- t)** As far as possible electrical switches shall be excluded from a place where there is danger of explosion. All electrical equipment such as motors, switches and lighting fittings installed in work room where there is possibility of explosion hazard shall be explosion proof.
- u)** All connections to lighting fixtures, starters or other power supplies shall be provided with PVC insulated, PVC sheathed twin/three/four core wires to have better mechanical protection for preventing possible damage to equipment or injury to personnel. Taped joints shall not be allowed and the connections may be made in looping system. Electric starter of motors, Switches shall not be mounted on wooden boards. Only sheet steel mounting or iron frame work shall be used.
- v)** All the lighting fixtures and lamp holders shall be of good quality and in good condition. Badly repaired or broken holders, etc. shall not be used.
- w)** Only PVC insulated and PVC sheathed wires or armored PVC insulated and sheathed cables shall be used for external power supply connections of temporary nature. Weather proof rubber wires shall not be used for any temporary power supply connections. Taped joints in the wires shall not be used.
- x)** The bulbs/lamps used for illumination and testing purpose shall have cover or guard to protect them from accidental breakages. Only 24 V supply system shall be used for hand lamps etc, while working inside metallic tanks or conducting vessels.
- y)** After installation of new electric system and or other extensive alterations to existing installations, thorough inspection shall be made by Departmental Electrical Engineer before the new system or new extension is put in use.
- z)** Contractor shall ensure that power factor for their loads shall be maintained at 0.85. In case the power factor falls below 0.85, necessary capacitor units shall be provided by the contractor.

2.2 Operation & Maintenance

- a)** All persons who work with electrical installation/equipment shall be aware of the electrical hazards, use of protective devices and safe operational procedures. They shall be given training in firefighting, first aid and artificial resuscitation techniques.
- b)** The supervisor shall instruct the proper procedure, specify and enforce the use of necessary protective equipment such as adequately insulated pliers, screw drivers, fuse pullers, testing lamps and similar hand tools. Only wooden ladders shall be used to reach the heights in electrical work.
- c)** No material or earth work shall be allowed to be dumped below or in the vicinity of the bare overhead line conductors.
- d)** Separate work permits shall be issued for individual group leaders working on the same system which shall be returned after the completion of the work to Safety Supervisor and no system shall be energised without the clearance of Safety supervisor.
- e)** Before any maintenance work is commenced on electrical installations/equipment, the circuits shall be de-energised and ascertained to be dead by positive test with an approved voltage testing device. Switches shall be tagged or the fuse holders withdrawn before starting the work. Adequate precautions shall be taken in two important aspects viz.
 - I)** That there shall be no danger from any adjacent live parts and
 - II)** That there shall be no chances of re-energizations of the equipments on which the persons are working
- f)** While working on or near a circuit, whenever possible the use of one hand may be practiced even though the circuit is supposed to be dead. The other hand may preferably be kept in pocket.
- g)** When it is necessary to touch electrical equipment (for example when checking for overload of motors) back of the hand may be used. Thus, if accidental shock were to cause muscular contractions one would not 'freeze' to the conductor.
- h)** Operation of electrical equipment shall be avoided when standing on wet floor or when hands are wet.
- i)** Before blown fuses are replaced, the circuit shall be locked out and an investigation shall be made for the cause of the short circuit or overload.
- j)** When two persons are working within reach of each other, they shall never work on different phases of the supply.
- k)** When structural repairs, modification or painting work are to be undertaken, appropriate measures shall be taken for the protection of persons whose work may bring them into the proximity of live equipment/circuit.
- l)** It shall be ensured that the insulation and wire size of extension cords are adequate for the voltage and current to be carried.
- m)** While tapping electricity from the socket, plug top must be used. It shall be ensured that no extension boards are over loaded while tapping. Only standard three pin plugs shall be used for tapping electricity. Broken sockets/plugs shall be replaced immediately with good ones. Only joint free cables shall be used for connecting equipment/apparatus.
- n)** Floors shall be kept free from trailing electrical cables to avoid tripping hazard.
- o)** Power supply to all the machines and lighting fixture shall be switched off when not in use.
- p)** Temporary electrical connections shall be removed as soon as the stipulated work is over. After completion of the works, the contractor shall dismantle the distribution boards and the other facilities he may have erected.
- q)** Unauthorised tapping of power by others from distribution boards under the control of the contractor shall be prohibited at all circumstances.

- r) No flammable materials shall be stored in any working area near the switch boards.
- s) Safety work permits shall be used for switching off the main feeder and equipment by the contractor.
- t) "MEN ON LINE" " DO NOT SWITCH ON" "DANGER" or "CAUTION" board as applicable shall be used during maintenance works on the electrical equipment.

2.3 Portable electrical equipment

- a) Portable electrical equipment shall be regularly examined, tested and maintained to ensure that the equipment and its leads are in good order. Register shall be maintained for inspection recording, the testing dates and results of the equipments.
- b) All portable appliances shall be provided with three core cable and three pin plug. The third pin of the plug shall invariably be earthed. It shall be ensured that the metal part of the equipment shall be effectively earthed.
- c) All connections to portable equipment or machines from the panel/distribution board/extension board shall be taken using 3 core double insulated PVC flexible copper wire in one length. No joints shall be allowed in this flexible wire. In case single length of wire is not sufficient for a particular location then the supply can be tapped by providing another extension board comprising of switch and socket.
- d) Flexible cables for portable lamps, tools, and apparatus shall be regularly examined, tested periodically and maintained to ensure safety.

Procedure for Safe Working at heights

1.0 SCOPE:

1.1 For work at height of 3.5mts. and above from the ground floor, where a person is likely to fall from a height of 3.5mtrs., unless otherwise protected by rail or other means.

2.0 OBJECTIVE:

2.1 To ensure personnel working at heights are fit to work at such hazardous locations.

2.2 Safe working conditions at height exist i.e. strong working platform, handrail, toe guard, etc.

2.3 Personnel not to adopt unsafe practice while working at heights

2.4 To ensure use of appropriate personal protective equipment for safe working.

3.0 APPLICABILITY:

3.1 This procedure is applicable for work at height of 3.5mts and above from the ground floor, where a person is likely to fall from a height of 3.5mts unless otherwise protected by rail other means; this procedure shall be adopted by all the department staffs and all the contract workers executing works at IGCAR.

4.0 RESPONSIBILITY:

4.1 Responsibility for implementation of this procedure lies with the concerned person executing the work.

5.0 PRE-REQUISITE:

5.1 The concerned person executing the work and his supervisor shall check the entire work place (height more than 3.5mtrs.) with respect to safety. He shall take necessary guidance from Environmental & Industrial Safety Section (E&ISS) for ensuring the applicability and implementation of the procedure.

6.0 EQUIPMENTS AND ACCESSORIES:

6.1 Ladder, Safety Belts, Safety net and other PPE's.

7.0 IMPORTANT DEFINITION:

Fall Protection – It means items, which can;

7.1 Prevent a person from falling i.e. guard, railing, etc.

7.2 Arrest the falling of person i.e. safety belt.

7.3 Hold the falling person above the ground i.e. safety net.

8.0 PROCEDURE FOR OBTAINING HEIGHT PASS CERTIFICATE:

8.1 Departmental person shall undergo medical test as per listed test in the format enclosed (Annexure-1-Height Pass) by the Certifying Surgeon / Doctor at occupational health centre, IGCAR.

8.2 Contractor's personnel shall obtain the certificate in the format enclosed (height pass) from Certifying Surgeon / MBBS Doctor.

8.3 Person medically fit to work at heights shall be given safe work training and shall have undergo the physical test as per the format (annexure-1-height pass).

8.4 Medically and physically fit persons shall be issued height pass certificate and a registration number shall be assigned on the form and the same recorded in the height pass register.

8.5 The pass will be valid for 1 year from the date of issue. In case the individual wants to continue the work at height beyond this period he has to obtain a fresh height pass certificate.

9.0 SAFETY PRACTICE WHILE WORKING AT HEIGHT:

9.1 Apply for a height work permit (Annexure-2)

9.2 The concerned supervisor shall ensure that safe work environment exists, safe work methods followed (refer AERB notification, Annexure-4) and personnel working at height have valid height pass certificate.

9.3 Concerned Engineer in charge or contractor as applicable shall provide all necessary resources to achieve all objects as stated above.

9.4 Access to work area at height shall be ensured by providing portable ladders (Refer annexure-3 - ladder safety).

9.5 Safety net shall be fixed under the work spot so as to prevent fall of material and personnel to ground /floor to cause damage/injury if other fall protection means are not practicable.

9.6 Safety training of fall prevention shall be given to all workmen involved in such operations.

9.7 Hand tools used by the workmen at height shall be secured with static line / with body of the user (tool bag).

10.0 REFERENCES:

1. Atomic Energy (Factories) Rules, 1996.

2. AERB Notification (Refer AERB/IPSD/PKG/2004/8274 dt.29.11.2006)

Annexure-1

FILLED BY USER

HEIGHT PASS

(Working at heights more than 3.5 m above ground or floor)

Ref. No.

Valid upto:

(Valid only for 1Year from issue unless cancelled/withdrawn earlier by the issuing authority. It can be revalidated free of cost on due application to Head, IS. In case of loss, applicant must apply and appear for the practical test again.)

1. Full Name of applicant (Block letters)& Desgn. :

2. Present address :

3. Permanent Address :

4. Age and Sex:

5. Height and weight: _____ cm and _____ kg.

6. IC No. / Gate pass No. and Date :

7. Name of Contractor with whom engaged at present :

8. Contract work order No. :

9. Description of present Job :

| 10. Previous experience of working at heights: Name of employer | Duration of employment | Work experience |
|--|------------------------|-----------------|
| | | |

Declaration:

I here by declare that the above informations furnished by me is true and correct. I shall always wear the safety belt and tie the life line whenever working at height above 10 feet or in depth. I shall not misuse the height pass issued to me or transfer it to any other person. I shall never come to duty or work at height / depth under influence of alcohol.

Date

Signature and Name of the applicant

MEDICAL TEST

| | | |
|--|---|--|
| Blood pressure: Flat foot : Epilepsy : | Mental depression : Frequent headache or reeling sensation: | Limping gait : Vertigo Any other height related illness : |
|--|---|--|

Date of the Medical test

Signature and Name of the medical officer

Registration No. and seal

.....
PHYSICAL TEST

Date of physical Test:

(The above applicant has appeared at the following practical test conducted by Head, IS and the results are given below)

| | |
|--|------------|
| Walking freely over a horizontal bar at 1 ft. height: | :PASS/FAIL |
| Wearing a safety belt and tying the knot: | :PASS/FAIL |
| Walking freely over a horizontal structure at 10 ft. height: | :PASS/FAIL |
| General physique: | :PASS/FAIL |
| Climbing of rope | :PASS/FAIL |

The above applicant's performance in the above tests has been **satisfactory / un-satisfactory**. He has been issued a height pass bearing Sl. No. _____
(If found un-satisfactory mention reason):

Date of issue

Signature and Name of the issuing authority (E&ISS) with seal

.....

Annexure-2

FILLED BY USER

HEIGHT WORK PERMIT (More than 3.5 m)

Permit No.: _____ Date of issue _____ Validity _____

Location: Date:

Name of contractor: Work Order No.:

Name of Dept. Engineer In-charge :

| | |
|--|----------|
| Ladder for access and safe working platform | Yes / No |
| Check tightness of scaffolds and lending | Yes / No |
| Check for handrails | Yes / No |
| All openings protected / guarded against fall hazard | Yes / No |
| Check for the need of safety net at all openings | Yes / No |
| Personnel working at height has obtained height pass certificate and provided with safety belt. Option to tie belt exist | Yes / No |
| Fire Safety measures, if hot work is carried out at height | Yes / No |
| Area lighting for height works | Yes / No |
| Safe work procedure is available or not | Yes / No |
| Supervisor is available to supervise the job | Yes / No |

Contractor Supervisor/ Engineer

Contractor Safety Supervisor / Officer

Contractor Site Engineer In- charge

Industrial Safety

The work is permitted / Not Permitted :

Reason for rejection :

Industrial Safety

Revalidation of work permit(to be re-validated weekly till work completes and area is clear)

| | | | | |
|----------------|--|--|--|--|
| Date / Time | | | | |
| Name of issuer | | | | |
| Issuer initial | | | | |

LADDER SAFETY
ATOMIC ENERGY (F) RULES, 1996

Rule no. 52. LADDERS.- (1) Every ladder shall be of good construction, sound material and of adequate strength for the purpose for which it is used. The rungs shall be parallel, level and uniformly spaced at 30 cm.

(2) Ladders shall be inspected regularly and repaired immediately. No ladder with defective or missing rungs shall be used. Wooden ladders shall not be painted. For preserving the material from deterioration linseed oil or clear varnish shall be

(3) No portable single ladder shall be over 9 m in length the width between side rails in rung ladder shall in no case be less than 28 cm for ladder upto and including 3 m in length. For longer ladders this width shall be increased atleast 20mm for each additional metre of length. Uniform step spacing shall not exceed 30 cm.

(4) All ladders with spreading bases such as step and trestle ladders shall be equipped with rigid spreads or some other means to prevent their premature opening or closing.

(5) Ladders shall be in a safe position before being climbed. The best angle for a ladder is 75 with the horizontal ie the distance of the base of the ladder from the wall, pole structure etc., as the case may be shall be $\frac{1}{4}$ th its length.

(6) A ladder shall be stored upon brackets and in sheltered locations.

(7) A ladder shall not be placed upon a box, barrel, or other moveable insecure object and against a round or annular pillar such as pipe or narrow steel section etc.

(8) Two ladders must not be spliced together as far as possible. When it is inevitable they shall be tied together properly to ensure rigidity. Extra parallel members at the point of splicing may be added to each of the main members of the ladders. Two ladders shall not be spliced together to provide access to greater height than when a single ladder is used.

(9) Bamboo ladders shall be provided with twisted wire loops enclosing both longitudinal members to prevent them from opening outwards. However, such ladders where longitudinal members are reinforced with metal/wire loops shall not be used when working on electrical circuits.

(10) Metal ladders with insulating rubber shoes shall only be used for working with electrical lines or in places where they may come in contact with such wires.

(11) No worker shall work from a plank placed on the rungs of ladders.

(12) All permanently installed vertical ladders above a height of 3m shall have manguards provided.

AERB Notification (Refer AERB/IPSD/PKG/2004/8274 dt. 29.11.2004)

WORKING AT HEIGHT

- All open side of a structure above a height of 3.5 m from which worker might fall and openings into which a worker might fall should be adequately covered or barricaded. Every opening in the floor of a building, or in a working platform shall be provided with suitable fencing/railing of 1 m.
- Where barricades cannot be installed, a safety net should be installed close to the level at which there is a danger of a fall. During erection of tall buildings/ structures, above 3.5 m height nylon nets shall be provided to ensure safety of men if there is a fall from height in case it is not possible to provide barricades.
- Where a secure foothold is impracticable, safety belts or harnesses with secure anchorage points should be provided at the working place as well as access to the access path to the working spot. All persons working at heights more than 3.5 m above ground or floor and exposed to the hazard of falling down shall use safety belts
- At elevated places, secure access and foothold should be provided. Adequate and safe means of access shall be provided at all work places for all elevations. Means of access may be portable or fixed ladder, ramp or a stairway. The use of cross braces or framework a means of access to the working surface shall not be permitted.
- Scaffolding or staging 3.5m above the ground floor shall have guardrail properly attached, bolted, braced or otherwise secured at least 1m height above the floor and platform.
- Where the platform is more than 3.5 m above ground floor for working standing on the platform, the width should be minimum 1 m.

PART-II (PRICE BID)

Section- VIII
PRICE BID

Name of the work: Maintenance Contract for Online Monitors of FBTR During 2023-2025 at IGCAR, Kalpakkam

TENDER NO. - **IGCAR/RFG/OMG/TSD/RCS/2023/1**

IMPORTANT INSTRUCTIONS

1. This schedule must be read along with detailed specification and scope of work and general specifications for complete understanding.
 2. Items of work described in brief below are detailed under technical specification of work. The scope of work will not be estimated from the brief specification.
 3. Rate quoted must include all components required for meeting the specification and performance requirements of the item.
 4. For e-tendering mode, contractor must ensure to quote rate of each item. The column meant for quoting rate in figures appears in YELLOW colour and the moment rate is entered, it turns SKY BLUE. If any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
 5. Obtain the passes for men & materials as per the latest DAE Security procedure.
 - 6. Bidders are advised to get acquainted with the site conditions before quoting.**
 7. Schedule rate shall be firm and overall conditional discount for the total tendered amount will not be accepted
 8. Follow the safety norms as per clause of tender "AERB SAFETY GUIDELINES FOR CONTROL OF WORKS".
 9. All the required documents as instructed by the department have to be maintained properly and have to be submitted in time to the EIC by the contractor.
 10. Running account bills/final bill has to be prepared and be submitted by the contractor as specified by IGCAR format and as per agreement & all JMR (joint measurement record) has to be maintained day to day basis at site by the contractor.
- NOTE. "The quoted Rates shall be inclusive of GST@18% and shall be payable by the contractor and IGCAR will not entertain any claim whatsoever in this respect".

PRICE BID TO BE SUBMITTED ONLINE THROUGH WEB PORTAL ONLY.