

NUCLEAR POWER CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)
Directorate of Corporate Planning

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HEAD QUARTERS INSTRUCTION ISSUAL

TITLE: HEAD QUARTERS INSTRUCTIONS (HQI) – FOR GENERAL CONDITIONS OF CONTRACT FOR WORKS AND MAINTENANCE CONTRACTS AND NOTICE INVITING TENDER.

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NPCIL-HQI-0000	- Guidelines for preparation of HQIs
NPCIL-HQI-0001-0899 series	- Directorate of Operations
NPCIL-HQI-0901-0999 series	- Reactor Systems
NPCIL-HQI-1000 series	- Directorate of Human Resources
NPCIL-HQI-2000 series	- Directorate of Corporate Finance
NPCIL-HQI-3000 series	- Directorate of Contracts & Materials Management
NPCIL-HQI-4001-4499 series	- Directorate of Corporate Planning
NPCIL-HQI-4501-4999 series	- Information Technology Group
NPCIL-HQI-5001-5499 series	- Directorate of Engineering
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NPCIL-HQI-6000 series	- Directorate of Quality Assurance
NPCIL-HQI-7000 series	- Directorate of HSE/Public Awareness Group
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4.3

(S. Thakur)
Executive Director (CP&CC)

Note: The text of this HQI is available on intranet.
Read this HQI along with addendum.

GENERAL CONDITIONS OF CONTRACT

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1 GENERAL PROVISIONS

1.1 Definitions

- 1.1.1 **"Accepting Authority"** shall mean the authority mentioned in Schedule "A".
- 1.1.2 **"Corporation"** shall mean Nuclear Power Corporation of India Ltd. (NPCIL) and include its legal representatives, successors and permitted assigns.
- 1.1.3 **"Contract"** shall mean an agreement where a proposal has been accepted and shall include notice inviting the tender, the tender and acceptance thereof and the formal agreement, if any, executed between Nuclear Power Corporation of India Ltd and the Contractor together with the documents referred to therein including these conditions with appendices and any special conditions, specifications, designs, drawings, schedule of quantities with rates and amounts. All these documents taken together shall be deemed to form one contract and shall be complementary to one another.
- 1.1.4 **"Contractor"** is a person(s) named as contractor in the work order / agreement and its legal successors.
- 1.1.5 **"Contract Price"** shall mean:
- (i) in the case of **"Lumpsum Contracts"**, the sum for which the tender is accepted
 - (ii) in the case of **"Item Rate Contracts"**, the cost of the works arrived at after extension of quantities shown in Schedule of Quantities by the item rates quoted by the tenderer for various items.
- 1.1.6 **"Commissioning"** means the trial/initial operation of the works / facility or any part thereof by the contractor, for the purpose to demonstrate successful operation of the facility as per contract provisions.
- 1.1.7 **"Completion Certificate"** means the certificate issued by the Corporation on completion of works in accordance with sub clause 8.1 (Completion Certificate).
- 1.1.8 **"Completion Time"** means the time within which completion of the works or part (where a separate time of completion of such part has been prescribed) is to be completed as stipulated in the work order and in accordance with the provisions of contract.
- 1.1.9 **"Contract Documents"** means documents listed in the Contract Agreement including any amendments therein to.
- 1.1.10 **"Contractors' Equipment"** means all apparatus, machineries, vehicles and other things required for the execution and completion of the works and the remedying of any defects. However, contractors equipment excludes temporary works, employers equipment (if any), plant, materials and any other things intended to form or forming part of the works.
- 1.1.11 **"Contractors' Representative"** means the person nominated or appointed time to time by the contractor who acts on behalf of the contractor.

- 1.1.12 **"Corporations' Tools & Plants"** means the apparatus, machinery, tools, plants and vehicles (if any) made available by the Corporation for the use of the contractor in the execution of the work but it does not include plants which has not been taken over by the Corporation.
- 1.1.13 **"Country"** means the country in which the site is located where the works are to be executed.
- 1.1.14 **"Date of Commencement"** means the date when the contractor shall commence execution of the works as mentioned in the work order and the completion time for the work shall be reckoned from this date.
- 1.1.15A **"Day"** means a day of 24 hours from mid-night to mid-night irrespective of the number of hours worked in that day, a **"Week"** means seven days, a **"Month"** means a calendar month and a **"Year"** means 365 days without regard to the number of hours worked in any day.
- 1.1.16The **"Defect Liability Period"** is the period defined in the Schedule "A" during which the contractor is responsible for defects with respect to the works as provided in GCC clause No. 9 (Defect Liability).
- 1.1.17**"Defect"** means any part of the Works not executed in accordance with the Contract.
- 1.1.18**"Drawings"** means the drawings of the works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Corporation in accordance with the Contract.
- 1.1.19**"DRB"** means the Dispute Resolution Board appointed under sub-clause 17.3 (Appointment of the Dispute Resolution Board).
- 1.1.20**"Engineer-in-Charge"** shall mean the Officer appointed by the Corporation or his duly authorized representative who shall direct, supervise and be in charge of the works for purposes of this Contract.
- 1.1.21**"Excepted Risks"**, are the risks due to riots (other than that among Contractor's employees) and civil commotion (in so far as both these are uninsurable), war (whether declared or not), invasion, act of foreign enemies, global terrorism, civil war, rebellion, munitions of war, explosive materials, ionizing radiation or contamination by radio activity, revolution, insurrection, military or usurped power, any acts of Government, damage from aircrafts, sabotage, acts of God such as earthquake, lightning, cyclones, Tsunami 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 the **"Corporation"** of the part of Works in respect of which a certificate of completion has been issued.
- 1.1.22 **"GCC"** means the General Conditions of Contract.
- 1.1.23**"Latent Defects"** shall mean any defects which exists but has not surfaced at the time of testing and has not manifested during defect liability period.
- 1.1.24**"Laws"** means all national (or state) legislation, statutes, ordinances and other laws and regulations and by-laws of any legally constituted public authority.

- 1.1.25 **"Local Currency"** means the currency of India. **"Foreign Currency"** means a currency in which part (or all) of the Contract Price is paid in currency other than the Local Currency.
- 1.1.26 **"Market Rate"** shall be the rate as decided by the Engineer-In-Charge on the basis of the cost of materials and labour at the Site where the work is to be executed, plus 10 % to cover all overheads and profit. For material issued by the Corporation, the overheads and profit percentage shall be allowed @ 2.5%.
- 1.1.27 **"Minimum Wages"** shall be the minimum wages declared from time to time by the state or central government, whichever is higher.
- 1.1.28 **"Near Relatives"** means wife, husband, parents and grand parents, children and grand children, brothers and sisters, uncles and aunts, cousins and their corresponding in-laws.
- 1.1.29 **"Part Completion Certificate"** means the certificate issued by the Corporation on completion of items or group of items for which separate period of completion have been specified in the contract, issued in accordance with Sub clause 8.1 (Completion Certificate).
- 1.1.30 **"Party"** shall mean Corporation or Contractor, as the context requires.
- 1.1.31 **"Performance Guarantee"** is the guarantee to be submitted by the Contractor to the Corporation in accordance with sub-clause No. 4.2.3 (Performance Guarantee).
- 1.1.32 **"Pre-Commissioning"** means the testing, checking and other requirements specified in the technical specifications that are to be carried out by the contractor in preparation for commissioning.
- 1.1.33 **"Retention Money"** means the accumulated retention money which the Corporation retains from the Running Bills as specified in sub-clause No. 4.2.5 (Retention Money)
- 1.1.34 **"Schedule(s)"** referred to in these conditions shall mean the relevant schedule (s) annexed to the tender papers issued by the Corporation.
- 1.1.35 **"Scheduled Commercial Bank"** in India as per definition of Reserve Bank of India shall include of the following bank groups (i) State Bank of India and its associates, (ii) Nationalized Banks, (iii) Regional Rural Banks, (iv) Foreign Banks and (v) Other Indian Scheduled Commercial Banks (in the private sector).
- 1.1.36 **"Site"** means the places where Works are to be executed, including storage and working areas, and to which Plant and Materials are to be delivered and any other places as may be specified in the Contract as forming part of the Site .
- 1.1.37 **"Specification"** means the specification of the works included in the contract and any modification / addition made or approved by the Engineer-in-charge.
- 1.1.38 **"Sub-Contractor"** means any person named in the Contract as a Sub-Contractor, or any person appointed as a Sub-Contractor, for a part of the Works; and the legal successors in title to each of these persons. Piece rate Contractors are not to be considered as Sub-Contractor.
- 1.1.39 **"Temporary Works"** shall mean all temporary works of every kind required in or

about the execution, completion or maintenance of the Works.

1.1.40 "**Urgent Works**" shall mean any urgent measures which, in the opinion of Engineer-in-Charge, become necessary during the progress of Work to obviate risk of accident or failure or which become necessary for security and safety.

1.1.41A "**Variation**" is an instruction / communication given by Engineer-in-charge or his representative, which varies the works.

1.1.42 "**WCMS**" shall mean the Work contract Management system software used by NPCIL for handling works contract.

1.1.43 "**Work order**" is the formal communication by the Corporation to the bidder whose bid has been accepted

1.1.44 "**Works**" shall mean the works to be executed in accordance with the Contract or part(s) thereof as the case may be and shall include all extra or additional, altered or substituted works as required for execution of the Contract. It shall include variations and urgent works.

Any term which is not defined herein but defined under different enactment shall be construed to have the same meaning as defined in the act.

1.2 Interpretation

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and vice versa;
- (c) the word "tender" is synonymous with "bid", "tenderer" with "bidder" and "tender documents" with "bidding documents"; and
- (d) 'written' or 'in writing' means hand-written, type-written, printed or electronically made, which would be produced physically as an evidence for the communication.

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

1.3 Law and Language

1.3.1 The contract shall be governed by the law of the country or other jurisdiction stated in the contract. The country unless otherwise stated in the contract shall be India.

1.3.2 The ruling language of the contract shall be English unless otherwise stated in the Contract.

1.4 Priority of Documents

1.4.1 In the case of discrepancy between Schedule of Quantities, the special conditions, the Specifications and/or the Drawings, the following order of preference shall be observed:

- (a) Description in Schedule of Quantities and rates
- (b) Special Conditions of Contract, if any
- (c) Drawings

(d) Technical specifications

(e) General Conditions of Contracts

1.4.2 Any inadvertent 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 the works comprised therein according to terms and conditions or from any of his obligations under the Contract.

1.4.3 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.

1.5 Contractor's Documents for use by Corporation

1.5.1 The Contractor shall maintain at his Site Office all drawings, specifications and other Contract documents and any other supplementary data complete with all the latest revisions thereto. The Contractor shall also maintain, in addition, the continuous record of all changes to the above Contract documents, drawings, specifications, supplementary data, etc. effected at the site. Whenever called by Engineer-in-charge, the Contractor shall incorporate all such changes on the drawings and other engineering data to indicate actual construction/fabrication and erection carried out under the Contract. Two copies of such revised / updated drawings and engineering data shall be submitted to the Engineer-in-Charge along with the soft copies on completion of his total assignment or the milestones as specified under the Contract.

1.5.2 The Contractor shall be deemed (by signing the Contract) to give to the Corporation a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This license shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in lawful possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- (c) in the case of Contractor's Documents, which are recorded in computer programs and other software, permit the access to the data through any computer on the Site.

1.5.3 The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Corporation for purposes other than those permitted under this sub-clause.

1.6 Corporation's Documents for use by Contractor

1.6.1 The Corporation shall retain copyright and other intellectual property rights of their Specification, the Drawings and other documents made by (or on behalf of) the Corporation. The Contractor may, at his cost, copy, use, and

obtain communication of these documents for the purposes of the Contract. They shall not, without the Corporation's consent in writing, be copied, used or communicated to a third party by the Contractor.

1.7 Confidential Details

- 1.7.1 The Contractor shall take necessary steps to ensure that all persons employed on any work in connection with this Contract have noticed that the Indian Official Secrets Act, 1923 (XIX of 1923) applies to them and shall continue to apply even after the execution of such works under the Contract.
- 1.7.2 The Contractor's and the Corporation's Personnel shall disclose all such confidential and other information as may be reasonably required in order to verify compliance with the Contract and allow its proper implementation.
- 1.7.3 Each of them shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Works prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.

1.8 Compliance with Law

- 1.8.1 The Contractor shall, in executing the Contract, comply with applicable Laws. Unless otherwise stated:
 - (a) the Corporation shall have obtained (or shall obtain) the planning, zoning, building permit or similar permission for the Permanent Works, and any other permissions described in the Specification as having been (or to be) obtained by the Corporation; and the Corporation shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and
 - (b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licenses and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Corporation harmless against and from the consequences of any failure to do so, unless the Contractor is impeded to accomplish these actions and shows evidence of its diligence.

1.9 Changes in Constitution

- 1.9.1 Where the Contractor is a partnership firm, Joint Venture, collaborate or consortium, prior approval in writing of the Accepting Authority (defined by the Corporation) 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 firm which would have the right to carry out the work hereby undertaken

by the Contractor.

- 1.9.2 Where the Contractor is a partnership firm, Joint Venture, collaborate or consortium partnership the Contractor shall intimate the Corporation of any change or modifications in the terms within their partnerships, which could happen between the submission of bids and awarding of bid. The Contractor shall obtain prior approval in case of any such change or modification happens during the currency of the contract.
- 1.9.3 If prior approval as aforesaid is not obtained, the Contract shall be deemed to have been assigned in contravention thereof and the same action may be taken as provided for in the said clause 13.2 (Determination/Cancellation of Contract).

1.10 Conflict of Interest

- 1.10.1 The Contractor shall not be permitted to tender for works in the NPCIL units (responsible for award and execution of work) in which his near relative is posted as an officer in any capacity.
- 1.10.2 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 of any officer in the NPCIL.
- 1.10.3 He shall also intimate if any employee of the Corporation has or develops a financial or other interest of either with the Contractor or his company during the execution of the contract.
- 1.10.4 The Contractor shall also intimate if any of the employee of NPCIL has any financial interest in the Contractor's firm or company.
- Any breach of the above conditions by the Contractor would render him liable for cancellation of the Contract.

1.11 Patent Indemnity

- 1.11.1 The contractor shall fully indemnify the Corporation 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 an action brought against Corporation in respect of any such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom. Provided that the contractor shall not be liable to indemnify the Corporation in 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.

2 THE CORPORATION

2.1 Possession of Site

- 2.1.1 The Contractor shall not be permitted to enter on (other than for inspection purposes) or take possession of the site until instructed to do so by the Engineer-in-Charge in writing. The portion of the Site to be occupied by the Contractor shall be defined and /or marked on the Site Plan, failing which these shall be indicated by the Engineer-in-Charge at site and the Contractor shall on no account be allowed to extend his operations beyond these areas.
- 2.1.2 It is deemed that the Contractor has inspected and has full knowledge of the site.
- 2.1.3 The Engineer-in-charge shall give the Contractor right of access to and possession of, part or all parts of the Site (as deemed necessary) within the time specified in the Schedule A.
- 2.1.4 If no such time is stated in the Contract, the Corporation shall give the Contractor right of access to, and possession of, the Site within such times as required to enable the Contractor to proceed without disruption in accordance with the program submitted.
- 2.1.5 The Corporation may withhold the action on giving the right of access to and possession of site to the Contractor till the Performance Guarantee and acceptance of work order has been received.

2.2 Permits, Licenses or Approvals

- 2.2.1 The Corporation shall provide, at the request of the Contractor, such reasonable assistance or direction, which shall be limited to the issue of necessary certificates as required under law so as to allow the Contractor to obtain the following:
 - (a) copies of the Laws of the Country which are relevant to the Contract but are not readily available, and
 - (b) any permits, licenses or approvals required by the Laws of the Country which the Contractor is required to obtain under sub-clause 1.8 [Compliance with Law], for the delivery of Goods, including clearance through customs, and or the export of Contractor's Equipment when it is removed from the Site.
- 2.2.2 However, no claims can be made by the Contractor with respect to this clause.

2.3 Corporation's Personnel

- 2.3.1 The Corporation shall be responsible for ensuring that the Corporation's Personnel and the other Contractors deputed by Corporation at the Site:
 - (a) co-operate with the Contractor's efforts under sub-clause 4.21 [Co-operation and Facilities to Other Contractors], and
 - (b) take or facilitate actions similar to those which the Contractor is required to take under Sub-Clause 5.6 [Health and Industrial Safety]

and Sub-Clause 4.13 [Protection of the Environment].

2.4 Corporation Claims

- 2.4.1 If the Corporation considers itself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the defect liability period, the Engineer-in-charge shall give notice and particulars to the Contractor. However, notice is not required for payments due under Electricity, Water and Gas, Corporation's Equipment, Free-Issue Material and municipal taxes on land utilized for colony or for other services rendered by the Corporation.
- 2.4.2 The notice shall be given as soon as practicable after the Corporation became aware of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Liability Period shall be given before the expiry of such period.
- 2.4.3 The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount and/or extension to which the Corporation considers itself to be entitled in connection with the Contract. The Corporation shall set off or deduct against amount due, or otherwise to claim against the Contractor.

3 THE ENGINEER-IN-CHARGE

3.1 Engineer-In-Charge's Duties and Authority

- 3.1.1 The Corporation shall nominate the Engineer-in-charge, who shall carry out the duties assigned to him in the Contract. The Engineer-in-charge's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.
- 3.1.2 The Engineer-in-Charge is entitled to watch and supervise the works and to test and examine any materials to be used or workmen employed in connection with the works.
- 3.1.3 Engineer-in-charge shall also certify and release payments for the work done and make deductions as per the contract.
- 3.1.4 The Engineer-in-charge may exercise the authority attributable to the Engineer-in-charge as specified in or necessarily to be implied from the Contract. The Corporation shall promptly inform the Contractor of any change to the authority attributed to the Engineer-in-charge.
- 3.1.5 Except as otherwise stated in these Conditions:
 - (a) Whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer-in-charge shall be deemed to act for and behalf of the Corporation;
 - (b) Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, supervision or similar act by the Engineer-in-charge (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances.

- (c) Any act by the Engineer-in-charge in response to a Contractor's request except otherwise expressly specified shall be notified in writing to the Contractor within 30 days of receipt.

3.2 Instructions of the Engineer-In-Charge

- 3.2.1 Subject as otherwise provided in this Contract, all notices to be given on behalf of the Corporation and all other actions to be taken on its behalf shall be given or taken by the Engineer-in-Charge or any Officer for the time being entrusted with the functions, duties and powers of the Engineer-in-Charge.
- 3.2.2 All instructions, notices and communications, etc. under the Contract shall be given in writing and if sent by registered / Speed post to the last known place of abode or business of the Contractor, shall be deemed to have been served.
- 3.2.3 The Contractor or his Agent shall be in attendance at the Site(s) during all working hours and shall supervise the execution of the Works with such additional assistance in each trade as the Engineer-in-Charge may consider necessary. 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.
- 3.2.4 The Contractor shall comply with the instructions given by the Engineer-in-charge or delegated representative, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Engineer-in-charge or a delegated representative:
- (a) gives an oral instruction,
 - (b) receives a written confirmation of the instruction, from the Contractor, within 2 working days after giving the instruction, and
 - (c) does not reply by issuing a written rejection and/or instruction within 7 working days after receiving the confirmation, then the confirmation shall constitute the written instruction of the Engineer-in-charge or delegated representative (as the case may be).

3.3 Replacement of the Engineer-In-Charge

- 3.3.1 If the Corporation intends to replace the Engineer-in-charge the Corporation shall intimate the Contractor of the name and designation of the intended replacement Engineer-in-charge.

4 THE CONTRACTOR

4.1 Contract Documents

- 4.1.1 The Specification and Drawings shall be in the custody and care of the Corporation. unless otherwise stated in the Contract, two copies of the Contract documents and three copies of each drawings shall be supplied to the Contractor free of charge.
- 4.1.2 Each of the Contractor's Documents shall be in the custody and care of the Contractor. The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the

Contract. The Engineer-in-charge shall have the right of access to all these documents at all reasonable times.

- 4.1.3 If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect

4.2 Security Deposit

- 4.2.1 Total Security Deposit (SD) shall be calculated as under

- (i) Contract value up to Rs.100 Crores - 10% of Contract Value.
- (ii) Contract value more than Rs. 100 Crores – 5% of Contract Value subject to a minimum of Rs 10 Crores.

Note: The contract value for the purpose of this clause shall be taken as the value of the contract awarded.

- 4.2.2 Security Deposit as calculated based on above parameters shall be split in the following of two parts and furnished accordingly;

- a) Performance Guarantee to be submitted on award of work (50% of Security Deposit), and
- b) Retention money to be recovered from Running Bills (50% of Security Deposit).

- 4.2.3 **Performance Guarantee:** The Contractor shall deliver the Performance Guarantee to the Corporation within 30 days after issue of work order. The Performance guarantee shall be issued by an entity and from within the country approved by the Employer, and shall be in the form of Bank Guarantee or FDR or any other form of deposit stipulated by the Corporation.

- 4.2.4 Failure of the successful bidder to comply with furnishing the performance guarantee within 30 days as stated above shall constitute sufficient grounds for cancellation of the award of work.

- 4.2.5 **Retention Money:** Retention Money shall be deducted at the rate of 6% of the value of work done from Running Bills till the 50% of Security Deposit amount so calculated as above, is built up. Total of Performance Guarantee & Retention Money should not exceed the amount of security deposit calculated as above.

- 4.2.6 When the retention money reaches the limit of 5 lakhs, the Contractor, if he so desires, may convert the amount into a Bank Guarantees as aforesaid.

- 4.2.7 In case a Fixed Deposit Receipt of any bank is furnished by the Contractor to the Corporation as part of the Security Deposit and the bank goes into liquidation or for any other reasons is likely to be unable to make payment against the said Fixed Deposit Receipt, the loss caused thereby shall be borne by the Contractor and the Contractor shall forthwith or on demand furnish additional security to the Corporation to make good the deficit.

- 4.2.8 The Corporation may deduct any sum of money payable by the Contractor under the terms of this Contract or any other Contract or any other account whatsoever from his security deposit. In the event of his security deposit amount being reduced by reasons of such deduction as aforesaid, the

Contractor shall within 10 days of receipt of notice of demand from the Engineer-in-Charge make good the deficit.

4.2.9 FDR / Bank Guarantee shall be accepted only from Scheduled commercial banks in India.

4.2.10 No interest will be paid on Security Deposit (Performance Guarantee and Retention Money).

4.3 Refund of Security Deposit

4.3.1 The retention money will be refunded to the Contractor after one month from the date of issue of Completion Certificate on receipt of request from the contractor, if as per the Engineer-In-Charge the balance amount of security deposit (Performance Guarantee) is sufficient to cover the Liabilities.

4.3.2 After the expiry of the Defects Liability Period, the balance amount of security deposit i.e. the Performance Guarantee shall be refunded by the Engineer-in-Charge to the Contractor. However, if any work remains to be executed under Clause 9 [Defects Liability], the Engineer-in-Charge shall withhold the estimated cost of such rectification work until it is executed.

4.4 Sub-contracts

4.4.1 The Contractor shall not sub-contract the work or any portion of the work without the prior written approval of the Engineer-in-Charge. Piece rate work shall not be deemed as sub-contract. Sub contracting does not alter the Contractor's obligations and responsibilities.

4.4.2 The Contractor shall not employ Sub-Contractor against whom the Engineer-in-charge raises reasonable objection by notice to the Contractor with supporting particulars.

4.4.3 The Contractor shall pay to the Sub-Contractor the amounts shown on the Sub-Contractor's invoices approved by the Contractor. The Corporation may pay, direct to the Sub-Contractor, part or all of such amounts which are due to the Sub-Contractor and for which the Contractor has failed to make the payment. The Contractor shall then repay, to the Corporation, the amount which the Sub-Contractor was directly paid by the Corporation with interest at prevailing rate. If the Contractor fails to repay, the same shall be adjusted against any dues payable to the Contractor along with interest for the intervening period. In this regard the decision of the Engineer-in-charge shall be final.

4.5 Construction Coordination

4.5.1 The field activities of the Contractors working at Site will be coordinated by the Engineer-in-Charge and his decision shall be final in resolving any disputes or conflicts between the Contractor and other Contractors regarding scheduling and co-ordination of work.

4.5.2 Engineer-in-Charge shall hold periodic meetings with the Contractors working at Site, at a time and a place to be designated by him. The Contractor shall attend such meetings and shall strictly adhere to the decisions taken during the meeting in executing his works.

4.6 Setting out the Work

4.6.1 The Engineer-in-Charge shall supply dimensioned drawings, levels and provide all necessary information to enable the Contractor to set out the works. The contractor shall make reasonable efforts to verify its accuracy before its use and the Corporation shall not be responsible for any error at a subsequent stage unless it is found that such error has crept in as a result of incorrect data furnished in writing by the Engineer-in-charge. The Contractor shall protect and preserve all reference baseline and bench marks used in setting out the works till end of the Defects Liability Period unless the Engineer-in-Charge directs their earlier removal.

4.7 Quality Compliance

4.7.1 The construction/fabrication and erection of works under the scope of this Contract shall be executed in accordance with the specifications and drawings. The Contractor shall adopt suitable quality assurance program, commensurate with NPCIL QA program.

4.8 Sufficiency of the Accepted Contract Amount

4.8.1 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. The rates and prices quoted by the Contractor in the Schedule of Quantities shall, except as otherwise provided, cover all his obligations under the Contract and all matters and resources necessary for the proper execution and completion of the Works and the remedying of any defects till the end of defect liability period.

4.9 Reporting of Hindrances

4.9.1 The Contractor shall record hindrances if any, in the Hindrance register as specified in the sub clause 7.4 [Hindrances]. Hindrances recorded and accepted by the Engineer-in-charge in the register shall be the basis for granting extension of time. The hindrance register shall be in the custody of the Engineer-in-charge.

4.10 Supply of Goods

4.10.1 The Contractor shall place purchase order well in time for supply of goods as deemed necessary as per the contract. He shall arrange to give notice sufficient in advance for necessary quality assurance at the place of manufacturing. The contractor shall submit an unpriced copy of Purchase order to Engineer-in-charge in order to ensure that all the requirements of technical specifications have been met.

4.11 Transport of Goods

4.11.1 Unless otherwise stated:

- a) the Contractor shall give the Engineer-in-charge not less than 10 days notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the

Works.

- 4.11.2 The Contractor shall indemnify and hold the Corporation harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and pay all claims arising from their transport.

4.12 Contractor's Equipment

- 4.12.1 The Contractor shall bring only the required equipments for the execution of works and shall be responsible for all his equipments. The equipments when brought to the site shall be in working condition and deemed to be exclusively intended for the execution of this Works. The Contractor shall not remove from the Site any major items of his Equipment without the written consent of the Engineer-in-charge. List of equipments brought to site shall be submitted to the Engineer-in-charge.

4.13 Protection of the Environment

- 4.13.1 The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to avoid damage and nuisance to any people and property resulting from pollution, noise and other consequences of his operations.
- 4.13.2 Contractor shall not at any time do, cause or permit any nuisance on site or do anything which shall cause unnecessary disturbance to owners, tenants or occupants of other properties near the site and to the general public.
- 4.13.3 The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values stated in the Specification, if any, or prescribed by applicable Law of the land.

4.14 Electricity

- 4.14.1 Electric power, if available (Refer Schedule A), will be provided by the Corporation at one point (the farthest distance from the work site would be 100 meters). All distribution system and metering unit should be arranged for by the Contractor himself at his own cost, complying with all relevant act/regulations. Charges for energy consumed shall be as per Schedule 'A'. For the purpose of planning, the bidder shall furnish along with his bid, the estimated requirement of electric power for execution of work in terms of maximum demand and daily energy in kWh.
- 4.14.2 Disruption in supply or non-availability of electricity shall not entitle the Contractor for any claim for compensation either in time or money. He shall make prior arrangements for such contingency to carry on with the work without interruption.
- 4.14.3 Load required can be changed twice on the request of Contractor during the currency of contract subject to prior approval by Engineer-In-Charge.
- 4.14.4 Electric power, if available can be provided to one or more places, in case in the opinion of Engineer-in-charge it is absolutely necessary and will accelerate the work.

4.15 Work during Night or on Sundays and Holidays

4.15.1 Prior written permission of the Engineer-in-Charge shall be taken whenever any works are proposed to be carried out during night or on Sundays or on authorized Holidays except when the work is unavoidable or absolutely necessary for safety of life or property of works, in which case the Contractor shall immediately inform the Engineer-in-Charge accordingly.

4.16 Material obtained from Excavation

4.16.1 Materials of any kind obtained from dismantling of a structure, excavation on the Site etc. shall remain the property of the Corporation and shall be disposed off as the Engineer-in-Charge may direct.

4.17 Treasure, Trove, Fossils, etc.

4.17.1 All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site from dismantling of structure, excavation etc shall be placed under the care and authority of the Corporation. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings. Incase where in the work or part thereof is suspended by the Corporation for protection of such articles, then the sub-clause 7.9(Suspension of Work for a period up to 90 days) or sub-clause 7.10 (Prolonged Suspension of Work (beyond 90 days)) shall be applicable, as the case may be.

4.18 Site Drainage

4.18.1 All water which may accumulate on the Site during the progress of the works, or in trenches and excavated areas, from causes other than the Excepted Risks (as defined in the Definitions) shall be removed from the Site to the satisfaction of the Engineer-in-Charge and at cost of the Contractor.

4.19 Protection of Trees

4.19.1 Trees designated by the Engineer-in-Charge shall be protected from damage during the course of the works and earth level within 1 metre of each such tree shall not be changed. Where necessary, such trees shall be protected by providing temporary fencing. Where tree uprooting is unavoidable, procedures as directed by the Engineer-in-Charge shall be strictly complied with.

4.19.2 The Contractor shall plant and maintain trees during the currency of Contract, as specified in schedule A.

4.20 Security of the site

4.20.1 The Contractor shall provide and maintain at his own expense all lights, guards, fencing, watch and ward when and where necessary or required by the Engineer-in-Charge for protection of materials and the works or for the safety and convenience of those employed on the Works or the public.

4.20.2 The Contractor shall be responsible for keeping unauthorized persons off the site.

4.21 Co-operation and Facilities to Other Contractors

4.21.1 The Contractor shall co-operate and share the Site with other Contractors, public authorities, utilities, and with the Corporation as instructed by the

Engineer-in-charge during the currency of the contract. The Corporation may modify the schedule of work for other Contractors and shall notify the Contractor of any such modification.

- 4.21.2 The Contractor shall, in accordance with the requirements of the Engineer-in-Charge, afford all reasonable facilities to other Contractors engaged contemporaneously on separate contracts. Similarly the departmental labour and labour of any other authorized agency or statutory body which may be employed or deployed at the Site for execution of any other work may also be extended co-operation and facility by the contractor.

4.22 Training of Apprentice

- 4.22.1 The Contractor as well as his Sub-Contractor shall provide training during the currency of the Contract, to such number of Apprentices (given in Schedule A) as engaged/employed by the Corporation. The Contractor shall train them as required under The Apprentices Act, 1961. The Corporation shall make payment to apprentices as required under the Act.

4.23 Water Supply

- 4.23.1 **Water Supply:** The Contractor shall make his own arrangements for water required for the work and nothing will be paid for the same. This will be subject to the following conditions:

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

- 4.23.2 **Departmental Water Supply:** Water, if available, (Refer schedule A) may be supplied to the Contractor by the Corporation subject to the following conditions:

- (i) The water charges as stipulated in Schedule A shall be recovered from the Contractor.
- (ii) The Contractor shall make his own arrangement for water connection and laying of pipelines from existing mains of source of supply and metering. The distance of the available water supply shall not be more than 100 metres from the work site.
- (iii) The Corporation do not guarantee to maintain uninterrupted supply of water and it will be incumbent on the Contractor to make alternative arrangements for water at his own cost in the event of any temporary breakdown in the Corporation's water mains so that the progress of his work is not held up for want of water. No claim of damage or refund/reimbursement of water charges will be entertained on account of such breakdown.

4.24 Land

- 4.24.1 **Land for Contractor's Office, Stores, Workshop etc.:** The Engineer-in-Charge shall,

at his discretion and for the duration of the Contract, make available at site, land for construction of Contractor's field office, workshop, stores, assembling yard, etc required for execution of the Contract. Leveling and dressing of site, any construction of temporary roads, offices, workshops, etc. as per plan approved by the Engineer-in-Charge shall be done by the Contractor at his own cost.

4.24.2 Land for Contractor's Colony: Land will be given, if available, (Refer schedule A) by the Corporation for the Contractor's colony. Where ever applicable the Contractor may indicate the requirement of land for the colony along with his tender. Land will be made available for the period of Contract. The Contractor shall make his own arrangement for water supply, electric supply, sanitation, access road and general cleanliness of his colony. All these amenities shall be got approved by the Engineer-in-Charge prior to construction of the camp. The Contractor shall not permit any of his personnel to maintain any living quarters within the Corporation's land other than the land allotted for colony. In case the land allotted for setting up the camp / colony is on lease, the contractor shall pay the appropriate municipal taxes / duties as applicable.

4.24.3 In respect of any land allotted to the Contractor for purposes of or in connection with the Contract, the Contractor shall be a licensee subject to the following and such other terms and conditions as may be imposed by licensor:-

- (i) that he shall pay a nominal license fee of Re.1 per hectare per year or part of a year for use and occupation, in respect of each and every separate area of land allotted to him.
- (ii) that such use or occupation shall not confer any right of tenancy of the land to the Contractor.
- (iii) that the Contractor shall be liable to vacate the land on demand by the Engineer-in-Charge.
- (iv) that the Contractor shall have no right to any construction over this land without the written permission of the Engineer-in-Charge. In case, he is allowed to construct any structure he shall have to demolish and clear the same before handing over the completed work unless agreed to the contrary.

On completion of work, the Contractor shall handover the land duly cleaned to the Engineer-in-Charge. Until and unless the Contractor has handed over the vacant possession of land allotted to him for the above purposes, the payment of his final bill shall not be made. The Contractor shall be made liable to pay at the rate of **Rs. 5,000 per week** as a penalty for the use and occupation of land beyond 6 months from the date of physical completion of work.

5 STAFF, LABOUR AND INDUSTRIAL SAFETY

5.1 Engagement of Staff and Labour

5.1.1 The Contractor shall not employ any person who has not completed eighteen years of age. He shall employ labour in sufficient numbers to maintain the required rate of progress and to complete the contract in the stipulated

completion time. He shall engage skilled and experienced workmen to the satisfaction of the Engineer-in-Charge to ensure workmanship as per the Contract.

5.1.2 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour (local or other) and for their payment, housing, catering, transport etc.

5.1.3 Contractor shall employ their workmen, preferably from amongst the project affected eligible persons. Contractor, if asked by Engineer-In-Charge shall submit regularly in a prescribed performa, a list of such project affected persons employed by him throughout the contract period.

5.1.4 The contractor shall indemnify that the labour / workmen engaged by him are trained and certified for intended work.

5.2 Rates of Wages and Conditions of Labour

5.2.1 The Contractor shall pay to labour employed by him either directly or through Sub-Contractors wages in accordance with the rules, regulations and the law in force relating to the payment of wages for the workers.

5.2.2 The Contractor shall pay not less than the minimum wages declared from time to time by Central or State Government, whichever is higher.

5.2.3 The Contractor shall intimate the Engineer-in-charge well in advance the date of payment to the workers. A representative on behalf of Engineer-in-charge shall be present at the time of payment disbursement. Contractor shall obtain certificate of witness of payment by representative of Engineer-in-charge.

5.3 Persons in the Service of Corporation and other Contractors

5.3.1 The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Corporation's Personnel without prior approval of Engineer-in-charge.

5.3.2 The Contractor shall not recruit, either on full-time or part-time basis, the staff and labour from other Contractors, working with the Corporation, without prior approval of Engineer-in-charge.

5.4 Labour Laws

5.4.1 The Contractor and his Sub-Contractors shall abide at all times by all existing labour enactment and rules, regulations, notifications, amendments and bye laws etc. issued by the State or Central Government or local administrative authorities applicable therein issued from time to time during the subsistence of contract. The Contractor shall keep the Corporation indemnified, in case any action is taken against the Corporation by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments.

5.4.2 In the event of the Contractor committing a default or breach of any of the provisions of the aforesaid Contractor's Labour Regulations as amended from time to time the corporation may impose penalty for each of such default as necessary. The Engineer-in-charge shall deduct such amount from bills or security deposit of the Contractor. The decision of the Engineer-in-

Charge in this respect shall be final and binding.

5.4.3 The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Corporation at any point of time.

5.4.4 List of some of the Major laws applicable to establishments engaged in building and other construction work are listed below. For details, latest versions of relevant Acts and laws should be referred.

- Workmen Compensation Act, 1923
- Payment of Gratuity Act, 1972
- Employees P.F and Miscellaneous Provision Act, 1952:
- Maternity Benefit Act, 1951:
- Contract Labour (Regulation & Abolition) Act, 1970
- Minimum Wages Act, 1948
- Payment of Wages Act, 1936
- Equal Remuneration Act, 1979
- Payment of Bonus Act, 1965:
- Industrial Disputes Act, 1947
- Industrial Employment's (Standing Orders) Act, 1946:
- Trade Unions Act, 1926:
- Child Labour (Prohibition & Regulation) Act, 1986:
- Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act, 1979
- The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act, 1996 and the Cess Act, 1996
- Factories Act, 1948
- Employees State Insurance Act, 1948
- Atomic Energy Factories Rules, 1996

5.4.5 Contractor shall at his own expense comply with or cause to be complied with Model Rules for Labour Welfare as appended to these conditions or rules framed by the Government from time to time for the protection of health and for making sanitary arrangements for workers employed directly or indirectly on the works. In case the Contractor fails to make arrangements as aforesaid, the Engineer-in-Charge shall be entitled to do so and recover the cost thereof from the Contractor.

5.4.6 Failure to comply with Model Rules for Labour Welfare (as annexed) and to grant of maternity benefits to female workers shall make the Contractor liable to pay to the Corporation as a penalty an amount not exceeding Rs.5000/- for each default or materially incorrect statement.

5.4.7 The Contractor shall be liable to pay his contribution and the employees contribution to the State Insurance Scheme in respect of all labour employed

by him for the execution of the Contract, in accordance with the provisions of "The Employees State Insurance Act, 1948" as amended from time to time. The Contractor shall submit to the Corporation the copy of monthly Challans of payments made for PF and ESI.

- 5.4.8 The Engineer-in-Charge shall have the powers to deduct any sum from the amount due to contractor for making good the loss suffered by worker(s) by reason of non-fulfillment of the conditions of contract or non-payment / short payment of wages or non-observance of the Labour laws / regulations.
- 5.4.9 In every case in which by virtue of the provisions sub-section(1) of Section 12, of the Workmen's Compensation Act, 1923, the Corporation is obliged to pay compensation to a workman employed by the Contractor, in execution of the works, the Corporation without prejudice to its right under sub-section (2) of section 12 of the said act, 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 the Corporation to the Contractor whether under this contract or any other contract at the same unit or any other units of the Corporation.
- 5.4.10 The decision of the Engineer-in-Charge in such matters based on reports from the Inspecting Officers as defined in the Contractor's Labour Regulation as appended to these conditions shall be final and binding and deduction(s) for recovery of such penalty may be made from any amount payable to the Contractor.

5.5 Facilities for Staff and Labour

- 5.5.1 Unless otherwise stated, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. Model Rules for Labour Welfare, as annexed shall be referred in this regard.

5.6 Health and Industrial Safety

- 5.6.1 The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. The Contractor shall ensure first-aid facilities available at all times at the work site. Other facilities in collaboration with local health authorities like medical staff, sick bay, ambulance, etc. shall be provided as required. The Contractor shall also make suitable arrangements for necessary welfare and hygiene requirements and for the prevention of epidemics.
- 5.6.2 The Contractor shall comply, as statutory requirement, to all provisions of "AERB (Atomic Energy Regulatory Board) Safety Guide for Works Contract" i.e., document No. AERB/SG/IS-1 amended from time to time and other safety requirements as applicable to specific site. A copy of guide is attached herewith. In addition to the above the following requirements of Industrial safety be complied with.
- 5.6.3 The Contractor shall at his own expense arrange & provide for the safety provisions as appended to these conditions (AERB Safety Guide) and the facilities in respect of all labour directly or indirectly employed for execution of the works or as required by the Engineer-in-Charge. In case, the Contractor fails to make arrangements and provide necessary facilities as per guidelines, the Engineer-in-Charge shall be entitled to do so at the risk and cost of the

contractor and recover the cost from the Contractor with penalty as defined in Schedule (A). The total amount of penalties for non-compliance under this Para 5.6.3, shall be subject to a maximum of 2% of the contract value.

- 5.6.4 The Contractor shall provide mandatory Industrial Safety Training to all workmen. In case, where it is specified in the schedule A, the same shall be provided by the Corporation.
- 5.6.5. The Contractor shall provide and maintain all lights, fencing, guards, warning signs and caution board and similar items as required to ensure safe working conditions at work site.
- 5.6.6 The Contractor and his Sub-Contractor shall comply with the instructions given by departmental safety officer or his representative(s) regarding safety precautions, protection measures and housekeeping, etc.
- 5.6.7 The Contractor shall provide proper access and working platforms for all place of work as per laid down standards or as advised by Engineer-in-charge.
- 5.6.8 The Contractor shall ensure all floor openings in his work are guarded / barricaded during the course of work and at the end of each day's work.
- 5.6.9 All Contractors, working at plant site, must meet statutory requirements as well as regulatory requirements applicable to the plant in general and NPCIL in particular, especially the requirements as per Factory Act, Atomic Energy Factories Rule-1996 (AEFR-1996), safety guidelines for Job Hazard Analysis (JHA) & AERB notifications on Industrial & Fire safety.
- 5.6.10 All Contractors' safety professionals must be well aware about Acts, Rules, concerned with Industrial Safety and practices particularly applicable to the plant and to that effect they have to undergo an assessment at the plant within 7 days of their placement at the plant and that will be at the cost of the Contractor and then only he / she would be given permanent entry pass to plant and considered in the required strength of safety professionals.
- 5.6.11 All Personal Protection Equipments (PPE) procured and provided to workers shall conform to relevant Indian Standards and should be maintained in good condition by suitable storage, maintenance and inspection. Contractor shall promote safe work practices at work in plant.
- 5.6.12 The Contractor shall be held responsible for non-compliance of any of the safety measures, injuries, fatalities and compensation arising out of such situations or accidents.
- 5.6.13 Contractor shall be responsible for safety of all his employees during execution of the contract. As per Workmen's Compensation Act, 1923 (amended in 2000), the Contractor will ensure the payment of compensation to his employees in case of an accident as early as possible within the time frame permitted by the law of land.
- 5.6.14 The Contractor shall employ sufficient number of qualified safety professionals required for the safe execution of the job. The minimum number shall not be less than the minimum number that is specified in Schedule (A).
- 5.6.15 The Contractor should deploy safety professionals as defined above, failing which the Corporation shall outsource or deploy such person at the cost and risk

of the Contractor. Penalty, as defined in Schedule (A) shall also be recovered in addition to the cost for non-deployment of safety professionals.

5.6.16 The Contractor shall prepare industrial safety procedure for approval by corporation and ensure the industrial safety requirements have been established prior to execution of whole or part of work.

5.7 Contractor's Supervision for compliance

5.7.1 The Contractor shall provide all necessary supervision to plan, arrange, direct, manage, inspect and test the work for acceptance by Engineer-in-charge throughout the execution of the Works, and as long thereafter as is necessary to fulfill the Contractor's obligations.

5.7.2 Supervision shall be done by a sufficient number of qualified persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.3 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

5.8 Contractor's Personnel

5.8.1 The Contractor shall employ the key personnel as per the Schedule of Key Personnel as referred to at the time of submission of tender document to carry out or supervise the functions stated in the Schedule or other personnel approved by the Engineer-in-charge. If the Contractor himself not have sufficient knowledge and experience to be capable of receiving instructions or cannot give his full attention to the works, the Contractor shall at his own expense, employ his accredited agent as Site-in-charge approved by the Engineer-In-Charge. The Engineer-in-charge shall have full powers to suspend execution of work in case of violation of this clause and the contractor shall be held responsible for such delay.

5.8.2 The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Engineer-in-charge may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

- (a) persists in any misconduct or lack of care,
- (b) carries out duties incompetently or negligently,
- (c) fails to conform with any provisions of the Contract, or
- (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment.

The Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

5.9 Records of Contractor's Personnel

5.9.1 The Contractor shall furnish to the Engineer-in-Charge, fortnightly, a distribution return of the number and description by trades of the workers employed on the works. Along with this return, the Contractor shall also submit a statement of

number of local people employed, to the Engineer-in-charge.

5.9.2 The Contractor shall also submit on the 4th and 19th of every month to the Engineer-in-charge a true statement showing in respect of the preceding fortnight,

- (i) 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
- (ii) the number of female workers who have been allowed maternity benefit as provided in the Maternity Benefit Act, 1961 or Rules made there under and the amount paid to them.

5.9.3 The Contractor shall submit the compliance report in the format appended.

5.10 Disorderly Conduct

5.10.1 The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

5.11 Foreign Personnel

5.11.1 The Contractor may depute in to the country any foreign personnel who are necessary for the execution of the Works to the extent allowed by the applicable Laws. The Contractor shall ensure that these personnel are provided with the required residence visas and work permits. The Corporation will, if requested by the Contractor, use its best endeavours with regards to issuing of necessary letters in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national, or government permission required for bringing in the Contractor's personnel.

5.11.2 The foreign personnel shall have to comply with the security procedures of the corporation.

5.11.3 The Contractor shall be responsible for the return of all such staff and labour to the place from where they were recruited or to their domicile. The Contractor shall be responsible till the time they have left the country.

5.12 Other Compliance

5.12.1 The Contractor shall fulfill and comply with all the requirements, if any, notified by the government or municipal authorities or agencies so authorized in this regard, in respect of supply of foodstuff, water and to take measures against insect & pest nuisance. Failure, on the part of the Contractor shall attract penalty in addition to the action as may be initiated by the state government or municipal authorities or agencies so authorized by the Government.

The Contractor shall not do anything or permit its employees or worker deployed by him, at the site or office, which is specifically or generally prohibited by law, rules or regulations framed by the central or state government or Municipal authorities.

The rules and regulations framed by the government authorized agencies, state or central government in regards to alcoholic liquor, Arms and ammunitions and

the labor legislation shall be followed /complied in its letter & spirit, by the Contractor.

5.13 House Keeping

5.13.1 The contractor shall maintain the cleanliness of the work site and labour colony on a day to day basis. Failing to maintain cleanliness of work place, Engineer-in-charge will have full power to maintain the cleanliness at the risk and cost of the contractor.

6 PLANT, MATERIALS AND QUALITY ASSURANCE

6.1 Tools, Plants & Equipments

6.1.1 The Contractor shall arrange at his own expense all tools, plant and equipment (hereinafter referred to as T&P) required for execution of the work, except the item listed in Schedule (C) which may be given to him on hire (if the same can be spared) by the Corporation at rates shown in that Schedule. In case the Contractor requires some or all items of T&P listed in Schedule (C), he shall indicate his requirements at the time of submitting his tender. The Corporation's T&P hired by the Contractor shall be transported at his expense from the place of issue to the Site and back.

6.1.2 If the Contractor requires any item of T&P on hire from the Corporation over and above the requirements indicated by him at the time of submitting his tender, the Corporation will, if such item is available, hire it to the Contractor at a rate to be fixed by the Engineer-in-Charge.

6.1.3 When T&P is hired on daily rates, the period of hire will be reckoned from the commencement of the day of issue upto the end of the day of return (including all holidays) irrespective of the actual hour of issue and return. Daily hire charges will be based on eight working hours or part thereof per day and for any additional use of T&P at rates fixed for the purpose. The Contractor will be exempted from levy of any charges for the number of days he is called upon in writing by the Engineer-in-charge to suspend execution of the work, provided the Corporation's T&P in question has, in fact remained idle with the Contractor due to suspension.

6.1.4 The Contractor shall be responsible for care and custody of the Corporation's T&P (including employment of security guards) during the period for which the Corporation's T&P remains with him. Any damage (fair wear and tear excepted) to any of the equipments shall be made good at the Contractor's expense to the satisfaction of the Engineer-in-Charge unless such damage is caused because of negligence of crew provided by the Corporation. The Contractor responsibility shall exclude any damage due to Excepted Risks, provided always that the Contractor has taken precautions necessary to protect it from such risks.

6.1.5 The Corporation's T&P hired to the Contractor shall be returned to the place of issue (unless otherwise directed by the Engineer-in-charge) on completion /termination of the work or relevant section of the work. The Corporation shall

be entitled to terminate the hire after giving 7 days notice without assigning any reason whatsoever and the Contractor shall have no claim to any payment of compensation or otherwise whatsoever on account of termination of hire of the Corporation's T&P by the Corporation.

- 6.1.6 When the T&P is hired on hourly rates, a Log Book shall be maintained by the Engineer-in-charge or any representative of the Engineer-in-Charge, for recording hours during which the items have been utilized for each day. The log book shall be daily attested by the Contractor or his authorized representative. In case the Contractor contests correctness of any entry and/or fails to sign the Log Book, the decision of the Engineer-in-Charge shall be final and binding on him. Hire charges shall be calculated in accordance with the entries in the Log Book. Hourly rate specified shall be charged for every hour or part thereof.
- 6.1.7 The hire charges (along with the taxes as applicable) payable by the Contractor shall be recovered from the Contractor's running account / final bills.
- 6.1.8 If the Corporation / other Contractors hire T&P from the Contractor, a reasonable rate as mutually agreed between the Contractor and the Engineer-in-charge shall be payable.

6.2 Workmanship

- 6.2.1 The Contractor shall execute the whole and every part of the work in the most substantial and workman like manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The Contractor shall also confirm compliance to the design, drawings and instructions in writing in respect of the work to the Engineer-in-Charge for his acceptance.
- 6.2.2 The works to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plant and equipment, and transport, which may be required in execution and completion of the works. The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include waste on materials, carriage and cartage, carrying in return of empties, hoisting, setting, fitting and fixing in position and all other labour necessary in and for the full and entire execution and completion as aforesaid in accordance with good engineering practice and recognized principles.
- 6.2.3 In the case of any class of work for which there is no such specifications as referred to above, such work shall be carried out in accordance with Bureau of Indian Standards Specifications. In case there is no such specification in Bureau of Indian Standards, the work shall be carried out as per ASTM/ BS or manufacturers' specifications. In case there are no such specifications as referred to the above the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.
- 6.2.4 The furnishing of engineering data by the Contractor shall be in accordance with the Schedule as specified in the technical specifications. The review of engineering data by the Engineer-in-charge shall not limit the Contractor towards any of his responsibilities and liabilities for mistakes and deviations, if any, from the requirements specified under these specifications and documents.

6.2.5 The Contractor shall carry out the manufacture of Plant, the production and manufacture of Materials, and all other execution of the Works:

- (a) in the manner (if any) specified in the Contract,
- (b) in a proper workmanlike and careful manner, in accordance with recognized good practices, and
- (c) with properly equipped facilities.

6.3 Quality Assurance

6.3.1 To ensure that the construction/fabrication and erection of works under the scope of this Contract whether executed within the Contractor's works or at any other place of work are in accordance with the specifications, the Contractor shall adopt suitable quality assurance program commensurate with NPCIL QA program to control such activities at all stages necessary. Such program shall be outlined by the Contractor in a QA Manual and shall be finally accepted by the Engineer-in-Charge after discussions before commencement of work. A quality assurance program of the Contractor shall generally cover but not limited to the following:

- (a) his organisation structure for the management and implementation of the proposed quality assurance program including interfaces.
- (b) documentation control system.
- (c) qualification and certification data for Contractor's key personnel.
- (d) the procedure for purchase of materials, parts, components and selection of Sub-Contractors' services including vendor selection, source inspection, incoming raw material inspection, verification of materials purchased etc.
- (e) system for construction / fabrication and site erection controls through QA plans.
- (f) Control of non-conforming items and system for corrective and preventive actions.
- (g) Inspection and test procedures both for construction and erection.
- (h) control of calibration and testing of inspection measuring and testing equipment.
- (i) system of indication and appraisal of inspection status.
- (j) system of quality audits
- (k) system of intimation by the Contractor and approval by the Engineer-in- Charge of stages of inspection.
- (l) System for maintenance of records.
- (m) System for handling, storage, preservation and delivery of items
- (n) A quality assurance plan detailing out the specific quality control procedure to be adopted for controlling the quality characteristics relevant to each item of work.

The Contractor shall deploy personnel as per QA Structure defined in special conditions of contract, failing which the Corporation shall outsource or deploy

such person at the cost and risk of the Contractor.

- 6.3.2 The Contractor shall be required to submit the relevant Quality Assurance Document within three weeks of completion of works which shall include relevant test reports connected with all engineering controls adopted by him during the construction. The Engineer-in-Charge or his duly authorized representative reserves the right to carry out Quality Audit and Quality Surveillance of the systems and procedures of the Quality Management and Control Activities of the Contractor / his vendor.
- 6.3.3 The QA Manager appointed by the Contractor shall report administratively to Project Manager but functionally (on technical matters) to the Head Quarters of the Contractor's Company. QA staff shall be responsible only for quality control and they should not be deployed for execution of the work.

6.4 Materials & Samples

- 6.4.1 The Contractor shall, at his own expense, provide all materials required for the works, other than the material which are to be issued by the Corporation.
- 6.4.2 The Contractor shall, at his own expense and without delay, supply to the Engineer-in-Charge samples in accordance with QA program of materials proposed to be used in the works. The Engineer-in-Charge shall, within 7 days of supply of samples or within such further period as he may require, 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 at his cost.

6.5 Inspection

- 6.5.1 The Corporation's Personnel shall at all reasonable times:
- a) have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
 - b) during production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.
- 6.5.2 The Contractor shall give the Corporation's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment along with required manpower. No such activity shall relieve the Contractor from any obligation or responsibility.
- 6.5.3 The Contractor shall give notice to the Engineer-in-charge whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Engineer-in-charge shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Engineer-in-charge does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Engineer-in-charge uncover the work and thereafter reinstate and make good, all at the Contractor's cost.

6.6 Testing

- 6.6.1 This Sub-Clause shall apply to all tests specified in the Contract.
- 6.6.2 Except as otherwise specified in the Contract, the Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Engineer-in-charge the time and place for the specified testing of any Plant, Materials and other parts of the Works.
- 6.6.3 The Engineer-in-charge shall give the Contractor not less than 24 hours' notice of the Engineer's intention to attend the tests. If the Engineer-in-charge does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer-in-charge.
- 6.6.4 If the Engineer-in-charge requires this Plant, Materials or workmanship to be retested, in case of any doubt, the tests shall be repeated under the same terms and conditions. The cost of such additional tests shall be mutually agreed upon.

6.7 Rejection

- 6.7.1 The Engineer-in-Charge shall have full powers to instruct the removal of any or all of the materials brought to Site by the Contractor which are not in accordance with the Contract specifications or do not conform in character or quality to samples approved by him. In case of default on the part of the Contractor in removing rejected materials, the Engineer-in-Charge shall be at liberty to have them removed by other means. The Engineer-in-Charge shall have full powers to procure other proper materials to be substituted for rejected materials, in the event of the Contractor refusing to comply. All costs, which may accrue upon such removal and/or substitution, shall be borne by the Contractor. The decision of Engineer-in-charge shall be final and binding.

6.8 Remedial Work

- 6.8.1 The Engineer-in-charge may instruct the Contractor to:
- (a) remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,
 - (b) remove and re-execute any other work which is not in accordance with the Contract, and
 - (c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.
- 6.8.2 The Contractor shall comply with the instruction within a reasonable time, or immediately if urgency is specified under sub-paragraph (c) above.
- 6.8.3 If the Contractor fails to comply with the instruction, the Corporation shall be entitled to employ and pay other persons to carry out the work at the risk and cost of the Contractor.

6.9 Ownership of Plant and Materials

- 6.9.1 Except otherwise specified in the Contract, each item of Plant and Materials shall, to the extent consistent with the Laws of the Country, become the property

of the Corporation at whichever is the earlier of the following times, free from liens and other encumbrances:

- (a) when it is incorporated in the Works;
- (b) when the Contractor is paid the corresponding value of the Plant and Materials.
- (c) when the secured advance is paid for materials received.

6.9.2 Material issued by the Corporation to the Contractor for incorporating in the work either free of cost or chargeable basis shall remain the property of Corporation.

6.10 Octroi, Cess, Taxes, Royalties, etc.

6.10.1 All charges on account of octroi, cess, VAT, service tax, royalty, terminal or Sales Tax and other duties on materials obtained for the works from any source (excluding materials supplied by the Corporation) shall be borne by the Contractor.

6.10.2 In pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Corporation in respect of any material used by the Contractor in the works then in such a case, the Corporation shall be entitled to recover the amount paid in the circumstances as aforesaid from dues of the Contractor.

6.10.3 Any increase in rate of or new statutory levies, customs duty, VAT, service tax, octroi and other duties during the currency of the contract shall be reimbursed by the Corporation on submission of documentary proof for payments.

6.11 Urgent Works

6.11.1 If, by reason of an emergency arising in connection with and during the execution of the Contract, any protective or remedial work is necessary as a matter of urgency to prevent damage to the Works, the Contractor shall immediately carry out such work.

6.11.2 If the Contractor is unable or unwilling to do such work immediately, the Corporation may do or cause such work to be done as the Corporation may determine is necessary in order to prevent damage to the Works.

6.11.3 If the work done by the Corporation was to be executed by the Contractor under the Contract, the reasonable costs incurred by the Corporation in connection therewith shall be paid by the Contractor to the Corporation.

6.12 Materials Issued by the Corporation

6.12.1 Materials to be supplied by the Corporation are shown in Schedule B which also stipulates quantum, place of issue and rate(s) to be charged in respect thereof. The Corporation shall, at its risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them, and shall promptly give notice to the Engineer-in-charge of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Corporation shall immediately rectify the notified shortage, defect or default.

6.12.2 The Contractor shall bear the cost of loading, transporting to Site, unloading,

storing under cover as required, assembling and joining the several parts together as necessary and incorporating or fixing materials in the works including all preparatory work of whatever description as may be required.

6.13 Material Accounting

6.13.1 The contractor shall account for all materials issued as free / chargeable by the Corporation. He shall also maintain account for the materials suggested by the Engineer-in-charge and procured by him. The material account must be submitted as and when required by the engineer-in-charge and on completion of the contract. Retention money shall be released only after completion of material accounting.

6.13.2 The actual consumption of quantity of materials shall be calculated based on the measurements with reference to the standard formula /Bureau of Indian Standards/approved cutting plan as applicable on the basis of drawings and specifications. The permissible returnable wastage and invisible wastage shall be as per schedule 'B'.

6.13.3 In case of supply and erection package, the details of returnable wastage / quantities shall be discussed during pre bid meetings for all the items involved.

6.13.4 The contractor shall prepare and submit reconciliation statement indicating the quantities of material issued to him and/or procured by him and the quantities of material consumed as per design and drawings including permissible wastage to the satisfaction of the Engineer-in-charge within 15 days of the issue of written notice by him.

6.13.5 The contractor shall be liable to be charged penalty in addition to the cost of material at market rate landing at NPCIL stores incase he fails to submit the reconciliation statement and/or deposit the excess material issued to him over the theoretical consumption including the permissible wastage back to the NPCIL stores.

6.14 Mega Power Project Concessions

6.14.1 The Contractor shall include all concessions in taxes and duties available under Mega Power Project, if applicable as per NIT. The Corporation's responsibility will be limited to the extent of issuing necessary certificates. Contractor shall arrange all the other requisites for availing the benefits under the Mega Power Project at no extra cost to the Corporation.

7 COMMENCEMENT, DELAYS AND SUSPENSION

7.1 Commencement of Work and completion time

7.1.1 The execution of the works shall commence from the date of commencement as mentioned in the work order and the completion period for the work shall also be reckoned from the said date. The time allowed for execution of the works or the extended time in accordance with these conditions shall be the **essence of**

the Contract.

- 7.1.2 If the Contractor commits default in commencing the execution of the work as aforesaid; the Corporation shall without prejudice to any other right or remedy be at liberty to forfeit the Bid security absolutely.

7.2 Program

- 7.2.1 The Contractor shall submit a detailed resource based time program for physical & financial progress of the Works to the Engineer-in-charge for his approval, within 30 days after Commencement of Works as defined in sub-clause 7.1. The Contractor shall also submit a revised program whenever the previous program is inconsistent with actual progress or with the Contractor's obligations.
- 7.2.2 Each program shall include:
- (a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage or activity or milestone of design, submission of Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing including resource mobilization details,
 - (b) Sub-Contractor wise detailed breakup of the above stages of work,
 - (c) the sequence and timing of inspections and tests specified in the Contract, and
 - (d) a supporting report which includes:
 - (i) a general description of the working methodology which the Contractor intends to adopt for the major stages / activities, in the execution of the Works, and
 - (ii) Contractor's resource mobilization details stating reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage/ activity.
- 7.2.3 The program shall define as mentioned above, intermediate milestones which will form the basis for, monitoring the progress and initiating such corrective measures as may be decided by the Engineer-in-charge which shall be final and binding.
- 7.2.4 Within 15 days of receipt of the program, the Engineer-in-charge shall give notice to the Contractor, stating the extent to which the program does not comply with the Contract. In absence of the same, the Contractor shall proceed in accordance with the program, subject to his other obligations under the Contract.
- 7.2.5 The Corporation's Personnel shall be entitled to rely upon such program when planning their activities.
- 7.2.6 If, at any time, the Engineer-in-charge gives notice to the Contractor that a program fails to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised program to the Engineer without any further delay.
- 7.2.7 It is expected that e-governance will be largely adopted for submission of programs / reports during execution of work.

7.3 Early Detection of Hindrances

- 7.3.1 The Contractor shall intimate the Engineer-in-charge at the earliest opportunity, of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of works. The Engineer-in-charge may require the Contractor to provide an estimate of the expected effect of the event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.
- 7.3.2 The information provided by the Contractor can be used by the Engineer-in-Charge for considering his proposals to overcome the eventualities or reduce the effect on execution and completion of work as per contract conditions.

7.4 Hindrances

- 7.4.1 The Contractor is required to record the hindrance if any, while carrying out the construction work as well as executing the work in respect of design, engineering, procurement and supply related issues, in the hindrance register maintained by the Engineer-in-charge. The Contractor shall record hindrances in the Hindrance Register(s) and get it approved/ endorsed by the Engineer-in-Charge, as the case may be.
- 7.4.2 Hindrances recorded in the register shall form the basis for granting extension of time. The format of the hindrance register is **annexed**.

7.5 Rate of Progress

- 7.5.1 The Contractor shall submit a report on rate of progress of work at the desired frequency, as requested by engineer-in charge.

If, at any time Engineer-in-charge notices that the:

- (a) actual progress is too slow to complete within the Time for Completion, and/or
- (b) progress has fallen or will fall behind the current program under Sub-Clause 7.2

then the Engineer-in-charge may instruct the Contractor to submit the revised program, as envisaged in Sub-Clause 7.2, along with supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete the interim milestones as per the given schedule as well as complete the whole work within the time stipulated in the contract.

- 7.5.2 Unless the Engineer-in-charge notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor.

7.6 Extension of Time for Completion

- 7.6.1 Request for extension of time, has to be made by the Contractor in writing within 15 days of the occurrence of the event causing delay. The Contractor shall indicate the period for which extension is desired, in such request.

- 7.6.2 All such events or requests shall be considered and analysed by the Engineer-in-charge within 30 days before completion period of the contract and the decision regarding the extension of time is to be communicated to the Contractor before completion date.
- 7.6.3 The absence of any request or application from 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.

7.7 Compensation for delay

- 7.7.1 Compensation for delay shall be levied in the contracts where the estimated cost put to tender is above Rs. 5 Lakhs.
- 7.7.2 If the Contractor fails to maintain the required progress or to complete the work and clear the site on or before the Contract or agreed extended date of completion, the Contractor shall, without prejudice to any other right or remedy of the Corporation on account of such breach, pay as agreed compensation amount calculated as stipulated below or such smaller amount as be fixed by the Corporation on the Contract Value of the work for every week that the progress remains below that specified in contract document or that the work remains incomplete.
- 7.7.3 These delay damages shall be the amount calculated by the Corporation on the Contract Value of the work for every week that the progress remains below that specified in contract document or that the work remains incomplete.
- 7.7.4 The term 'Contract Value' shall be the value at contract rates of the work as ordered. This shall exclude the value of the part of works which has been taken over and put in use by the Corporation.
- 7.7.5 The delay damages would be as follow:-
- (a) Completion period (originally stipulated) not exceeding 1 year - 1% of Contract Value per week.
 - (b) Completion period (originally stipulated) exceeding 1 year and not exceeding 3 years -1/2% of the Contract Value per week.
 - (c) Completion period (originally stipulated) exceeding 3 years – 1/4% of Contract Value per week.
- 7.7.6 However, the total amount due under this Sub-Clause shall not exceed 5% of the total value of the Contract value or of the Contract Value of the item or group of items of work for which a separate period of completion is specified.
- 7.7.7 These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Clause 13 [Contract Termination by Corporation] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.
- 7.7.8 The amount of compensation shall be adjusted or set off against any sum

payable to the Contractor under this or any other contract(s) with same unit or any other unit(s) of the Corporation.

7.8 Incentives

7.8.1 The time allowed for execution of the works as specified in the work order is the essence of the contract. However if the work is required to be completed in compressed period before the stipulated date of completion then the contractor may be eligible for the incentive. Refer Schedule A for applicability of the Incentive clause. This clause shall be operated only with prior approval of CMD, NPCIL.

7.8.2 For early completion of the contract work before the stipulated date of completion, an incentive amount / percentage which shall be decided by the Engineer-in-charge will be paid. If the incentive is to be apportioned between the various milestones to complete the work the same shall be decided by the Engineer-in-charge while drawing the construction schedule. The incentive amount shall be subject to a maximum percentage (as specified in Schedule A) of the contract value.

For this purpose the term 'Contract Value' shall be the value at contract rates of the work as agreed upon in the contract.

7.9 Suspension of work for period upto 90 days

7.9.1 The Engineer-in-charge may at any time instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or all of the Works against any deterioration, loss or damage. No compensation shall be paid for suspension upto the period of 30 days.

7.9.2 The Contractor shall, on receipt of the order in writing of the Engineer-in-Charge, 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 for any of the following reasons:

- (i) on account of any default of the Contractor, or
- (ii) for proper execution of the Works or part thereof for reasons other than the default of the Contractor;

7.9.3 If the suspension is ordered for reasons (ii) above ,

- (i) Contractor shall be entitled to an extension of the time equal to the period of each 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;
- (ii) if the total cumulative period of all such suspension exceeds 30 days, the Contractor shall, in addition, be entitled to compensation for the period of suspension beyond 30 days, as mentioned in the Schedule A.

However the Contractor shall submit within 10 days his claim to the Engineer-in-Charge for every 15 days of suspension, over and above 30 days.

7.10 Prolonged Suspension of work (beyond 90 days)

- 7.10.1 If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than 90 days at a time, except when suspension is ordered for reason 7.9.2 (i) above, the Contractor may after receipt of such order serve a written notice to the Engineer-in-Charge requiring permission from him, to treat the suspension, where it affects only a part of the works as deletion of such part and if the same is accepted by Engineer-in-charge then it will be dealt under Clause 11[Variations and Adjustments] and no compensation on account of suspension shall be paid.
- 7.10.2 Where the suspension affects the whole of the Works or part thereof and the suspension of the part of the work is not treated as deletion as above, then the Contractor may serve a notice to Engineer-in-charge requiring permission within 10 days from the date of receipt of said notice by Engineer-in-charge to demobilize the labour/staff and remove plant and equipment or any part thereof.
- 7.10.3 In case Engineer-in-charge agrees to the Contractor's request then the Contractor shall be at liberty to demobilize the labour/staff and remove plant and equipment or any part thereof hypothecated to the Corporation under this contract to any other works site of the Contractor for carrying on his other works, after giving an undertaking through an indemnity bond to bring back to the Site the labour /staff and plant and equipment as may be necessary for completion of the works, immediately after the suspension is revoked. If such plant and equipment are not brought back, the Contractor shall forthwith repay the amount of the loan outstanding with interest. The security deposit from the contractor may also be forfeited.
- 7.10.4 In case the Engineer-in-charge does not agree to the contractor's request to demobilize, the contractor shall be continued to be paid the compensation as per sub-clause 7.9.3 (ii) provided the Contractor submits his claim in accordance to the clause supported by details to the Engineer-in-Charge.
- 7.10.5 In addition to above compensation the Contractor shall be entitled to an extension of the time equal to the period of 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.

7.11 Payment for Plant and Materials in Event of Suspension

- 7.11.1 The Contractor shall be entitled to payment of the value of Plant and/or Materials, meant to be incorporated in works which have not been delivered to Site, if:
- (a) the work on Plant or delivery of Plant and/or Materials has been suspended for more than the 30 days except when suspension is ordered for reason 7.9.2 (i) above and
 - (b) the Contractor has marked the Plant and/or Materials as the Corporation's property in accordance with the Engineer's instructions.

Under the above situation Corporation shall make payment to the Contractor

on production of documentary evidence to the effect that he has marked / purchased these items for Corporation and make him responsible to deliver these items to Corporation either during suspension or after revoking suspension.

7.12 Resumption of Work

7.12.1 After the permission or instruction to proceed with the work is given, the Contractor and the Engineer-in-charge shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension after receiving from the Engineer-in-charge an instruction to this effect.

8 CORPORATION'S TAKING OVER

8.1 Completion Certificate

8.1.1. The Contractor shall as soon as the work is complete in all respects give notice to the Engineer-in-charge for his acceptance. The Engineer shall, within 30 days after receiving the Contractor's application:

- i) shall inspect the work and shall furnish the Contractor with a certificate of completion indicating
 - (a) date of completion
 - (b) defects to be rectified by the Contractor and/ or
 - (c) items for which payment shall be made at reduced rates.

When separate periods of completion have been specified for items or groups of items, the Engineer-in-Charge shall issue separate completion certificates for such item or groups of items.

- ii) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable to Completion Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

8.1.2 The contractor shall remove all the temporary material/equipment and clear the work place as per the directives of Engineer-in-charge. Contractor shall also ensure that all permanent structure has been adequately cleaned for use by others, failing which the Engineer-in-charge will have sufficient reasons to make the place good to use at the risk and cost of the contractor.

9 DEFECTS LIABILITY

9.1 Rectification of Defects

9.1.1 The defect liability period shall commence from the date of completion as certified by the Engineer-in-charge. The Contractor shall be responsible to make good and rectify at his own expense within such period as may be

stipulated by the Engineer-in-Charge in his communication to Contractor, any defect which may develop or may be noticed before the expiry of the defect liability period as mentioned in Schedule (A).

- 9.1.2 The Contractor shall on receiving the intimation shall execute all work required to rectify defects or damage, as may be notified by the Corporation on or before the expiry date of the Defects Liability Period for the Works.
- 9.1.3 If the Contractor fails to carry out the aforesaid work within the period fixed by the Engineer-in-charge after serving the notice to the Contractor, all work referred to in this Sub-Clause shall be executed at the risk and cost of the Contractor.
- 9.1.4 The Corporation shall be entitled to an extension of the Defects Liability Period for the Works or a section of work for a period equal to the period during which the Works or section of work cannot be used by the Corporation due to reasons of a defect or by reason of a damage attributable to the Contractor.
- 9.1.5 Any rectification of defect which is not attributable to the Contractor but requested by the Engineer-in-charge for doing so, shall be carried out by the Contractor at the cost of Corporation on a mutually agreed basis.
- 9.1.6 Unless otherwise specified in the contract, at the end of Defect Liability period the contractors liability ceases except for Latent Defects, if applicable as per Schedule "A". The latent defect for this purpose shall mean any defects which exists but has not surfaced at the time of testing and has not manifested during defect liability period. The Contractors liability for Latent Defects warranty for the plant and equipment including spares shall be limited to a period of 5 (five) years from the end of Defect Liability period of the respective plant and equipment including spares. A written communication in this regards shall be submitted by the contractor.

10 MEASUREMENT AND EVALUATION

10.1 Records & Measurement

- 10.1.1 Engineer-in-Charge shall, except as otherwise stated, ascertain and determine by measurement the value of work done in accordance with the Contract.
- 10.1.2 All items having a financial value shall be entered in Measurement Book, Field Book etc. prescribed by the Corporation so that a complete record is obtained of all work executed under the Contract. However, where the computerized system is used for billing by the Corporation, all above records will be maintained in the computer system (WCMS) and a hard copy generated will be kept as a record after the acceptance by the Contractor.
- 10.1.3 Measurement shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the Contractor or his authorized representative from time to time.

- 10.1.4 Whenever the Engineer-in-charge requires any part of the Works to be measured, reasonable notice shall be given to the Contractor's Representative, who shall:
- (a) promptly assist the Engineer-in-charge in making the measurement along with a qualified official, and
 - (b) supply any particulars requested by the Engineer-in-charge
- 10.1.5 The Contractor shall without extra charge, provide all assistance such as appliance, labour and other things necessary for measurements.
- 10.1.6 Measurements shall be signed and dated by both the parties from time to time on the Site during the progress of the Work.
- 10.1.7 If the Contractor objects to any of the measurements recorded on behalf of the Corporation, a notice to that effect shall be made with reasons and submitted to Engineer-in-charge for decision in this regard. After receiving this notice, the Engineer-in-charge shall review the records and either confirm or vary them and certify the payment of the undisputed part. The decision of Engineer-in-Charge on such dispute or difference or interpretation shall be final and binding on both the parties.
- 10.1.8 If the Contractor fails to attend or send his authorized representative for measurement after such a notice or fails to counter-sign or to record his objections within a week from the date of measurement, then measurements taken by the Engineer-in-Charge or by his authorized representative shall be taken to be the correct measurement of the work.
- 10.1.9 When the contract includes lump-sums in respect of parts of the work, the Contractor shall be entitled for payment in respect of such items of work involved or the part of the work in question, at the same lumpsum price as are payable under this contract for such items.
- 10.1.10 If in the opinion of the Engineer-in-Charge, part of the work in question is not payable by measurements, the Engineer-in-Charge may pay the amount commensurate to the value of work done based on lumpsum amount quoted. In such a case, the Engineer-in-Charge would provide a certificate which shall be final and conclusive against the Contractor with regard to any sum or sums payable to him under the provisions of the clause.
- 10.1.11 Recording of measurements will not relieve the Contractor of his responsibilities and liabilities over any recorded excess measurements or noticed defects till the completion of the defect liability period.

10.2 Method of Measurement

- 10.2.1 Except where any general or detailed description of the work in quantities expressly shows to the contrary, schedule of quantities shall be deemed to have been prepared and measurements taken in accordance with the procedure set forth in Schedule of Rates /Specification, notwithstanding any provision in the relevant Standard Method of Measurement or any general or local custom.

10.2.2 In the case of items which are not covered by the Schedule of Rates / Specification, measurement 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.

11 VARIATIONS AND ADJUSTMENTS

11.1 Right to Vary

11.1.1 Variations may be initiated by the Engineer-in-charge at any time prior to issuing the Completion Certificate for the Works, by an instruction for the Contractor to submit a proposal. The Contractor shall submit a proposal for variation for approval of Engineer-in-charge.

11.1.2 Each Variation may include:

- a) changes to the quantities of any item of work included in the Contract,
- b) changes to the quality and other characteristics of any item of work,
- c) deletion of any work which forms part of the scope given in the contract, or
- d) any additional work, Plant, Materials or services necessary for the Works, including any associated Tests on Completion and exploratory work.

11.1.3 The time for completion of the works shall, in the event of variations resulting in additional cost over the Contract value being ordered be extended as follows, if requested by the Contractor:

- (a) in the proportion which the additional cost of the extra, additional or substituted work, bears to the original Contract Sum; plus
- (b) 25% of the time calculated in (a) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

11.2 Payment for Variations

11.2.1 Variation permitted beyond the tendered quantity for individual items shall be as follows,

- | | | |
|--------------------|---|-------|
| • Excavation items | : | ±100% |
| • All other items | : | ±50% |

11.2.2 Any variation above the tendered quantity but within the above specified limit shall be paid as per the rates as provided in the contract in the Schedule of quantities.

11.2.3 In case the quantities to be executed is beyond the variation limits above or extra, additional or substituted work, the contractor shall give notice to the corporation of his intention to claim a varied rate or price supported by proper analysis within 14 days of the date of instruction for executing varied work, extra,

additional work or substituted work, and before the commencement of such work.

- 11.2.4 In case of quantities beyond variation limits, the Engineer-in-charge shall determine the rates, after due consideration to the rate analysis submitted by the contractor. These provisions shall also be applicable for decrease in rates.
- 11.2.5 For determining the rates for extra, altered or substituted item, where in such item with similar specification is available in the schedule of quantities then the same rate shall be applied. In case the item is not available within the same schedule of quantities but are available in other parts / modules of the contract, then the lowest rate among the rates in other part / module shall be considered.
- 11.2.6 In case the rates for extra, altered or substituted item are not available in any part or Module of Schedule of quantities then the rate shall be determined based on Market rates, approved by the Engineer-in-charge.
- 11.2.7 Deletion of any item / any part of work of schedule of quantities shall also form part of the variation limit.
- 11.2.8 If the over all net contract value is less than 75% of the contract value, then a suitable compensation shall be assessed mutually and paid to the contractor based on case to case basis.
- 11.2.9 In case the quoted rates are more than 25% of the estimated departmental rates the corporation has got a right to negotiate such rates with prospective bidder for execution of quantity beyond the tendered quantity before award of work.

11.3 Contract Price Adjustment

- 11.3.1 The rates quoted by the tenderer shall be the Base Price, which will be subjected to PRICE ADJUSTMENTS in accordance with the conditions and formula prescribed herein and further subject to satisfying the requirements specified in this clause only. This clause is applicable only to the contracts where stipulated completion period is more than 12 months.
- 11.3.2 For contract(s) where completion period as stipulated in NIT or work order is less than and upto 12 (twelve) months and where there is a delay which is attributed to the Corporation, due to which the period of the contract exceeds 12 months, the contract price adjustments is applicable for the extended period. (For example, where the original contract period is 10 months and there is extension for 3 months, then adjustment is payable for one month i.e. 13th month only). However the Subscript value of "0" defined in 11.3.4 above shall be the indices of the month in which the Mid period (50% in terms of days) of the extended contract period falls on.
- 11.3.3 The "Contract Price" as awarded shall be the Base Price, unless other wise specified.

A certain fixed percentage of the base price shall not be subject to any price adjustment. The balance percentage to be specified shall be of Identified Components towards Labour, Material(s) (not being material supplied/or services rendered at fixed prices by the Corporation) and P.O.L. and shall be subjected to Price Adjustment. The fixed component shall be 15% of the

contract value, and is not subjected to price adjustments. However other components shall vary from contract to contract depending upon the scope of work(s) and this information is furnished by the Corporation in Schedule A(refer clause 11.3.4).

11.3.4 The actual amount of price adjustment shall be determined by satisfying the conditions specified herein.

The price adjustment formula for the various components of the Contract Price shall be construed as stipulated hereinafter. The formula designed for governing and calculating the price adjustment to be applied to the contract price shall be as follows:

$$ACV_1 = CV (F + I_u \times L_{u1}/L_{u0} + I_s \times L_{s1}/L_{s0} + m \times M_1/M_0 + n \times N_1/N_0 + o \times O_1/O_0 + p \times P_1/P_0 + q \times Q_1/Q_0 + d \times D_1/D_0)$$

Where:

ACV1- Adjusted contract price i.e., value of work done after application of above price adjustment formula.

CV Base contract price, subject to price adjustment, i.e. the value of the work done in the given period for which the Price Adjustment is to be calculated excluding cost of material supplied or services rendered at fixed prices by the Corporation and the cost of extra items, rates for which have been worked out based on market rates.

F Fixed component i.e. 15% of contract value, which is not subjected to any adjustment under this formula or otherwise.

I_u - Unskilled Labour component (Defined in Schedule A) expressed as percentage of the contract value which will be subjected to adjustment.

I_s - Skilled labour component (Defined in Schedule A) expressed as percentage of the contract value which will be subject to adjustment.

m,n,o,p - Various material component (bought by the contractor) expressed as percentage of the contract value(defined in Schedule A), which will be subject to adjustment. The sum of m,n,o,p along with F, d , labour (I_u and I_s) and q should sum up to one.

'q - Component for all the other materials (other than m, n, o, and p) expressed as percentage of contract value, as defined in Schedule A.

d - P. O. L. component expressed as percentage of the contract value, as defined in Schedule A, which will be subject to adjustment.

M, N, O, P - Corresponding published price indices of various materials based on All India Wholesale Price Index for Individual Commodities /Group Items for the period under consideration published by Economic advisor to Government of India, Ministry of Industry & Commerce.

Q - Wholesale price indices applicable to all commodities for the period under consideration as published by Economic Advisor to Government of India, Ministry of Industry & Commerce.

- L - Minimum wages in Rupees of a labour fixed under any law, statutory rule or order as applicable on the last date of the month under consideration (where in subscript 'u' and 's' denotes the unskilled and skilled labour respectively).
- D - Petrol prices of the nearest petrol pump (defined in Schedule A) applicable as on the last date of the month under consideration.

SUBSCRIPT:

- '0' - refers to the values of the above-mentioned Minimum Wages/ Material indices/ Petrol price applicable to previous month prior to the date of submission of tenders (In case of two part tender the date of submission of Part 1 shall be taken).
- '1' - refers to the values of corresponding Minimum Wages, Material indices/ petrol price as applicable for the month prior to the month in which the work is executed for which adjustment is applicable, respectively.
- 11.3.5 The value of fixed component 'F' will remain unchanged and fixed and shall not be disputed.
- 11.3.6 Price Adjustment(s) shall be calculated for the quantum of works executed during the month of the bill.
- 11.3.7 Additional, altered or substituted items of work, derived from the agreed Bill of quantities and rates attached in work order will also attract price adjustment as per this clause. No price adjustment for the cost of material issued and/or services provided by the Corporation shall be applicable, which are issued at fixed rates to the Contractor. Extra, altered or substituted item for which the rate has been derived from the market rate, shall not be subject to price adjustment within 12 months from the actual commencement of execution or date of its communication to the contractor whichever is earlier.
- 11.3.8 In the case of materials brought to site for which any secured advance is included in the bill, the full assessed value of such advance shall be added to the cost of work shown in the bill for operation of this Clause. Similarly, when such materials are incorporated in the work and secured advance is deducted from the bill, the full assessed value should be deducted from the cost of the work shown in the bill, running or final.
- 11.3.9 In case of advance payment is given for the work done but not measured the full value of such unmeasured work shall be added to the cost of work shown in the bill for operation of this Clause. When such work is measured and paid the full value of such work shall be deducted from the cost of work shown in the bill, running or final.
- 11.3.10 Every month after the award of Contract, the Contractor shall submit to the Engineer-in-Charge, a written notice of the changes, if any, that have occurred in the specified indices of Material/petrol prices and in minimum wages for labour during the previous month containing the effective date of such change, the extent of change etc. with authenticated documentary evidence (as described above) of the relevant published indices/petrol price/minimum wages to substantiate the price adjustment claim.

- 11.3.11 Provided further that such payment/refund shall not be operative and payable after the Schedule expiry of the contract period including authorized extended contract period.
- 11.3.12 In case where the reasons for extension of the contract is attributable to the force majeure and Contractor, the Contractor shall be paid the contract price adjustment for the extended period at the frozen indices applicable for the month preceding to the last date of stipulated completion period or extended completion period attributable to Corporation whichever is later. In case the prevailing price indices are lower than the frozen indices, as stated above, the lower shall be considered.
- 11.3.13 For this purpose, the total delayed period shall be apportioned between delays due to the Corporation, force majeure events and / or the Contractor in the following order:
1. Delay caused by the Corporation will be allowed considering as if this delay due to the Corporation happened first, immediately after stipulated contract completion period, irrespective of actual point in time in which such delay by Corporation occurs.
 2. Followed by delay due to Force Majeure,
 3. Delay due to Contractor
- 11.3.14 The total adjusted contract price shall be:
- (Sigma) ACV1 + Other elements of Contract Price, if any
- 11.3.15 Except as provided herein, no other expenditure incurred by the Contractor, under any Clause(s) / item(s) due to any reason whatsoever, shall be payable to the Contractor.
- 11.3.16 Bids specifying provisions other than those specified above run the risk of rejection.

12 CONTRACT PRICE AND PAYMENT

12.1 Mobilisation Advance

- 12.1.1 Mobilisation Advance shall be granted to the Contractor, if required by him, with the conditions mention herein being fulfilled.
- 12.1.2 Advance shall be granted where the estimated cost of work put to tender is Rs.10 Crores or more.
- 12.1.3 The amount of mobilisation advance shall be limited to 15% of the contract value and shall be granted under following two categories:
- i) Lumpsum Advance against a non-revokable Bank guarantee acceptable to the Corporation which shall be 10% of the contract value.
 - ii) over and above (i) an Advance at 90% of the purchase price of New Plant and Equipment acquired for the work and brought to site, against production of documents in support thereof and that such plant and

equipment are hypothecated in favour of the Corporation in the form required by the Corporation. Further this new plant and equipment for which mobilisation advance applied for are not in excess of requirement and price there of considered to be reasonable by the Engineer-in-Charge. (Subject to maximum of 5% of the contract value)

12.1.4 The mobilization advance shall be interest bearing, and simple interest rate shall be charged on mobilization advance. The rate of interest to be charged on mobilization advance shall be as mentioned in the Schedule A.

12.1.5 The Contractor shall ensure that the bank guarantee is valid and enforceable until the advance payment has been repaid, but its amount shall be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the bank guarantee specify its expiry date, and the advance payment has not been repaid within 30 days prior to the expiry date, the Contractor shall extend the validity of the guarantee till the advance payment is repaid failing the Bank guarantee may be encashed by the Corporation.

12.1.6 When advance granted is more than Rs.2 Crores, it shall be released in two or more equal installments as deemed necessary. The subsequent installments shall be released only on submission of proof of bonafide utilisation of earlier installments by the Contractor and to the satisfaction of Engineer-in-Charge

12.1.7 Unless stated otherwise in the Contract, the advance payment shall be repaid through percentage deductions from the payments against the running bills determined by the Engineer-in-charge. as follows:

The recovery of advances shall be regulated in suitable installments commencing from 2nd RA bill or after 10% of the work is completed whichever is earlier. The payment of mobilization advance by itself shall not be considered as one of RA bill for this purpose. The entire amount of advance with interest shall be recovered before 80% of the work is completed.

12.1.8 Interest on the advance shall be calculated on each installment of recovery from the date of its payment as Mobilisation Advance till the preceding day of recovery from running / final bills.

12.1.9 Where advance payment to Contractor against running bills is to be made after effecting the recovery of Mobilisation Advance installment from the bill, the interest for advance payment shall be calculated till the preceding day of passing the bill.

12.1.10 If the amount payable under any interim bill is not sufficient to cover all deduction to be made for sums advanced and other sums deductible therefrom, the balance outstanding shall be deducted from subsequent bills.

12.2 Payment of Running Bills

12.2.1 Running bills shall be submitted, monthly by the Contractor for the work executed during the previous month along with all supporting documents on the format prescribed by the Corporation. The Engineer-in-Charge shall then arrange to have the bill verified. Where ever applicable (as defined in Schedule

A) the Contractor will submit the bills in a soft form, which shall be in the format as required by the Engineer-in-charge.

12.2.2 Payment "On Account" for amount admissible shall be made upon the Engineer-in-Charge certifying the sum to which the Contractor is considered entitled by way of interim payment for the following:-

(a) For Works :All work executed, after deducting there from the amounts already paid, the retention money and such other amounts as may be deductible or recoverable in terms of the Contract.

(b) For Materials: The Contractor on signing an indenture in the form to be specified by the Engineer-in-charge 75% percent of the cost (as assessed by the Engineer-in-Charge) of any materials which are in the opinion of the Engineer-in-Charge reasonably required in accordance with the Contract and have been brought to Site for incorporation in the Works and are safeguarded against loss due to any cause whatsoever to the satisfaction of the Engineer-in-Charge but have not been so incorporated. However, in case of perishable materials the Contractor shall provide an insurance cover for the full cost. No secured advance shall be payable on high risk material such as glass, sand, petrol/ diesel etc. The advance payments under this shall be adjusted as and when materials are utilised in the Works.

12.2.3 Payment of the Contractor's on account bill shall be made by the Corporation within 25 days from the date of submission of the bill by the Contractor along with all the supporting documents subject to the certification of the same by the Engineer-in-charge. If in the opinion of the Engineer-in-Charge it is likely to take more time for payment, an advance payment of 75% of the net bill amount shall be released to the Contractor, within 3 working days and balance payment shall be released within 30 days from the date of submission of bill.

12.2.4 Any interim bill paid, relating to work done or materials delivered, may be modified or corrected by any subsequent interim bills or by the final bill. Any Certificate of the Engineer-in-Charge supporting an interim payment shall not be conclusive evidence that any work or materials to which it relates is/are in accordance with the Contract.

12.3 Over payments and Under Payments

12.3.1 Wherever any claim for the payment of a sum of money to the Corporation arises under this Contract against the Contractor, the same may be deducted from any sum due to the Contractor under this Contract or any other Contract with the Corporation or from his security deposit; or he shall pay the claim on demand.

12.3.2 The Corporation reserves the right to carry out post payment audit and technical examination of the final bill including all supporting vouchers, abstracts etc. The Corporation further reserves the right to enforce recovery of any overpayment when detected, notwithstanding the fact that the amount of the final bill may be included by one of the parties as an item of dispute before the dispute resolution board for this Contract.

12.3.3 If as a result of such audit and technical examination any overpayment is discovered in respect of any work done by the Contractor or alleged to have

been done by him under the Contract, it shall be recovered by the Corporation from the Contractor by any or all of the legal methods prescribed above. If any under-payment is discovered, the amount shall be duly paid to the Contractor by the Corporation.

12.3.4 Provided that the aforesaid right of the Corporation to adjust over payments against amounts due to the Contractor under any other Contract with the Corporation shall not extend beyond the period of three years from the date of payment of the final bill or in case the final bill is a MINUS bill, from the date the amount payable by the Contractor under the MINUS final bill is communicated to the Contractor.

12.3.5 Any amount due to the Contractor under this Contract for under-payment may be adjusted against any amount then due or which may at any time thereafter become due before payment is made to the Contractor, from him to the Corporation on any other Contract or account whatsoever.

12.4 Time limit for Payment of Final Bill

12.4.1 The final bill shall be submitted by the Contractor within 90 days of physical completion of the works. Payment of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and at rates as approved by the Engineer-in-Charge, shall be made within the period specified hereunder. The period shall be reckoned from the date of receipt of the bill by the Engineer-in-Charge along with the all acceptable supporting documents.

(i) If the tendered value of work is upto Rs. 5 Crores : 3 months

(ii) If the tendered value of work exceeds Rs. 5 Crores : 6 months

12.4.2 The engineer-in-charge shall intimate for, if any, corrections in the final bill to Contractor. The Contractor should re-submit the bill, with corrections within the 30 days of its return by the Engineer-in-charge. The re-submitted bill will be checked and paid within the period as indicated in sub-clause 12.4.1 (i) and (ii) above (as the case may be).

12.4.3 After payment of the amount of the final bill as aforesaid has been made, the Contractor may, if he so desires, reconsider his position in respect of the disputed portion of the final bill and if he fails to do so within 90 days, his disputed claim shall be dealt with as provided in the Contract.

12.5 Delayed Payment

12.5.1 Interest at a pre-specified rate (as defined in Schedule A) shall be paid on the balance amount of the bill if not paid within the time limit specified for running and final bills as specified in sub-clause 12.2 and sub-clause 12.4 respectively. Disputed portion of bill (if any) will not attract any interest.

13 CONTRACT TERMINATION BY CORPORATION

13.1 Foreclosure of contract

13.1.1 If at any time after acceptance of the tender / during execution of work the Corporation 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 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.

13.1.2 The Contractor shall be paid at contract rates full amount for works executed at Site, on submission of the claim and review & approval of the claim by the Engineer-in-Charge.

13.1.3 The Corporation may in addition to above, compensate a reasonable amount to the Contractor on mutual agreement basis based on submission of the claim and review of the claim by the Engineer-in-Charge.

13.2 Determination/Cancellation of Contract

13.2.1 If the Contractor :

- (a) at any time makes default in proceeding with the works with due diligence and continues to do so after 7 days notice in writing from the Engineer-in-Charge; or
- (b) 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; or
- (c) fails to complete the works or items of work with individual dates of completion, on or before the date(s) of completion, and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge; or
- (d) shall offer, or give or agree to give to any person in the Corporation's service or to any other person on his behalf any gift, bribe, gratuity, commission, other thing of value or consideration of any kind as an inducement or reward for doing or forbearing to do or having done or forborne to do any act in relation to the obtaining or execution of this or any other Contract for the Corporation; or
- (e) shall enter into a contract with the Corporation 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 the terms of payment thereof have previously been disclosed in writing to the Accepting Authority/Engineer-in-Charge; or
- (f) shall obtain a Contract with the Corporation as a result of wrong tendering or other non-bonafide methods of competitive tendering; or

- (g) 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 a voluntary liquidation for 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; or
 - (h) being a company, shall pass a resolution or the Court shall make an order for the liquidation of its affairs, or a receiver or manager on behalf of the debenture holders shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or
 - (i) shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or
 - (j) 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 attempts to assign, transfer or sublet the entire works or any portion thereof without the prior written approval of the Engineer-in-Charge; or
 - (k) indulges in criminal proceedings / activities with the employees of the Corporation or any other sub contractor;
the Engineer-in-charge may, upon giving 7 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. The Corporation's election to terminate the Contract shall not prejudice any other rights of the Corporation, under the Contract or otherwise.
- 13.2.2 The Engineer-in-charge shall on such determination / cancellation have powers to:
- (a) take possession of the Site and any materials, constructional plant, implements, stores, etc. thereon; and /or
 - (b) carry out the incomplete work by any means at the risk and cost of the Contractor.
- 13.2.3 On giving a notice to the Contractor, the Engineer-in-Charge by virtue of the powers vested in him can;
- (a) take possession of or
 - (b) use as on hire
- all or any tools, plants, materials and stores, in or upon the works or the Site thereof belonging to the Contractor and intended to be used for the execution of the works or any part thereof.
- The payments for the above would be as per 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.

- 13.2.4 Otherwise the Engineer-in-Charge may order the Contractor to remove such tools, plant, materials or stores from the premises. If the Contractor fails to comply with any such requisition, the Engineer-in-Charge may remove them at the Contractor's expense or sell them on account of the Contractor and his risk in all respects.

In such case, 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.

- 13.2.5 On determination/ cancellation of the Contract in full or in part, the Engineer-in-charge shall determine what amount, if any, is recoverable from the Contractor for completion of works or part of the works or in case the works or part of the works is not completed, the loss or damage suffered by the Corporation. In determining the amount, credit shall be given to the Contractor for the value of the work executed by him upto the time of cancellation, the value of Contractor's material taken over and incorporated in the work, and use of tools, tackles and machinery belonging to the Contractor.

- 13.2.6 Any excess expenditure incurred or to be incurred by the Corporation in completing the works or part of the works or the loss or damage suffered or may be suffered by the Corporation as aforesaid after allowing such credit shall be recovered from any money due to the Contractor on any account, and if such money is not sufficient the Contractor shall be called upon in writing to pay the same within 30 days.

- 13.2.7 If the Contractor shall fail to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge shall have the right to retain any or all of the Contractor's unused materials, construction plant, implements, temporary buildings etc. till the balance outstanding from the Contractor is recovered in accordance with the provisions of the Contract.

- 13.2.8 In the event of anyone or more of the 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 advances on account or with a view to the execution of the work or the performance of the Contract. In case action is taken under any of the provision aforesaid, the Contractor shall not be entitled to recover or be paid any sum for any work thereof or actually executed 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 so certified.

- 13.2.8. Any sums in excess of the amounts due to the Corporation and unsold materials, construction plant, etc, shall be returned to the Contractor, provided, always that the cost or anticipated cost of completion by the Corporation of the works or part of the works is less than the amount which

the Contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the Contractor.

- 13.2.9. In case any of the powers conferred upon the Engineer-in-Charge by this clause become exercisable and the same are not 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.

13.3 Termination of Contract on death

- 13.3.1 If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the partners dies, then, unless the Engineer-in-Charge is satisfied that the legal representatives of the individual Contractor or of the proprietor of the proprietary concern and in the case of partnership, the surviving partners, are capable of carrying out and completing the Contract, the Engineer-in-Charge shall be entitled to cancel the Contract as to its incomplete part without the Corporation being in any way liable to payment of any compensation to the estate of the deceased Contractor and /or to the surviving partners of the Contractor's firm on account of the cancellation of the contract.

- 13.3.2 The decision of the Engineer-in-Charge that the legal representatives of the deceased Contractor or the surviving partners of the Contractor's firm cannot carry out and complete the Contract shall be final and binding on the parties in the event of such cancellation, the Corporation shall not hold the estate of the deceased Contractor and/or the surviving partners of the Contractor's firm liable for damages for not completing the Contract.

14 RISK AND RESPONSIBILITY

14.1 Liability for damage, defects or imperfections and rectifications thereof

- 14.1.1 If the Contractor or his workman or employees shall injure or destroy any part of the building in which they may be working or any building, road, fence, etc. contiguous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work while in progress, the Contractor shall, upon receipt of a notice in writing in that behalf make the same good at his own expense.
- 14.1.2 If it shall appear to the Engineer-in-Charge or his Representative at any time during construction or re-construction or prior to the expiration of the Defects Liability Period, that any work has been executed with unsound, imperfect or unskilled workmanship or that any materials or articles provided by the Contractor for execution of the work are not in accordance with the Contract, the contractor shall forthwith rectify or remove and re-construct the work so specified in whole or in part within the time limit specified by the Engineer-in-charge.

- 14.1.3 Failing which, the Engineer-in-Charge may rectify or remove and re-execute the work and/or remove and replace with others, the materials or articles complained of, as the case may be, by other means at the risk and expense of the Contractor.
- 14.1.4 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 competent authority 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.
- 14.1.5 In case of repairs and maintenance works, splashes and droppings from white washing, painting etc; shall be removed and surfaces cleaned simultaneously with completion of these items of work in individual rooms, quarters or premises, etc. where the work is done, without waiting for completion of all other items of work in the Contract. In case the Contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get the work done by other means at the cost of the Contractor. Before taking such action however, the Engineer-in-Charge shall give 3 days notice in writing to the Contractor.

15 INSURANCE

15.1 General Requirements for Insurances

- 15.1.1 The Contractor shall provide in the joint names of the Corporation and the Contractor, insurance cover from the date of commencement of work to the end of the Defects Liability Period. The Contractor is liable to take Contractor's all risk policy for the whole contract value. The insurance amount shall also cover third party liability to the extent, if any as specified in Schedule A. In addition to this the contractor shall also take Workmen Compensation Policy for workmen.
- 15.1.2 Policies /certificates of insurance shall be delivered in original by the Contractor to the Engineer-in-charge before the date of commencement of work. In case of failure by the Contractor, no payment against the running bill shall be released till the submission of the policies / certificates of insurance. All such insurances shall provide for compensation to be payable in the types and proportions for which these policies are intended.
- 15.1.3 The Contractor shall provide premium receipts to the Engineer-in-Charge from time to time, as a proof that he has paid the necessary premiums for keeping the policies alive till expiry of the Defects Liability Period.
- 15.1.4 The Contractor shall ensure that similar insurance policies are taken out by his Sub-Contractors(if any) and shall be responsible for any claims or losses to the Corporation resulting from their failure to obtain adequate insurance protection in connection thereof. The Contractor shall produce or cause to be produced by his Sub-Contractors (if any) as the case may be, the relevant

policy or policies and premium receipts as and when required by the Engineer-in-Charge.

15.1.5 Alterations to the terms of insurance shall not be made without the approval of the Engineer-in-charge.

15.1.6 Both parties shall comply with all conditions of the insurance policies.

15.1.7 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the execution of the Contract shall be the responsibility of the Contractor. However this shall not include excepted risks which are not covered under the above said insurance policies. All consequential loss with reference to insurance claims shall be borne by the contractor.

16 FORCE MAJEURE

16.1 Definition of Force Majeure

16.1.1 In this Clause, "Force Majeure" means an exceptional event or circumstance:

- a) which is beyond a Party's control,
- b) which such Party could not reasonably have provided against before entering into the Contract,
- c) which, having arisen, such Party could not reasonably have avoided or overcome, and
- d) which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- i. war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- ii. rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war,
- iii. riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
- iv. munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- v. natural catastrophes such as earthquake, hurricane, typhoon, tsunami or volcanic activity.

16.2 Consequence of Force Majeure

16.2.1 If the Contractor is prevented from performing its substantial obligations under the Contract by Force Majeure, and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor may be eligible to

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 7.6 [Extension of Time for Completion], and

- (b) if the event or circumstance is of the kind described in sub-paragraphs (a) to (d) of Sub-Clause 16.1 [Definition of Force Majeure] and, in the case of sub-paragraphs (i) to (v), occurs in the Country, payment of any such costs of rectifying or replacing the Works and/or Goods damaged or destructed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in Clause 15 [Insurance].

16.2.2 The Contractor shall, as may be directed in writing by the Engineer-in-Charge, remove from the Site any debris and so much of the Works as shall have been damaged, taking to the Corporation's store such Corporation's T&P, articles and/ or materials as may be directed.

16.3 Duty to Minimise Delay

16.3.1 The Contractor shall, as may be directed in writing by the Engineer-in-Charge, proceed with the erection and completion of the Works under and in accordance with the provisions and conditions of the Contract.

16.3.2 Each Party shall at all times use all reasonable endeavours to minimise any delay in the executing of the Contract as a result of Force Majeure. A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

17 CLAIMS, DISPUTES AND ARBITRATION

17.1 Contractor's Claims

17.1.1 The Contractor may be granted extension of time and compensation under the following delay events, for the portion of delay attributable to Corporation :

- (a) if the Contractor suffers delay as a result of failure by the Corporation to give right or possession of site as per the sub-clause 2.1 (Possession of site),
- (b) if the Contractor suffers delay from executing the work due to error or incorrect data furnished by the Engineer-in-charge, as per the clause 4.6 (Setting out the work)
- (c) if there is a substantial delay in issue of drawings by the Corporation and affects the progress of work.
- (d) if there is a substantial delay in issue of material agreed as per the contract to be supplied by Corporation and affects the progress of work

17.1.2 The contractor shall be eligible, based on reported and agreed delays attributable to the corporation, to extension of time for the full delay subject to the provisions of Sub-Clause 7.6 [Extension of Time for Completion] and in addition for Compensation for the same period which would be mutually agreed based on the initiation made by the Contractor with proper supporting documents. The Contractor shall serve a notice for claim within 90 days after the Contractor became aware, should have become aware, of the event or circumstance, as stated under (a) to (d) above. The settlement of the claims shall be made at the end of the completion of contract.

17.1.3 If the Contractor fails to give notice of a claim within period of 90 days, the Contractor shall not be eligible to additional payment, and the Corporation shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

17.1.4 The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Engineer. Without admitting the Corporation's liability, the Engineer-in-charge may, after receiving any notice under this sub-clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Engineer-in-charge to inspect all these records, and shall (if instructed) submit copies to the Engineer-in-charge.

17.1.5 Within 15 days after the Contractor gives notice, or within such other period as may be proposed by the Contractor and approved by the Engineer-in-charge, the Contractor shall send to the Engineer-in-charge a fully detailed claim which includes full supporting particulars of the basis of the claim. If the event or circumstance giving rise to the claim has a continuing effect:

- (a) this claim shall be considered as interim;
- (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Engineer-in-charge may reasonably require; and
- (c) the Contractor shall send a final claim within 30 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer-in-charge.

The Engineer-in-charge shall examine and accumulate all claims received under this clause, for settlement of the claim immediately after the close of the contract.

In case Contractor, at the end of the contract, has dispute over the claim admitted by the Engineer-in-charge he may consider that the claim is rejected by the Engineer and any of the Parties may refer it to the Dispute Board in accordance with Sub-Clause 17.4 [Obtaining Dispute Resolution Board's Decision].

17.2 Dispute Resolution

17.2.1 Disputes if not resolved at the level of Engineer-in-charge, will be referred to a committee appointed by the CMD, NPCIL, before the matter is referred to Dispute Resolution Board.

17.3 Appointment of the Dispute Resolution Board

17.3.1 The present sub-clause 17.3 and the forth coming sub-clauses 17.4, 17.5, 17.6 and 17.7 relating to appointment of dispute resolution board, obtaining Dispute resolution Board's decision, amicable settlement, Failure to comply to with Dispute resolution Board's decision and expiry of Dispute resolution board's appointment shall not be applicable in respect of a contract having the total

value of less than Rs. 100 Crores at the time of award of contract. With a view to clarify the doubt, if any, it is declared that clause 17.3 to 17.7 shall be applicable in respect of the contract having value more than Rs. 100 Crores. In such cases, where the value of the contract is less than Rs. 100 Crores, the disputes, differences shall be settled and decided in accordance with clause 17.8 of this General Conditions of Contract.

- 17.3.2 If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation by the Engineer-in-charge, either Party may refer the dispute in writing to the Dispute resolution board for its decision, with copies to the other Party.
- 17.3.3 The Dispute Resolution Board (DRB) shall be established by signature of the Dispute Resolution Board Agreement (“the Board Agreement”) which shall be made effective from the same time as the signature of the Contract Agreement.
- 17.3.4 The Board shall comprise three Members experienced in the type of work involved and in the interpretation of document. One Member shall be selected by each of the Corporation and the Contractor and approved by the other.
- 17.3.5 The third Member shall be selected by the other two and approved by the parties. The third Member shall serve as Chairman of the Board.
- 17.3.6 The terms of the remuneration of each of the three members, including the remuneration of any expert whom the Dispute Resolution Board consults, shall be mutually agreed upon by the Parties when agreeing the terms of appointment of the member or such expert (as the case may be). Each Party shall be responsible for paying one-half of this remuneration.
- 17.3.7 In the event of death, disability, or resignation of any Member, such Member shall be replaced in the same manner as the Member being replaced was selected. If for whatever other reason a Member shall fail or be unable to serve, the Chairman (or failing the action of the Chairman then either of other Members) shall inform the parties and such non- serving Member shall be replaced in the same manner as the Member being replaced was selected. Replacement shall be considered complete when the new Member signs the Board Agreement. Throughout any replacement process the Members not being replaced shall continue to serve and the Board shall continue to function and its activities shall have the same force and effects as if the vacancy had not occurred.

17.4 Obtaining Dispute Resolution Board’s Decision

- 17.4.1 The DRB shall be deemed to have received any reference on the date when it is received by the chairman of the DRB.
- 17.4.2 Both Parties shall promptly make available to the DRB all such additional information, further access to the Site, and appropriate facilities, as the DRB may require for the purposes of making a decision on such dispute. The DRB shall be deemed to be not acting as arbitrator(s).
- 17.4.3 If the Dispute Resolution Board has given its decision as to a matter in dispute to

both Parties, and no notice of dissatisfaction has been given by either Party within 30 days after it received the DRB's decision, then the decision shall become final and binding upon both Parties.

17.4.4 Any dispute on which the Board has not issued a Recommendation within 45 days of its final hearing on the dispute, or regarding which the Recommendation (s) are not accepted, may be referred in writing by either party to arbitration in accordance with this Clause, by written notice to the other party with copies to the the Board. Such notice shall state that it is being made pursuant to this Clause and shall establish the entitlement of the party giving it to commence arbitration provided that no such arbitration may be commenced until such notice is given. Such reference shall be made within 15 days of receipt of the Board's recommendation (s), or within 15 days of the day on which said period of 45 days expired, as the case may be, failing which reference any recommendation (s) previously rejected or not accepted shall be deemed accepted despite such previous rejection or non-acceptance and shall be final and binding upon the parties.

17.4.5 All Recommendations, which have become final and binding, shall be implemented by the parties forthwith; such implementation shall include any relevant action of the Engineer-in-charge.

17.4.6 Whether or not accepted or deemed accepted, all of the Recommendations shall be admissible in any subsequent dispute resolution procedure, including any arbitration or any litigation having any relation to the dispute or disputes to which the Recommendation(s) relate.

17.4.7 Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence and the Contractor and the Corporation shall give effect forthwith to every decision of the Engineer-in-charge unless and until the same shall be revised, as hereinafter provided, in an arbitral award.

17.5 Amicable Settlement

17.5.1 Where notice of dissatisfaction has been given under Sub-Clause 17.4[Obtaining Dispute Resolution Board's Decision] above, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, arbitration may be commenced on or after the 60th day after the day on which a notice of dissatisfaction and intention to commence arbitration was given, even if no attempt at amicable settlement has been made.

17.6 Failure to Comply with Dispute Resolution Board's Decision

17.6.1 In the event that a Party fails to comply with a final and binding DRB decision, then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under sub-clause 17.8 [Arbitration]. Sub-clause 17.4 [Obtaining Dispute Resolution Board's Decision] and sub-clause 17.5 [Amicable Settlement] shall not apply to this reference.

17.7 Expiry of Dispute Resolution Board's Appointment

17.7.1 If a dispute arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works and there is no DRB in place, whether by reason of the expiry of the DRB's appointment or otherwise:

- (a) Sub-Clause 17.4 [Obtaining Dispute Resolution Board's Decision] and Sub-Clause 17.5 [Amicable Settlement] shall not apply, and
- (b) the dispute may be referred directly to arbitration under Sub-Clause 17.8 [Arbitration].

17.8 Arbitration

17.8.1 Any dispute not settled amicably and in respect of which the DRB's decision (if any) has not become final and binding shall be finally settled by arbitration. Unless otherwise agreed by both Parties:

- i) For contracts with foreign contractors:
 - a) International arbitration with proceedings administered by the international arbitration institution appointed by the corporation, in accordance with the rules of arbitration of the appointed institution,;
 - b) the place of arbitration shall be the city where the headquarters of the appointed arbitration institution is located or such other place selected in accordance with the applicable arbitration rules; and
 - c) the arbitration shall be conducted in the language for communications defined in Sub-Clause 1.3 ; and
- ii) For contracts with domestic contractors, arbitration with proceedings conducted in accordance with the Indian Arbitration and Conciliation Act, 1996:
 - a) All questions and disputes relating to the meaning of the specifications, designs, drawings and instructions herein before contained in this Contract or as to the quality of the workmanship or materials used on the work or arising out of the terms and conditions of the Contract whether during the progress of the work or after the completion or abandonment thereof, at the request of the aggrieved party in writing, shall be referred to the sole arbitration of the person and appointed by the Chairman & Managing Director, Nuclear Power Corporation of India Ltd, in respect of the contracts entered for and on behalf of the Corporation, by any Officer / Authority of the Corporation.
 - b) When it appears to the person that there exists an element of a settlement which may be acceptable to the parties, he shall submit them to parties for their observation. He may reformulate the terms of a possible settlement in the light of their observations.
 - c) If the parties reach agreement of the dispute, they may draw up and sign a written settlement agreement. They may request the person to draw up or assist them in drawing up the settlement agreement.
 - d) If settlement agreement shall have the same status and effect as if it is an arbitral award on agreed terms on the substance of the dispute rendered by an arbitral tribunal under section 30 of the Act.

- e) If a settlement does not appear possible, the person, after consultation with the parties, will give a written declaration that further efforts at Conciliation are no longer justified and the person proceedings are terminated.
- f) When Conciliation proceedings have become infructuous or have been terminated, the party, which initiated the Conciliation, shall refer the disputes for Arbitration. The reference to Arbitration should be made preferably within 30 days of the termination of Conciliation Proceedings.
- g) The Arbitration shall be conducted in accordance with the Indian Arbitration and Conciliation Act, 1996. For Contracts costing upto Rs. 10 Crores, a Sole Arbitrator shall be appointed. For Contracts costing over Rs. 10 Crores, a Committee of Arbitrators shall be appointed composed of one Arbitrator to be by the Contractor, one to be by the Owner and the third Arbitrator, who will act as a Chairman but not as umpire, to be chosen jointly by the two nominees. The decision of majority of Arbitrators shall be final and binding on both parties.

18 SCHEDULES
SCHEDULE 'A'

Sr. No.	Clause Reference No.	ITEM	STIPULATION
1	NIT 37.1	Applicability of Mega Power Project Concession	Yes / No
2	1.1.1	Accepting Authority	
3	2.1.3	Time by which possession of site will be given	
4	4.14.1	Availability of Electricity	Yes / No
5	4.14.1	The rate at which electricity will be charged	Rs. _____ unit
6	4.19.2	Number of trees to be planted by the contractor	___ Nos
7	4.22.1	Number of Apprentices to be trained by the contractor	___ Nos
8	4.23.2	Availability of Departmental water supply	Yes / No
9	4.23.2 (i)	Water charges	Rs. _____ Ltr
10	4.24.2	Land availability for contractor's colony	Yes / No
11	5.6.3	Penalty, for not providing arrangements and facilities as per safety guidelines	Rs. _____
12	5.6.4	Industrial Safety Training to be provided by Corporation	Yes / No
13	5.6.14	Minimum number of safety professionals to be employed by Contractor	___ Nos
14	5.6.15	Penalty, for not deploying the minimum number of safety professionals	Rs. _____ per person
15	7.8.1	Applicability of the Incentive clause	Yes / No
16	7.8.2	Maximum percentage of the contract value, which shall be paid as incentive.	___ %
17	7.9.3	Compensation for suspension (entire work) beyond 30 days (per day rate)	Rs. _____ / Day
18	9.1.1	Defect Liability Period	
		For the contracts other than maintenance contracts mentioned below	12 months
		For contracts such as housekeeping, annual repairs, dismantling roads, horticulture, service contracts etc.	___ months
19	9.1.6	Applicability of liability towards Latent defect	Yes/no
20	11.3.4	Various Component expressed as a percentage of contract value	
		Unskilled labour component (lu)	___ %

Sr. No.	Clause Reference No.	ITEM	STIPULATION
		Skilled labour component (ls)	__%
		Material component	
		_____(m)	__%
		_____(n)	__%
		_____(o)	__%
		_____(p)	__%
		All other materials (q)	__%
		P.O.L Component(d)	__%
		Nearest Petrol pump to be considered for petrol prices (P.O.L)	ADDRESS
21	12.1.4	The rate of interest to be charged for mobilisation advance	__%
22	12.2.1	Applicability to submit the bills and measurement in Computerised form	Yes / No
23	12.5.1	Interest for delayed payment	__%
24	15.1.1	Amount of Third party liability to be covered in Insurance	Rs_____

SCHEDULE 'B'

MATERIAL ISSUED TO THE CONTRACTOR

(The Engineer-in-Charge to indicate permissible wastage before issue of tender duly approved by the Competent Authority)

Sl. No.	Particulars	Unit	Rate at which Material will be issued	Maximum Invisible wastage (Non-Returnable) %	Maximum permissible wastage (Returnable in case of free issue) %*	Qty. to be issued (approx.)
1	2	3	4	5	6	7

* This percentage can vary as per the cutting plan approved by Engineer-in- Charge

Signature of Issuing Officer:

Signature of Contractor:

Date:

Date :

SCHEDULE 'C'

TOOLS AND PLANT TO BE HIRED TO THE CONTRACTOR

Sr.no.	Particulars	Number available	Hire charges per Unit per working day Rs.	Frequency of Maintenance	Value Per Unit	Place of Issue	Number Reqd. by the Contractor.
1	2	3	4	5	6	7	8

Tools and Plants are not expected to be hired out to the Contractor. If, however, any tools and plants are available at the time of performing the work the same may be hired out at rates to be decided by the Engineer-In-Charge. The Corporation reserves the right not to hire out any T&P and to withdraw at any time such T&P hired out.

The Contractor shall ask the Engineer-In-Charge the value of tools & Plants for which these have to be insured and carry out the insurance accordingly in case insurance not available with NPCIL.

Signature of the Issuing Officer
Date.....

Signature of Contractor
Date.....

FORMAT FOR 'HINDRANCE REGISTER'

Sr.No	Nature of hindrance	Date of occurrence	Date of removal	Period of hindrance	Overlapping period if any	Net extension	Dated sign of Contractor with name	Dated sign of Engr. with name	Remarks

19. CONTRACTORS` LABOUR REGULATIONS AND FORMS

1. Definitions:

In these regulations, unless otherwise expressed or indicated, the following words and expression shall have the meaning hereby assigned to them:

- (a) **"Workmen"** means any person employed by the contractor, directly or indirectly through a sub-contractor, to do any skilled, semi-skilled or unskilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment are expressed or implied but does not include any person-
 - 1. Who is employed mainly in managerial or administrative capacity; or
 - 2. Who, being employed in supervisory capacity draws wages exceeding five hundred rupees per mensem or exercise either by the nature of the duties attached to the office or by reason of powers vested in him, functions mainly of managerial nature;
 - 3. Who is an out worker, that is to say, a person to whom any article or materials are given out by or on behalf of the principal employer to be made up, cleaned washed, altered, ornamental finished, repaired, adopted or otherwise processed for sale for the purposes of the trade or business of the principal employer and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal employer.
- (b) **"Fair Wage"** means wages, which shall include wages for weekly day of rest and other allowances, whether for time or piece work, after taking into consideration prevailing market rates for similar employments in the neighborhood but shall not be less than the minimum rates of wages fixed under The Minimum Wages Act.
- (c) **"Contractor"** for the purpose of these regulations shall include an agent or sub-contractor employing labour on the work taken on contract.
- (d) **"Inspecting Officer"** means any Labour Enforcement Officer, or Assistant Labour Commissioner of the Chief Labour Commissioner's Organisation.
- (e) **"Form"** means a form appended to these Regulations.

2. Notice of commencement: The Contractor shall, within **SEVEN** days of commencement of the work, furnish in writing to the Inspecting Officer of the area concerned the following information:

- (a) Name and situation of the work
- (b) Contractors` name and address
- (c) Particulars of the Department for which the work is undertaken

- (d) Name and address of sub-contractors as and when they are appointed
- (e) Commencement and probable duration of the work
- (f) Number of workers employed and likely to be employed
- (g) "Fair wages" for different categories of workers

3 (i) **Number of hours of work which shall constitute a normal working day:-**

The number of hours which shall constitute a normal working day for an adult shall be NINE hours. The working day of an adult worker shall be so arranged that inclusive of intervals, if any, for rest, it shall not spread over more than twelve hours on any day; when an adult worker is made to work for more than NINE hours on any day or for more than FORTY EIGHT hours in any week, he shall, in respect of overtime work, be paid wages at double at ordinary rate of wages.

(ii) **Weekly day of rest :**

Every worker shall be given a weekly day of rest which shall be fixed and notified at least TEN days in advance. A worker shall not be required or allowed to work on the weekly rest day unless he has or will have a substituted rest day, on one of the five day immediately before or after the rest day. Provided that no substitution shall be made which will result in the worker working for more than ten days consecutively without a rest day for a whole day.

Where in accordance with the foregoing provisions a worker works on the rest day and has been given a substituted rest day he shall be paid wages for the work done on the weekly rest day at the overtime rate of wages.

NOTE : The expression "ordinary rate of wages" means the fair wage the worker is entitled to.

4. **Display of notice regarding Wages, Weekly Day of Rest etc.,:**

The Contractor shall, before he commences his work on Contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition in conspicuous places on the works, notice in English and in the local Indian Language spoken by majority of workers, giving the rate of fair wages, the hours of work for which such wages are payable, the weekly rest days workers are entitled to and name and address of the Inspecting Officer. The Contractor shall send a copy each of such notices to the Inspecting Officers.

5. **Fixation of Wage Periods :**

The Contractor shall fix wage periods in respect of which wages shall be payable. No wage period shall normally exceed one week.

6. Payment of Wage:

- (i) Wages due to every worker shall be paid to him direct. All wages shall be paid in current coins or currency or in both.
- (ii) Wages of every worker employed on the Contract shall be paid where the wage period is one week, within THREE days from the end of the Wage period; and in any other case before the expiry of the 7th day or 10th day from the end of the wage period according as the number of workers does not exceed 1,000 or exceeds 1,000.
- (iii) When employment of any worker is terminated by or on behalf of the Contractor, the wages earned by him shall be paid before expiry of the day succeeding the one on which his employment is terminated.
- (iv) Payment of wages shall be made at the work site on a working day except when the work is completed before expiry of the wage period, in which case final payment shall be made at the work site within 48 hours of the last working day and during normal time.

NOTE : The term "working day" means a day on which the work on which labour is employed, is in progress.

7. Register of Workmen :

A register of workmen shall be maintained in the Form appended to these regulations and kept at the work site or as near to it as possible, and relevant particulars of every workman shall be entered therein within THREE days of his employment. (Ref. Appendix I)

8. Employment Card:

The Contractor shall issue an employment card in the Form appended to these regulations to each worker on the day of work or entry into his employment. If a worker already has any such card with him issued by the previous employer, the contractor shall merely endorse that Employment Card with relevant entries. On termination of employment the Employment Card shall again be endorsed by the Contractor and returned to the worker. (Appendix II)

9. Register of Wages etc. :

- (i) A Register of Wages-Cum-Muster Roll in the Form appended to these regulations shall be maintained and kept at the work site or as near to it as possible. (Appendix III).

- (ii) A wage slip in the Form appended to these regulations shall be issued to every worker employed by the Contractor at least a day prior to disbursement of wages. (Appendix IV).

10. Fines and deductions which may be made from Wages:

- (i) Wages of a worker shall be paid to him without any deduction of any kind except the following:
 - (a) fines;
 - (b) deductions for absence from duty; i.e. from the place of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent;
 - (c) deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money which he is required to account for, where such damage or loss is directly attributable to his neglect or default;
 - (d) deductions for recovery of advances or for adjustment or overpayment of wages, Advance granted shall be entered in a register; and
 - (e) any other deduction which the Corporation may from time to time allows.
- (ii) No fines shall be imposed on any worker say in respect of such acts and omissions on his part as has been approved by the Chief Labour Commissioner.
- (iii) No fine shall be imposed on a worker and no deductions for damage or loss shall be made from his wages until the worker has been given an opportunity of showing causes against such fines or deductions.
- (iv) The total amount of fines which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the wages payable to him in respect of that wage period.
- (v) No fine imposed on a worker shall be recovered from him in installments, or after expiry of sixty days from the date on which it was imposed. Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.
- (vi) The contractor shall maintain both in English & the local Indian language a list, approved by the Chief Labour Commissioner, clearly stating the acts and omissions for which penalty or fine may be imposed on a workman and display it in a good condition in a conspicuous place on the work site. (Appendix V)

- (vii) The Contractor shall maintain a register of fines and the register of deductions for damage or loss in the Forms appended to these regulations which should be kept at the place of work.(Appendix VI & VII).

11. Register of Accidents :

The Contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars.

- (a) Full particulars of the labourers who met with accident.
- (b) Rate of Wages
- (c) Sex
- (d) Age
- (e) Nature of accident and cause of accident
- (f) Time and date of accident
- (g) Date and time when admitted in hospital
- (h) Date of discharge from the hospital
- (i) Period of treatment and result of treatment
- (j) Percentage of loss of earning capacity and disability as assessed by Medical Officer
- (k) Claim required to be paid under Workmen's Compensation Act
- (l) Date of payment of compensation
- (m) Amount paid with details of the person to whom the same was paid
- (n) Authority by whom the compensation was assessed
- (o) Remarks

12. Preservation of Registers :

The Register of workmen and the Register of Wages-cum- Muster Roll required to be maintained under these Regulations shall be preserved for 3 years after the date on which the last entry is made therein.

13. Enforcement :

The Inspecting Officer shall either on his own motion or on a complaint received by him carry out investigations, and send a report to the Engineer-In-Charge specifying the amounts representing Workers' dues and amount of penalty to be imposed on the Contractor for breach of these Regulations, that have to be recovered from the Contractor, indicating full details of the recoveries proposed and the reasons therefore. It shall be obligatory on the part of the Engineer-In-Charge on receipt of such a report to deduct such amounts from payment due to the Contractor.

14. Disposal of amounts recovered from the Contractor :

The Engineer-In-Charge shall arrange payment to workers concerned within FORTY FIVE days from receipt of a report from the Inspecting Officer except in cases where the Contractor had made an appeal under Regulation 16 of these Regulations. In

cases where there is an appeal, payment of workers dues would be arranged by the Engineer-In-Charge, wherever such payments arise, within THIRTY days from the date of receipt of the decision of the Regional Labour Commissioner (RLC).

15. Welfare Fund :

All moneys that are recovered by the Engineer-In-Charge by way of workers dues, which could not be disbursed to workers within the time limit prescribed above, due to reasons such as whereabouts of workers not being known, death of workers, etc. and also amounts recovered as penalty, shall be credited to a Fund to be kept under the custody of the Corporation for such benefit and welfare of workmen employed by Contractors.

16. Appeal against decision of Inspecting Officer:

Any person aggrieved by a decision of the Inspecting Officer may appeal against such decision to the Regional Labour Commissioner concerned within THIRTY days from the date of the decision, forwarding simultaneously a copy of his appeal to the Engineer-in-Charge. The decision of the Regional Labour Commissioner shall be final and binding upon the Contractor and the workmen.

17. Representation of parties:

- (i) A workman shall be entitled to be represented in any investigation or enquiry under these Regulations by an officer of a registered trade union of which he is a member or by an officer of a Federation of Trade Unions to which the said trade union is affiliated or where the workman is not a member of any registered trade union, by an official of a registered trade union, connected with, or by any other workman employed in, the industry in which the worker is employed.
- (ii) A contractor shall be entitled to be represented in any investigation enquiry under these Regulations by an officer of an association of Contractors of which he is a member or by an officer of a Federation associations of contractors to which the said association is affiliated where the contractor is not a member of any association of contractors, by an officer of association of employers, connected with, or by any other employer engaged in, the industry in which the contractor is engaged.
- (iii) No party shall be entitled to be represented by a legal practitioner in investigation or enquiry under these Regulations.

18. Inspection of Books and other Documents:

The Contractor shall allow inspection of the Registers and other documents prescribed under these Regulations by Inspecting Officers and the Engineer-in-charge or his authorised representative at any time and by the worker or his agent on receipt of due notice at convenient time.

19. Interpretation, etc. :

On any question as to the application interpretation or effect of these Regulations, the decision of the Chief Labour Commissioner or Deputy Chief Labour Commissioner (Central) shall be final and binding.

20. Amendments

Central Government may from time to time, add to or amend these Regulations and issue such directions as it may consider necessary for the proper implementation of these Regulations or for the purpose of removing any difficulty which may arise in the administration thereof.

Appendix – I

Register of workmen

(Regulation 7)

- i) Name and address of the Contractor _____
- ii) Number and date of Contract _____
- iii) Name and address of the Department awarding the contract _____
- iv) Nature of the Contract and location of the work _____
- v) Duration of the Contract _____

Sr. No	Name and Surname of the workers	Age & Sex	Father's/ Husband's Name	Nature of Employment & Designation	Permanent Home Address of Employee (Village, Distt. Thana)	Present Address	Date of Commencement of employment	Date of termination or leaving of employment	Signature or thumb impression of the employee	Remarks
1	2	3	4	5	6	7	8	9	10	11

Appendix – 2
EMPLOYMENT CARD
(Regulation 8)

i) Name and Sex of the worker _____

ii) Father's/Husband's Name _____

iii) Address _____

iv) Age or Date of Birth _____

v) Identification mark _____

vi) Name and sex of the worker _____

Particulars of next of kin (Wife/Husband and Children, if any, or of dependent next of kin in case the worker has no wife / husband or child)

Name

Full Address of Dependent _____

(Specify, Village, Distt and State) _____

Sr N o.	Name and address of employer (specify whether a contractor or a sub- Contractor)	Particul ars of locatio n of work site and descrip tion of work done	Total period for which the worker is employe d (fromto)	Actual numb er of days worke d	Leave taken (No. days should be specifi ed)	Nature of work done by the worker	Wag e peri od	Wage rate with particulars of unit in case of piece work	Total wage earned by the worker during the period shown under Col. 5	Rem arks	Signature of the employer
1	2	3	4	5	6	7	8	9	10	11	12

N.B. For a worker employed at one time piece work basis and at another on daily wages, relevant entries in respect of each type of employment should be made separately.

Appendix – 3

REGISTER OF WAGES - CUM - MUSTER ROLL (Regulation 9)

- i) Name & Address of the contractor _____
- ii) Number and date of Contract _____
- iii) Name and address of the Department awarding the Contract _____
- iv) Nature of the Contract and location of the work _____
- v) Duration of the Contract _____
- vi) Wage Period _____

						Fair Wages Payable			Wages Paid		Overtime Worked				Deduction from wages								
Sr No.	Name and Surname of the worker	Father's/ Husbands Name	Sex	Designation/ Nature of work	Daily attendance (No. of Units 1, 2, 3, 4, 5, 6, 7)	Total Attendance	Basic	D.A. & other allowance	Basic	D.A. & other allowance	Date	No. of Hrs.	Over time wages earned	Total wages paid	Fine	Deduction for Damage or loss	House Rent	Recovery of	Other deductions	Net Wages payable	Date of Payment	Signature / Thumb impression of worker	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Reasons to be recorded in Col. 24

**Appendix-4
WAGE SLIP**

(Regulation 9)

i) Name of the Contractor _____

ii) Place _____

1.	Name of the Workers with father`s/ husband`s name	:
2.	Nature of Employment	:
3.	Wage period	:
4.	Rate of Wages Payable	:
5.	Total attendance/Unit of work done	:
6.	Date on which overtime worked	:
7.	Overtime Wages	:
8.	Gross Wages Payable	:
9.	Total Deductions (indicating nature of deductions)	:
10.	Net Wages Payable	:

Contractor's Signature/
Thumb Impression

Employees` Signature/
Thumb Impression

Appendix - 5

LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED

(REGULATION NO. 10 VI)

In accordance with rule 10 (vi) Contractor's Labour Regulations to be displayed prominently at the site of work both in English and local Language.

1. Willful insubordination or disobedience, whether alone or in combination with other.
2. Theft, fraud or dishonesty in connection with the Contractors beside a business or property of Corporation.
3. Taking or giving bribes or any illegal gratifications.
4. Habitual late attendance.
5. Drunkenness fighting, riotous or disorderly or indifferent behavior.
6. Habitual negligence.
7. Smoking near or around the area where combustible or other materials are locked.
8. Habitual indiscipline.
9. Causing damage to work in the progress or to property of the Corporation or of the Contractor.
10. Sleeping on duty.
11. Malingering or slowing down work .
12. Giving of false information regarding name, age father's name etc.,
13. Habitual loss of wage cards supplied by the employers.
14. Unauthorized use of employer's property for manufacturing or making of unauthorised articles at the work place.
15. Bad workmanship in construction and maintenance by skilled workers which is not approved by the Corporation and for which the contractors are compelled to undertake rectifications.

16. Making false complaints and/or misleading statements.
17. Engaging on trade within the premises of the establishments.
18. Any unauthorised divulgence of business affairs of the employees.
19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorised by the employer.
20. Holding meeting inside the premises without previous sanction of the employers.
21. Threatening or intimidating any workman or employer during the working hours within the premises.

Appendix –6

REGISTER OF FINES

Regulation No. 10 (vii)

Sr. No.	Name	Father's/ Husband's Name	Sex	Department	Nature and date offence for fines imposed	Whether workman showed offence cause against fine or not, if so enter data	Rate of wages	Date and amount of fine imposed	Date on which fine realised	Remarks
1	2	3	4	5	6	7	8	9	10	11

Appendix – 7

3. REGISTER OF DEDUCTIONS FOR DAMAGES OR LOSS CAUSED TO THE CORPORATION BY THE NEGLIGENCE OR DEFAULT OF THE EMPLOYED PERSONS.

Regulation No. 10 (vii)

Sr. No.	Name	Father's / Husband's Name	Sex	Department	Damage or loss caused with date	Whether worker showed cause against deduction, if so enter date	Date & amount of deduction imposed	Number of installment if any	Date on which total amount realized	Remarks
1	2	3	4	5	6	7	8	9	10	11

20. MODEL RULES FOR LABOUR WELFARE

1. Definitions:

- (a) "Work Place" means a place at which, on an average, twenty or more workers are employed.
- (b) "Large work place" means a place at which, on an average 500 or more workers are employed.

2. First Aid :

At every workplace, there shall be maintained in a readily accessible place first aid appliances including an adequate supply of sterilized dressings and sterilized cotton wool as prescribed in the Factory Rules of the State in which the work is carried on. The appliances shall be kept in good order and in large work-places, they shall be placed under the charge of a responsible person who shall be readily available during working hours.

At large workplaces, where hospital facilities are not available within easy distance of the works First Aid Posts shall be established and be run by trained compounders.

Where large workplaces are remotely situated and far away from regular hospitals, an indoor ward shall be provided with one bed for every 260 employees.

Where large workplaces are situated in cities, towns or in their suburbs and no beds are considered necessary owing to proximity of city or town hospitals, suitable transport shall be provided to facilitate removal of urgent cases to these hospitals. At other workplaces, some conveyance facilities shall be kept readily available to take injured person or person suddenly taken seriously ill, to the nearest hospital.

At large workplaces these shall be provided and maintained an ambulance room of the prescribed sizes, containing the prescribed equipment and in the charge of such medical and nursing staff as may be prescribed. For the purpose the relevant provisions of the Factory Rules of the State Government of the area where the work is carried on may be taken as the prescribed standard.

3. Accommodation for Labour :

The Contractor shall during the progress of the works provide, erect and maintain necessary temporary living accommodation and ancillary facilities for

labour at his own expense and to standards and scales as approved by the Engineer-in-Charge.

4. Drinking water :

In every workplace, there shall be provided and maintained at suitable places easily accessible to labour, a sufficient supply of cold water fit for drinking.

Where drinking water is obtained from an intermittent public water supply each workplace shall be provided with storage where drinking water shall be stored.

Every water supply storage shall be at a distance of not less than 15 meters from any latrine drain or other source of pollution. Where water has to be drawn from an existing well, which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and water-proof.

A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5. Washing and Bathing Places :

Adequate washing and bathing places shall be provided separately for man women. Such places shall be kept in clean and drained condition.

6. Scale of Accommodation in Latrines and Urinals :

There shall be provided within the precincts of every workplace latrines and urinals in an accessible place, and the accommodation, separately for each of these, shall not be less than at the following scales:-

	<i>No. of Seats</i>
(a) Where number of persons does not exceed 50	2
(b) Where number of persons exceeds 50 but does not exceed 100	3
(c) For additional persons per 100 or part thereof	3

In particular cases, the Engineer-in-Charge shall have the power to increase the requirement, where necessary.

7. Latrines and Urinals :

Except in workplaces provided with water flushed latrines connected with a water-borne sewage system. All latrines shall be provided with receptacles or dry-earth system which shall be cleaned at least four times daily and at least twice during working hours and kept in a strictly sanitary condition. Receptacles shall be tarred inside and outside at least once a year. If women are employed, separate latrine and urinals screened from those for men and marked in the vernacular in conspicuous letters "For Women Only" shall be provided on the scale laid down in rule 6. Those for men shall be similarly marked "For Men Only". A poster showing the figure of a man and of a woman shall also be exhibited at the entrance to latrines for each sex. There shall be adequate supply of water close to latrines and urinals.

8. Construction of Latrines:

Inside walls shall be constructed of masonry or some suitable heat resisting nonabsorbent materials and shall be cement washed inside and outside at least once a year. The dates of cement washing shall be noted in a register maintained for the purpose and kept available for inspection. Latrines shall have at least thatched roof.

9. Disposal of Excreta :

Unless otherwise arranged for by the local-sanitary authority, arrangements for proper disposal of excreta by incineration at the workplace shall be made by means of a suitable incinerator approved by the local medical health and municipal or cantonment authorities. Alternatively excreta may be disposed off by putting a layer of night soils at the Bottom of pucca tank prepared for the purpose and covering it with a 15 cm layer of waste or refuse and then covering it with a layer of earth for a fortnight(when it will turn into manure).

The Contractor shall, at his own expense, carry out all instructions issued to him by the Engineer-in-charge to effect proper disposal of soil and other conservancy work in respect of Contractor's work people or employees on the Site. The Contractor shall be responsible for payment of any charges which may be levied by municipal or cantonment authority for execution of such work on his behalf.

10. Provision of shelters during rest :

At every work place there shall be provided free of cost, four suitable sheds, two for meals and two others for rest, separately for use of men and women Labour. Height of each shelter shall not be less than 3 meters from floor level to lowest part of roof. Sheds shall be kept clean and the space provided shall be on the basis of at least 0.5 sq.m. per head.

11. Crèches :

At a place at which 20 or more women workers are ordinarily employed, there shall be provided at least one hut for use of children under the age of 6 years belonging to such women, Huts shall not be constructed to a standard lower than that of thatched roof, mud floor and wall with wooden plants spread over mud floor and covered with matting.

Huts shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean. There shall be two dais in attendance. Sanitary utensils shall be provided to the satisfaction of local medical health and municipal or cantonment authorities. Use of huts shall be restricted to children their attendance and mothers of children.

Where the number of women workers is more than 25 but less than 50, the Contractor shall provide at least one hut and one dai to look after children of women workers.

Size of creche (s) shall vary according to the number of women workers employed.

Creche (s) shall be properly maintained and necessary equipment like toys etc., provided.

12. Canteen :

A cooked food canteen on a moderate scale shall be provided for the benefit of workers wherever it is considered necessary.

13. Planning :

Setting and erection of the above mentioned structures shall be approved by the Engineer-in-Charge, and the whole of such temporary accommodation shall at all times during the progress of the works be kept tidy and in a clean and sanitary condition to the satisfaction of the Engineer-in-Charge and at the Contractor's expenses. The Contractor shall conform generally to sanitary requirements of local medical, health and municipal or cantonment authorities and at all times adopt such precautions as may be necessary to prevent soil pollution of the Site.

On completion of the Works the whole of such temporary structures shall be cleared away, all rubbish burnt, excreta or other disposal pits or trenches filled in and effectively sealed off and the whole of site left clean and tidy to the entire satisfaction of the Engineer-in-Charge and at the Contractor's expenses.

14. Anti-malarial precautions :

The Contractor shall, at his own expense, conform to all anti-malarial instructions given to him by the Engineer-in-Charge, including filling up any borrow pits which may have been dug by him.

15. Enforcement :

The Inspecting Officer mentioned in the Contractors Labour Regulations or any other officer nominated in his behalf by the Engineer-in-Charge shall report to the Engineer-in-Charge all cases of failure on the part of the Contractor and or his sub-contractors to comply with the provisions of these Rules either wholly or in part and the Engineer-in-Charge shall impose such fines and other penalties as are prescribed in the conditions.

16. Interpretations etc. :

On any question as to the application, interpretation or effect of these Rules, the decision of the Chief Labour Commissioner or Deputy Chief Labour Commissioner(Central) shall be final and binding.

17. Amendments :

Government may, from time to time add to or amend these Rules and issue such directions as it may consider necessary for the proper implementation of these Rules or for the purpose of removing any difficulty which may arise in the administration thereof.

21. AERB Safety Guide

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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. It is hoped that units of DAE may issue this guide as a part of contract documents while awarding contracts.

2. GENERAL SAFETY PROVISIONS

- 2.1 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, clean up programme and other measures that are in force at the site.
- 2.2 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.
- 2.3 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.
- 2.4 The Contractor shall plan his operation so as to avoid interference with the other Departmental works, other contractors or sub-contractors at the site. In case of any interference, necessary co-ordination shall be sought by the contractor from the Department for safe and smooth working.
- 2.5 The Contractor and his sub-contractor, if any, shall comply with the instructions given by the Safety Engineer or his authorised nominee regarding safety precautions, protective measures, house keeping 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

conditions 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.

- 2.6 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 or incidents.

3. TRAFFIC

- 3.1 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.
- 3.2 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.
- 3.3 The Contractor shall, at his own expense, make such approved temporary provisions as are required to maintain at least 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, sewage, power or telecommunication lines or any other service 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

- 4.1 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.
- 4.2 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.

- 4.3 Scaffolding or staging more than 3.5 m 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.
- 4.4 Working platforms of scaffolds shall have toe boards at least 15 cm in height to prevent materials from falling down.
- 4.5 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.
- 4.6 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.
- 4.7 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.
- 4.8 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 1.0 m, along with 15 cm high sheet obstruction at floor level along the railing.
- 4.9 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 300 mm. For longer ladders this width shall be increased by at least 20mm for each additional meter of length. Step spacing shall be uniform and shall not exceed 300 mm.

- 4.10 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 meters 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. EXCAVATION, TRENCHING AND EARTH REMOVAL

- 5.1 All trenches 1.2 m or more in depth shall at all times be supplied with at least one ladder for each spacing of 30m in length or fraction thereof. Ladder shall be extended from bottom of the trench to at least 1 m above the surface of the ground.
- 5.2 The sides of the trench which are 1.2 m or more in depth shall be stepped back to give suitable slope (angle of repose) or securely held by timber bracing, so as to avoid the danger of sides from collapsing. The excavated material shall not be placed within 1.5 m of the edges of the trench or half of the depth of the trench, whichever is more. Cutting shall be done from top to bottom. Under no circumstances mining or under-cutting shall be done.
- 5.3 The Contractor shall ensure the stability and safety of the excavation, adjacent structures, services and the works.
- 5.4 Open excavations shall be fenced off by suitable railing and warning signals installed at night at well lit places so as to prevent persons slipping or falling into the excavations.
- 5.5 All blasting operations shall be carried out on the basis of procedures approved by Inspector of Explosives. All works in this connection shall be carried out as per IS Code of Practice. Barricades, warning signals, etc. shall be placed on the roads / open area. Prior approval of such operation shall be obtained from Safety Engineer / Engineer-In-Charge of works.
- 5.6
- a. For removal of earth from an earth mound, a written permission shall be obtained from the Engineer-in-charge of the work and the Engineer-in-Charge of the earth mound.
 - b. As far as practical, earth shall be removed mechanically.
 - c. Wherever manual removal of earth is involved, earth shall be removed from the top by maintaining the proper slope equal to the angle of repose of the earth.

- d. Such work shall be constantly supervised by the contractor's responsible person and frequently inspected by the departmental representative to ensure that no under-cutting is done.

6. CONCRETING

Shuttering and supporting structures shall be of adequate strength and approved by Engineer-in-charge . This shall be ensured before concrete is poured. The procedure approved by Engineer-in-charge shall be followed for mixing, transporting and pouring of concrete.

7. DEMOLITION

Before any demolition work is commenced and also during the progress of the work :

- a. All roads and open area adjacent to the work site shall either be closed or suitably protected. Appropriate warning signs shall be displayed for cautioning approaching persons.
- b. Before demolition operations begin, the Contractor shall ensure that the power on all electric service lines is shut off and the lines cut or disconnected at or outside the demolition site. If it is necessary to maintain electric power during demolition operation, the required service lines shall be adequately protected against damage. Persons handling heavy materials / equipments shall wear safety shoes.
- c. No floor, roof or other part of the building shall be overloaded with debris or materials as to render it unsafe.
- d. Entries to the demolition area shall be restricted to authorised persons only.

8. 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. 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 9m³/hr.
- f. All persons working at heights more than 4.5 m 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 manholes are opened and are adequately ventilated at least 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 register before the workers are allowed to get into the manholes. The manholes 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.

9. PAINTING

- 9.1 The Contractor shall not employ women on the work of painting with products containing lead in any form. Only men above the age of 18 years shall be employed on the work with lead paint. The following precautions shall be taken during the work.
- Supplied air respirators shall be provided for use by the workers when paint is applied in the form of spray, or a surface having lead paint is dry rubbed or scraped.

- Overalls shall be supplied by the Contractors to the workmen and adequate facilities shall be provided to enable the painters to wash at the cessation of work.
- All painting jobs, especially those in which lead paints are used shall be kept under industrial hygiene surveillance.

9.2 Smoking, open flames or sources of ignition shall not be allowed in places where paints and other flammable substances are stored, mixed or used. A caution board, with the instruction written in national / regional language, "SMOKING - STRICTLY PROHIBITED" shall be displayed in the vicinity where painting is in progress or where paints are stored. Symbols shall also be used for caution boards.

Suitable fire extinguishers / sand buckets shall be kept available at places where flammable paints are stored, handled or used.

When painting work is done in a closed room or in a confined space, adequate ventilation shall be provided. If adequate ventilation cannot be provided, workers shall wear suitable respirators.

9.3 Epoxy resins and their formulations used for painting shall not be allowed to come in contact with the skin. The workers shall use plastic gloves and / or suitable barrier creams.

Adequate ventilation shall be provided especially when working with hot resin mixes.

Increased personal hygiene shall be practiced to control inadvertent contact with the resin and eliminate its effects.

Workers shall thoroughly wash hands and feet before leaving the work. Work clothes shall be changed and laundered frequently.

10. LIFTING MACHINES AND TACKES

10.1 Use of lifting machines and tackles, including their attachments, anchorage and supports shall conform to the following standards or conditions.

- a. Lifting machines and tackles shall be of good mechanical construction, sound material and adequate strength and free from any defects and shall be kept in good repair and in good working order.

Every rope used in hoisting or lowering materials or as a means of suspension shall be of good quality and adequate strength and free from any defect.

- b. Every crane operator or lifting appliance operator shall be properly qualified. No person under the age of 21 years shall be in charge of any hoisting machine or give signal to operator of such machine.
- c. In case of every lifting machine (and of every chain, ring, hook, shackle, swivel and pulley block used in hoisting or as means of suspension) the safe working load shall be ascertained and clearly marked. In case of a lifting machine having a variable safe working load, each safe working load and the conditions under which it is applicable, shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing. This shall be approved by the Safety Engineer.
- d. In case of departmental machines, the safe working load shall be notified by the Engineer-in-charge. As regards Contractor's machines, the contractor shall notify the safe working load of the machine to the Engineer-in-charge whenever he brings any machinery to site of work and get it verified by the Engineer-in-charge, supported by a valid test certificate by the competent person.
- e. Thorough inspection and load testing of lifting machines and tackles shall be done by a competent person at least once every 12 months and records of such inspection and testing shall be maintained.

10.2 Motors, gearing transmission, couplings, belts, chain drives and other moving parts of hoisting appliances shall be provided with adequate safeguards. Hoisting appliances shall be provided with such means as will reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced or lowered.

11. WELDING AND GAS CUTTING

- 11.1 Welding and gas cutting operations shall be done only by qualified and authorised persons and as per IS Specification and Code of Practice.
- 11.2 Welding and gas cutting shall not be carried out in places where flammable or combustible materials are kept and where there is danger of explosion due to presence of gaseous mixtures.
- 11.3 Welding and gas cutting equipment including hoses and cables shall be maintained in good condition.
- 11.4 Barriers shall be erected to protect other persons from harmful rays from the work. When welding or gas cutting is done in elevated positions, precautions shall be taken to prevent sparks or hot metal falling on persons or flammable materials.

- 11.5 Suitable type of protective clothing consisting of fire resistant gauntlet gloves, leggings, boots and aprons shall be provided to workers as protection from heat and hot metal splashes. Welding shields with filter glasses of appropriate shade shall be worn as face protection.
- 11.6 Adequate ventilation shall be provided while welding in confined space or while brazing, cutting or welding zinc, brass, bronze, galvanised or lead coated materials.
- 11.7 Welding and gas cutting shall not be done on drums, barrels, tanks or other containers unless they have been emptied, cleaned thoroughly and it is made certain that no flammable material is present.
- 11.8 Fire extinguisher shall be available near the location of welding operations. Fire Safety Permit shall be obtained for working at vulnerable areas and operating areas before flame cutting/welding is taken up.
- 11.9 For electric (Arc) welding the following additional safety precautions shall be taken:
- i) When electrical welding is undertaken near pipe lines carrying flammables, such pipe lines shall not be used as part of earth conductor but a separate earth conductor shall be connected to the machine directly from the job.
 - ii) Personnel contact with the electrode or other live parts of electric welding equipment shall be avoided.
 - iii) Extreme caution shall be exercised to prevent accidental contact of electrodes with ground.
 - iv) The welding cables shall not be allowed to get entangled with power cables. It shall be ensured that the cables are not damaged by movement of materials.

12. GRINDING

- 12.1 All portable grinders shall be used only with their wheel guards in position to reduce the danger from flying fragments should the wheel break during the use.
- 12.2 Grinding wheels of specified diameter only shall be used on a grinder - portable or pedestal - in order not to exceed the prescribed peripheral speed.
- 12.3 Goggles shall be used during grinding operation.

13. ELECTRICITY

Guidelines for providing temporary power supply at the site and general safety procedures for using electricity are given in the enclosed Annexure.

14. HOUSEKEEPING

- 14.1 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.
- 14.2 Welding and other electrical cables shall be so routed as to allow safe traffic by all concerned.
- 14.3 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.
- 14.4 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.
- 14.5 The Engineer-In-Charge has the right to stop work if the Contractor fails to improve upon the housekeeping after having been notified.

15. FIRE SAFETY

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

- a) Quantities of combustible materials like timber, bamboos, coal, paints, etc., shall be the minimum required in order to avoid unnecessary accumulation of combustibles at site.
- b) Containers of paints, thinners and allied materials shall be stored in a separate room which shall be well ventilated and free from excessive heat, sparks, flame ventilated and free from excessive heat, sparks, flame or direct rays of the sun. The containers of paint shall be kept covered or properly fitted with lid and shall not be kept open except while using.
- c) Fire extinguishers as approved by the Engineer-In-Charge shall be located at the construction site at appropriate places.

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

16. SAFETY WORK PERMIT

- 16.1 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.
- 16.2 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.

17. WORK IN RADIATION AREA

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

18. 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.

19. MEDICAL FACILITIES

- 19.1 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.
- 19.2 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.
- 19.3 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.

20. 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.

21. REPORTING OF ACCIDENT

- 21.1 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.
- 21.2 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.

22. 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 be taken to protect the public. He shall pay any damage and cost which may be awarded in any such suit, action or proceedings to any such person, or the amount which may be fixed as a compromise by any such person.

23. 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 Explosives 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.

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 authorised 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, overhead or cable feeders, earthing, etc. The position and location of all equipment and switches shall be given.
- 1.4 The Contractor shall make his own arrangements for main earth electrode and tapping 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. Natural 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 tappings from an earth bus may be done.
- 1.9 The entire installation shall be subjected to the following tests before energisation 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 fault 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 a 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 the 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 under ground, it shall be adequately protected by covering the same with bricks, plain cement concrete (PCC) tile or any other approved means.
- k) All armoured 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, amouring 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 armoured PVC insulated and sheathed cables shall be used for external power supply connections of temporary nature. Whether 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 fire fighting, first aid and artificial resuscitation techniques.
- b) The supervisor shall instruct the workers in 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 changes of re-energisation 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) “MAN 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.

FORM NO.SGCW - 1

FORM FOR COMPLETION CERTIFICATE
(Prescribed under Cl. 1.2 of Annexure)

I/We certify tht the installation detailed below has been installed by me/us and tested and that to the best of my/our knowledge and belief, it complies with Indian Electricity Rules, 1956 as well as IS:732-1963 code of practice for Electrical Wiring Installations. (System voltage not exceeding 650 Volts (Revised)).

Electrical installation at

Voltage and system of supply

a)	Particulars of work	Number	Total load	Type of system of wiring
		-----	-----	-----
	i) Light points			
	ii) Fan points			
	iii) Plug points (3 pin)			
	iv) Motors			

b) If the work involves installation of overhead lines and/or underground cable

c) Earthing

Description of earthing electrode, size of earth wire and number of electrodes provided :

d) Test results

1. Insulation resistance for the whole installation :

- i) Between conductors
- ii) Between each conductor and earth

2. Resistance of earthing electrode or earthing system.

3. Maximum earthing resistance of installation _____

Signature of Supervisor

Signature of Contractor

Name and address of Supervisor

Name and address of Contractor

FORM NO.SGCW - 2
‘A’ APPLICATION FOR SERVICE CONNECTION BY CONTRACTOR
(Prescribed under Cl. 1.3 of Annexure)
(To be filled in triplicate)

1. Name and Address of Contractor :
2. Reference to Tender & Work Order :
3. Completion period :
4. Connected load details (please attach details :
in a separate sheet)
5. Max. demand anticipated :
6. Nature of service connection required :
(whether single or three phase)
7. Place where service required :
 - a) Works :
 - b) Colony :
8. If supply of electricity is free or chargeable :
(Please enclose extract of conditions from
the tender)
9. Details of meter provided :
 - a) If meter required from the Department, :
whether SD is paid
 - b) Details of SD (Security Deposit) :
 - c) Whether meter is tested or not, if tested, :
attach test report, if not, details of testing
fee deposited
10. Name of Supervisor/Electrician in charge :
of installation and maintenance
11. Electrical license No. of person mentioned :
Against Col. 10

12. Electrical safety appliances available :
for use

13. Fire extinguishers available for use :

14. First Aid facility/box available for use, :
if any.

(Signature of the Contractor)

Date :

Name :

‘B’ CERTIFICATE BY THE CONTRACTOR

Certified that my/our installations have been carried out in accordance with I.E. Rules and that I/we have employed competent persons to handle the installations.

I/We am/are agreeable to the bills, in respect of this service connections being raised on the basis the connected load furnished above, in case the actual consumption falls below the one stipulated by the tender conditions.

(Signature of the Contractor)

Name :

Address :

Date :

.....

‘C’ CERTIFICATE BY THE CONTRACT CONTROL ENGINEER

Verified the particulars and forwarded to the Engineer-In-Charge.

(Signature of Contract Control Engineer)

Name :

Section : Civil/Electrical/Mechanical

.....

‘D’ CERTIFICATE BY THE ENGINEER-IN-CHARGE

Certified that the particulars furnished by the Contractor are true to the best of my knowledge and belief and that I have satisfied myself as to the safe conditions of electrical installations for which the service connection is applied for.

Signature :

Name :

Designation with Section :

Date:

‘E’ CERTIFICATE BY THE SAFETY ENGINEER

Certified that I have inspected the electrical installations referred herein and after satisfying myself about the safe conditions of the installation, I hereby recommend that the service connection be given to the Contractor.

Signature of the Safety Engineer

Date :

Name :

.....

‘F’ AUTHORISATION BY THE ELECTRICAL ENGINEER

Service connection may be/may not be given for the reasons noted hereunder :

Signature of Electrical Engineer :

Name :

Date:

Designation :

.....

'G' REPORT OF COMPLIANCE

Service connection is given by me on

a) Meter Nos. : 1.

2.

3.

b) Initial readings : 1.

2.

3.

c) Locations : 1.

2.

3.

d) Meter sealings :

Signature of Electrical Engineer

(Metering and Billing)

Name :

Date :

Designation :

Note:

1st copy to Contract Control Engineer

```

} After all the formalities are completed
} and Report of Compliance in (G) are
} filled up by the electrical Engineer after
} power supply is given.

```

2nd copy to Safety Engineer

3rd copy to Electrical Engineer

22. TENDER FORMS

TENDER

To,
Nuclear Power Corporation of India Ltd.,
(Hereinafter referred to as the Corporation)

I/We have read and examined the following documents relating to _____

(Name of the Works)

- (a) Notice Inviting tender.
- (b) Schedules A, B & C
- (c) Technical Specifications
- (d) Drawings
- (e) General Conditions of Contract including Contractors Labour Regulations, Model Rules for Labour Welfare and Safety guide appended to these conditions together with the amendments thereto Nos. 1 to if any.
- (f) Special Conditions of contracts
- (g) Schedule of quantities and Rates (referred to in the General Conditions of Contract as Schedule of Rates) together with Amendment Nos. 1 to if any.

I/We hereby tender for execution of the works referred to in the aforesaid documents upon the terms and conditions contained or referred to therein and in accordance in all respects with the specifications, designs, drawings and other relevant details at the rates contained in Schedule of Quantities and Rates and within the period(s) of completion as stipulated in NIT.

In consideration of I/We being invited to tender. I/We agree to keep the tender open for acceptance for days from the due date of submission thereof and not to make any modifications in its terms and conditions which are not acceptable to the Corporation.

A sum of Rs is hereby forwarded in Demand Draft payable at/Deposit at Call Receipt of any scheduled commercial bank as Bid Security. If I/We fail to keep the tender open as aforesaid or make any modifications in the terms and conditions of the tender which are not acceptable to the Corporation, I/We agree that the Corporation shall without prejudice to any other right or remedy, be at liberty to forfeit the said bid security absolutely. Should this tender be accepted, I/We hereby agree to abide by and fulfill all the terms, conditions and provisions of the aforesaid documents.

If, After the tender is accepted, I/We fail to commence the execution of the works as provided in the conditions, I/we agree that the Corporation shall without prejudice to any other right or remedy be at liberty forfeit the said bid security absolutely.

Signature of the capacity of _____

Duly authorised to sign the tender on behalf of the

(In block Capitals) _____

Dated _____

Postal Address _____

Telegraph Address _____

Telephone No./Fax/Telex No _____

Seal of the Company/Firm

Witness _____

Date _____

Address _____

23. FORMS OF DIFFERENT DEEDS

1. PROFORMA BANK GUARANTEE IN LIEU OF BID SECURITY

(On Non Judicial Stamp paper to be stamped in accordance
with stamp act, the stamp paper to be in name of
Executing Bank)

Ref.....

Date.....

Bank Guarantee No.....

To **NUCLEAR POWER CORPORATION OF INDIA LTD**

Dear Sir,

In accordance with your Notice Inviting Tender for _____ under your
tender No _____ dated _____ M/s _____ (hereinafter
called the Tenderer) with following directors on their Board of Directors/Partners of
the firm.

1 _____	2 _____
3 _____	4 _____
5 _____	6 _____
7 _____	8 _____
9 _____	10 _____

Wish to participate in the said tender for the following:

1 _____

2 _____

3 _____

Whereas it is a condition in the tender documents that the tenderer has to deposit Bid Security with respect to the tender, with Nuclear Power Corporation of India Ltd (hereinafter referred to as "Corporation") amounting to Rs..... or alternatively the tenderer is required to submit "Bank Guarantee" from a nationalised bank irrevocable and operative till 28 days after the validity of the offer. (i.e. 120 days from the date of opening of tender), for the like amount which amount is likely to be forfeited on the happening of contingencies mentioned in the tender documents. And whereas the tenderer desires to secure exemption from deposit of Bid Security and has offered to furnish a Bank Guarantee for a sum of Rs..... to the Corporation for the purpose of securing exemption from the deposit of Bid Security.

1. NOW THEREFORE, we the Bank, a body corporate constituted under the Banking Companies (Acquisition and Transfer of undertakings) Act 1969 and having a branch office at..... (hereinafter referred to as the Bank") do hereby undertake and agree to pay on demand in writing by the Corporation, the amount of Rs.....(Rupees.....) to the Nuclear Power Corporation of India Ltd without any demur, reservation or recourse.
2. We, the aforesaid Bank, further agree that the Corporation shall be the sole judge of and as to whether the tenderer has committed any breach or breaches of any of the terms and conditions of the tender and the extent of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the Corporation on account thereof the extent of the bid security required to be deposited by the Tenderer in respect of the said Tender document and the decision of the Corporation that the Tenderer has committed such breach or breaches and as to the amount or amounts of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the Corporation shall be final and binding on us.
3. We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect until it is released by the Corporation and change in the constitution, liquidation or dissolution of the Tenderer, shall not discharge our liability guaranteed herein.
4. It is further declared that it shall not be necessary for the Corporation to proceed against the Contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank notwithstanding any security which the Corporation may have obtained or shall obtain from the Contractor at the time when proceedings are taken against the Bank for whatever amount may be outstanding or unrealised under the Guarantee.
5. The right of the Corporation to recover the said amount of Rs.....(Rupees) from us in manner aforesaid will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said

M/s..... (Tenderer) and/or that any dispute or disputes are pending before any authority, officer, tribunal or arbitrator(s) etc.

6. Notwithstanding anything stated above, our liability under this guarantee shall be restricted to Rs.....(Rupees.....)and our guarantee shall remain in force upto..... and unless a demand or claim under the guarantee is made on us in writing within three months after the aforesaid date i.e. on or before the all your rights under the guarantee shall be forfeited and we shall be relieved and discharged from all liabilities thereunder.

Date.....

place.....

(Signature)_____

(Printed Name)_____

(Designation)_____

(Bank's Common seal)_____

(Authorisation No.)_____

In the presence of:

Witness

1)_____

2)_____

Accepted

(Signature of the Officer)
For and on behalf of the
Nuclear Power Corporation
of India Ltd.

**2. PROFORMA OF BANK GUARANTEE IN LIEU OF SECURITY DEPOSIT
(Performance Guarantee / Retention money)
IN INDIVIDUAL CONTRACT
(ON NON JUDICIAL STAMP PAPER)**

To

Nuclear Power Corporation of India Ltd.

In consideration of the Nuclear Power Corporation of India Ltd.....
Atomic Power Project) having its registered Office at
..... (hereinafter called the "Corporation" which expression shall
unless repugnant to the subject or context include its administrators,
successors and assigns) having agreed under the terms and conditions of the
Award Letter bearing No..... dated..... issued by the Corporation, which
has been unequivocally accepted by the Contractor
M/s...*..... work of.....(hereinafter called the
said Contract) to accept a Deed of Guarantee as herein provided for
Rs.....(Rupees.....only) from a Scheduled commercial bank in lieu of the
..... (performance guarantee to be submitted by the Contractor
/retention money deducted from the Contractor's bills) for the due fulfillment by the
said Contractor of the terms and conditions contained in the said Contract.

1. We, the Bank (hereinafter referred to as "the said Bank" and having our
registered office at..... do hereby undertake and agree to indemnify and keep
indemnified the Corporation from time to time to the extent of
Rs.....(RupeesOnly) against any loss or damage, costs, charges and
expenses caused to or suffered by or that may be caused to or suffered by the
Corporation by reason of any breach or breaches by the said Contractor of any
of the terms and conditions contained in the said Contract and to
unconditionally pay the amount claimed by the Corporation on demand and
without demur to the extent aforesaid.
2. We..... Bank, further agree that the Corporation shall be the sole judge
of and as to whether the said Contractor has committed any breach or breaches
of any of the terms and conditions of the said Contract and the extent of loss,
damage, costs, charges and expenses caused to or suffered by or that may be
caused to or suffered by the Corporation on account thereof and the decision
of the corporation that the said Contractor has committed such breach or

*Refer note at the end of the proforma.

breaches and as to the amount or amounts of loss, damage, costs charges and expenses caused to or suffered by or that may be caused to or suffered by the Corporation from time to time shall be final and binding on us.

3. We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and till all the dues of the Corporation under the said Contract or by virtue of any of the terms and conditions governing the said Contract have been fully paid and its claims satisfied or discharged and till the owner certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said Contractor and accordingly discharges this Guarantee subject, however, that the Corporation shall have no claim under the Guarantee after 90 (Ninety) days from the date of expiry of the Defects Liability Period as provided in the said Contract, i.e.(date) or from the date of cancellation of the said contract as the case may be, unless a notice of the claim under this Guarantee has been served on the Bank before the expiry of the said period in which case the same shall be enforceable against the Bank notwithstanding the fact, that the same is enforced after the expiry of the said period.

The Corporation shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee or Indemnity, from time to time, to vary any of the terms and conditions of the said Contract or to extend time of performance by the said Contractor or to postpone for any time from time to time any of the powers exercisable by it against the said Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said Contract or securities available to the Corporation and the said bank shall not be released from its liability under these presents by any exercise by the Corporation of the liberty with reference to the matters aforesaid or by reason of time being given to the said Contractor or any other forbearance act or omission on the part of the Corporation or any indulgence by the Corporation to the said Contractor or any other matter or thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of so releasing the Bank from its such liability.

5. It shall not be necessary for the Corporation to proceed against the Contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank, notwithstanding any security which the Corporation may have obtained or obtain from the Contractor shall at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealised.
6. We, the said Bank, lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the Corporation in writing and agree that any change in the Constitution of the said Contractor or the said Bank shall not discharge our liability hereunder. If any further extension of this

Guarantee is required the same shall be extended to such required periods on receiving instructions from M/s.....on whose behalf this guarantee is issued.

In the presence of _____ For and on behalf of (the Bank)

WITNESS

1. _____ Signature _____

2. _____ Name & Designation _____

Authorisation No: _____

Date and Place: _____

Bank's Seal _____

Accepted

(Signature of the Officer)
For and on behalf of the
(Nuclear Power Corporation of India Ltd)

NOTES

***For Proprietary Concerns**

Shri _____ son of _____ resident of _____ carrying on business under the name and style of _____ at _____ (herein after called " the said Contractor" which expression shall unless the context requires otherwise include his heirs, executors, administrators and legal representatives.

***For Partnership Concerns**

M/s. _____ a partnership firm with its office _____ (hereinafter called " the said Contractor" which expression shall unless the context requires otherwise include their heirs, executors, administrators and legal representative); the names of their partners being

(i) Shri _____ S/o. _____

(ii) Shri _____ S/o. _____

***For Companies**

M/s..... a company registered under the Companies Act, 1956 and having its registered office atin the State of (hereinafter called "the said Contractor" which expression shall unless the context requires otherwise include its administrators, successors and assigns).

3 PROFORMA OF BANK GUARANTEE TO SECURE A LUMP SUM ADVANCE

(On Non-Judicial Stamp Paper of Appropriate Value)

To
Nuclear Power Corporation of India Ltd.

.....

.....

In consideration of the Nuclear Power Corporation of India Ltd. (..... Atomic Power Project) having its registered Office at (hereinafter called "the Owner" which expression shall unless repugnant to the subject or context include its successors and assigns) having agreed under the terms and conditions of Award Letter No. dated issued by Owner which has been unequivocally accepted by *......in connection with the work of "....." Tender No..... (hereinafter called "the said Contract") to make at the request of the Contractor a lumpsum advance of Rs. (Rupees..... only) for utilizing it for the purpose of the Contract on his furnishing a guarantee acceptable to the Owner. We,.....Bank incorporated underand having one of our branches at (hereinafter referred to as "the said Bank") do hereby guarantee the due recovery by the Owner of this said advance with interest thereon as provided according to the terms and conditions of the Contract. If the said Contractor fails to utilize the said advance for the purpose of the Contract and/ or the said advance together with interest thereon as aforesaid is not fully recovered by the Owner, We, Bank hereby unconditionally and irrevocably undertake to pay to the Owner on demand and without demur to the extent of the said sum of Rs..... (Rupees.....only) on any claim made by the Owner on us for the loss or damage caused to or suffered by the Owner by reason of the Owner not being able to recover in full the said sum of Rs..... (Rupees.....only) with interest as aforesaid.

2. We,..... Bank, further agree that the Owner shall be the sole judge of and as to whether the said Contractor has not utilized the said advance or any part thereof for the purpose of the contract and the extent of loss or damage caused to or suffered by the Owner on account of the said advance together with interest not being recovered in full and the decision of the Owner that the said Contractor has not utilized the said advance or

**Refer note at the end of the proforma*

any part thereof for the purpose of the Contract and as to the amount or amounts of loss or damage caused to or suffered by the Owner shall be final and binding on us.

3. We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and till all the said advance with interest has been fully recovered and its claims satisfied or discharged and till Owner certifies that the said advance with interest has been fully recovered from the said Contractor, and accordingly shall have no claim under this guarantee after 30 (thirty) days from the date of satisfactory completion of the said Contract (as per the mutually agreed work schedule) i.e. upto and inclusive of(date) unless a notice of the claim under this Guarantee has been served on the Bank before the expiry of the said period i.e..... (date) in which case the same shall be enforceable against the Bank notwithstanding the fact, that the same is enforced after the expiry of the said period.
4. The Owner shall have the fullest liberty without effecting in any way the liability of the Bank under this Guarantee or Indemnity, from time to time, to vary any of the terms and conditions of the said Contract or the advance or to extend time of performance by the said Contractor or to postpone for any time from time to time any of the powers exercisable by it against the said Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said contract or the advance available to the owner and this said bank shall not be released from its liability under these presents by any exercise by the Owner of the liberty with reference to the matters aforesaid or by reasons of time being given to the said Contractor or any other forbearance act or omission on the part of the Owner or any indulgence by the Owner to the said Contractor on of any other matter or thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of so releasing the Bank from its such liability.
5. It shall not be necessary for the Owner to proceed against the Contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank notwithstanding any security, which the Owner may have obtained or obtain from the Contractor shall at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealised.
6. We, the said Bank, lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the Owner in writing and agree that any change in the Constitution of the said Contractor or the said Bank shall not discharge our liability hereunder.

If any further extension of this Guarantee is required the same shall be extended to such required periods on receiving instructions from M/s..... on whose behalf this Guarantee is issued.

Notwithstanding anything contained herein before our liability under this Guarantee is restricted to Rs,..... (RupeesOnly) together with interest. Our undertaking shall commence from the date of execution and shall remain in force upto

Dated thisday of.....20...

In presence of

For and on behalf of (the Bank)

WITNESS

1 _____

Signature _____

2 _____

Name & Designation _____

Authorisation No _____

Seal of the Bank _____

Accepted

(Signature of the Officer)
For and On behalf of the
Nuclear Power Corporation of India Ltd.,

NOTES

***For Proprietary Concerns**

Shri son of..... resident ofcarrying on business under the name and Style of.....at...(herein after called " the said Contractor" which expression shall unless the context requires otherwise include his heirs, executors, administrators and legal representatives).

***For Partnership Concerns**

M/s..... a partnership firm with its office.....(hereinafter called " the said Contractor" which expression shall unless the context requires otherwise include their heirs, executors, administrators and legal representative); the names of their partners being

(i) ShriS/o.....

(i) ShriS/o.....

***For Companies**

M/s. _____ a company under the Companies Act, 1956 and having its registered office at_____ in the State of_____(hereinafter called "the said Contractor" which expression shall unless the context requires otherwise include its administrators, successors and assigns).

4. FORM OF HYPOTHECATION DEED

(ON NON-JUDICIAL STAMP PAPER ON APPROPRIATE VALUE)

THE INDENTURE made thisday of20..... BETWEEN of the one part (herein after called `Contractor') and Nuclear Power Corporation of India Ltd. (..... Atomic Power Project/ Station) hereinafter called " the Corporation" which expression shall unless the context requires otherwise include his successors and assigns of the other part:

WHEREAS under sub-clause12.1 of the General Conditions of Contract relating to the terms and conditions of its Award letter No.....datedwhich have been unequivocally accepted by the Contractor, the Contractor has applied to the Corporation for a loan of Rs..... (Rupees)Only) for plant and equipment described in the Schedule here to specifically acquired by the Contractor for the works and brought to site.

AND WHEREAS one of the conditions on which the said loan of Rs...../- granted by the Corporation to the Contractor is that the Contractor shall hypothecate the plant and equipment described in the Schedule hereto in favour of the Corporation as security for the due repayment of the said loan.

AND WHEREAS the Contractor has represented that he is the Owner of the plant and equipment described in the Schedule hereto and the same is free from encumbrances.

NOW THIS INDENTURE WITNESSTH THAT in pursuance of the said agreement and in consideration of the premises the Contractor doth hereby hypothecate, assign and transfer to the Corporation the Plant and equipment described in the Schedule hereto the intent that the same shall remain and form security for repayment to the Corporation of the said loan of Rs..... together with the interest thereon at % per annum.

1. The Contractor hereby agrees, declares and covenants with the Corporation as follows:-
 - (a) The Contractor shall repay to the Corporation the said loan of Rs.....(Rupees..... Only) together with interest thereon as aforesaid by and agrees that the said loan be recovered by the Corporation by making deductions in the manner provided in sub-clause12.1 of the General Conditions of Contract and other conditions of the Award letter from the claims made by the Contractor against the Corporation of "on account payment".

- (b) The Contractor has paid in full the purchase price of the Plant & Equipment described in the Schedule hereto and each and every one of them and that the same are the absolute property of the Contractor and that the same have not been sold, pledged, mortgaged or transferred or in any way dealt with by the Contractor.
- (c) So long as any amount remains payable to the Corporation by the Contractor in respect of the said loan of Rs. _____ the Contractor shall not sell, pledge, hypothecate, transfer, part with or in any way deal with the Plant and Equipment described in the Schedule hereto.
- (d) If the said loan of Rs. _____ shall not be repaid by the Contractor or recovered in the manner described above by the saidday of due to any reasons whatsoever or the said Contract has been determined earlier or cancelled or if the Contractor shall sell, pledge, mortgage, transfer, part with or in any way deal with the said plant and equipment or any part thereof or the Contractor or any of the partners is adjudged insolvent or the Contractor is to be wound up or makes any composition or arrangement with its creditors or the Contractor shall commit breach of any of the terms and conditions or covenants as herein contained or if any of the said plant and equipment or if any other property whatsoever belonging to the Contractor has been sold or attached for a period of not less than 21 days in execution of the decree of any court for payment of money, the whole of the said loan of Rs. or such part thereof as may remain unpaid or unrecovered together with interest thereon shall forthwith become due and payable.
- (e) The Corporation may on the happening of any of the events mentioned in the preceding clause (d) or in the event of the said loan or any part thereof becoming due and payable and has not been paid or recovered or cannot be recovered as provided in the said conditions, seize and take possession of the said plant and equipment (and either remain in possession thereof without removing the same or else may remove the same) and sell the said plant and equipment or any of them either by public auction or private contract and may out of the sale proceeds retain the balance of the said loan and interest thereon remaining unpaid and unrecovered and all costs, charges and expenses and payments incurred or made in maintaining, defending or protecting the rights of the Corporation hereunder and shall pay over the surplus, if any, to the Contractor.
- (f) The Contractor shall at all times during the continuance of the security and at the expense of the Contractor insure and keep insured and plant and equipment described in the Schedule hereto for the value thereof in the joint names of the Contractor and the Corporation with an insurance company to be approved by the Engineer-in-charge against the risk of loss or damage from whatever cause arising other than the

Excepted Risks not covered under the insurance. During the continuance of the security the Contractor shall pay all premia and sums of money necessary for keeping such insurance on foot and the insurance policy and receipts in original for premia paid shall be deposited with the Engineer-in-charge. The Contractor shall assign all his rights, title and interest in the policy to the Corporation.

(g) The Contractor shall not permit or suffer the said plant and equipment or any part thereof to be destroyed or damaged or used or to be used or to deteriorate in a greater degree than it would deteriorate by reasonable wear and tear thereof in the performance of the Contract.

(h) In the event of any damage or loss happening to the said plant and equipment or any part thereof from whatever cause other than the Excepted Risk [not covered under insurance] the Contractor shall forthwith have the same repaired or replaced as the case may be or arrange for payment of the entire amount recovered or to be recovered from the insurance company to the Corporation towards the payment of the said loan of Rs.....

2 Upon repayment or recovery in full of the amount secured on account of this hypothecation deed the said plant and equipment secured hereunder shall stand released from hypothecation but this is without prejudice to the right of the Corporation under any other conditions of the Contract.

SCHEDULE ABOVE REFERRED TO

Sr. No.	Particulars of Plant and Equipment	Nos.	Purchase price/ considered reasonable by Engineer-in-Charge	Total price	Advance(75% of Col.5)
1	2	3	4	5	6

IN WITNESS WHEREOF the parties hereto have executed these presents on the
day and your first above written

Signed and delivered
by the within named

Signed by Shri _____
(Name and Designation)
Nuclear Power Corporation of India Ltd.,
(_____Atomic Power Project)

in the presence of :

(1) _____

(1) _____

(2) _____

(2) _____

***NOTES**

***For Proprietary Concerns**

Shri _____ son of _____ resident of _____ carrying on business under the name and Style of _____ at _____ (hereinafter called " the said Contractor" which expression shall unless the context requires otherwise include his heirs, executors, administrators and legal representatives.

***For Partnership Concerns**

M/s. _____ a partnership firm with its office _____ (hereinafter called " the said Contractor" which expression shall unless the context requires otherwise include their heirs, executors, administrators and legal representative); the names of their partners being

(i) Shri _____ S/o. _____

(ii) Shri _____ S/o. _____

***For Companies**

M/s..... a company registered under the Companies Act, 1956 and having its registered office at in the State of (hereinafter called "the said Contractor" which said Contractor" which expression shall unless the context requires otherwise include its administrators, successors and assigns).

24 DISPUTES RESOLUTION BOARD AGREEMENT

THIS AGREEMENT, made and entered into this Day of
.....20 Between (“the Corporation”) and
.....
..... (“the Contractor”), and the
Disputes resolution Board (“the Board”) consisting of three Board Members, (1)
..... (2)
..... (3)
.....

WITNESSETH, that

WHEREAS, the Corporation and the Contractor have contracted for the construction of the
.....
..... (Project
name) (the “Contract”) and
WHEREAS, the contract provides for the establishment and operation of the Board NOW
THEREFORE, the parties hereto agree as follows :

1. The parties agree to the establishment and operation of the Board in accordance with this Board Agreement.
2. Except for providing the services required hereunder, the Board Members should not give any advice to either party concerning conduct of the Works.

The Board Members :

- (a) shall have no financial interest in any party to the contract, or a financial interest in the contract, except for payment for services on the Board.
- (b) shall have had no previous employment by, or financial ties to, any party to the contract, except for fee based consulting services on other projects, all of which must be disclosed prior to appointment to the Board.

- (c) shall have disclosed in writing to the parties prior to signature of this Agreement any and all recent or close professional or personal or personal relationships with any director, officer, or employee of any party to the contract, and any and all prior involvement in the project to which the contract relates;
 - (d) shall not, while a Board Member, be employed whether as a consultant or otherwise by either party to the contract, except as a Board Member.
 - (e) shall not, while a Board Member, engage in discussion or make any agreement with any party to the contract, regarding employment whether as a consultant or otherwise either after the contract is completed or after services as a Board Member is completed;
 - (f) shall be and remain impartial and independent of the parties and shall disclose in writing to the Corporation, the Contractor, and one another any fact or circumstances which might be such to cause either the Corporation or the Contractor to question the continued existence of the impartiality and independence required of Board Members.
3. Except for its participation in the Board's activities as provided in the contract and in this Agreement none of the Employer, the Contractor, the Nodal Officer or his nominee, and one another any fact or circumstances which might be such to cause either the Employer or the Contractor to question the continued existence of the impartiality and independence required of Board Members.
4. The Contractor shall :
- a) furnish to each Board Members one copy of all documents which the Board may request including contract documents, progress reports, variation orders, and other documents, pertinent to the performance of the Contract.
 - b) in co-operation with the Employer, co-ordinate the Site visits of the Board, including conference facilities, and secretarial and copying services.
5. The Board shall serve throughout the operation of the contract. It shall begin operation following execution of this Agreement, and shall terminate its activities after issuance of the taking over Certificate and the Board's issuance of its Recommendations on all disputes referred to it.
6. Board Member, shall not assign or subcontract any of their work under this Agreement.

7. The Board Members are independent and not employees or agents of either the Employer or the Contractor.
8. The Board Members are absolved of any personal or professional liability arising from the activities and the Recommendations of the Board.
9. Fees and expenses of the Board Member[s] shall be agreed to and shared equally by the Employer and the Contractor. If the Board requires special services, such as accounting, data research, and the like, both parties must agree and the costs shall be shared by them as mutually agreed.
10. Board Site visits :
 - a) The Board shall visit the Site and meet with representatives of the Employer and the Contractor and at regular intervals, at times of critical construction events, and at the written request of either party. The timing of Site visit, failing agreement shall be fixed by the Board.
 - b) Site meetings shall consist of an informal discussion of the status of the construction of the works followed by an inspection of the works, both attended by personnel from the Employer, the Contractor .
 - c) If requested by either party or the Board, the Employer will prepare minutes of the meetings and circulate them for comments of the parties.
11. Procedure for disputes referred to the Board :
 - a) If either party objects to any action or inaction of the other party, the objecting party may file a written Notice of Dispute to the other party stating that it is given pursuant to relevant clause and stating clearly and in detail the basis of the dispute.
 - b) The party receiving the Notice of Dispute will consider it and respond in writing within 7 days after receipt.
 - c) This response shall be final and conclusive on the subject, unless a written appeal to the response is filed with the responding party within 7 days of receiving the response. Both parties are encouraged to pursue the matter further to attempt to settle the dispute. When it appears that the dispute cannot be resolved without the assistance of the Board either party may refer the dispute to the Board by written Request for Recommendation to the Board, and the other party stating that it is made pursuant to relevant Clause.

- d) The Request for recommendation shall state clearly and in full detail the specific issues of the dispute to be considered by the Board.
- e) When a dispute is referred to the Board, and the Board is satisfied that the dispute requires the Board's assistance, the Board shall decide when to conduct a hearing on the dispute. The Board may request that written documentation and arguments from both parties be submitted to each Board Members before the hearing begins. The parties shall submit insofar as possible agreed statements of the relevant facts.
- f) During the hearing, the Contractor and the Employer, shall each have ample opportunity to be heard and to offer evidence. The Board's Recommendations for resolution of the dispute will be given in writing, to the Employer and the Contractor as soon as possible, and in any event not more than 28 days after the Board's final hearing on the dispute.

12. Conduct of Hearings :

- a) Normally hearing will be conducted at the Site, but any location that would be more convenient and still provide all required facilities and access to necessary documentation may be utilised by the Board. Private sessions of the Board may be held at any location convenient to the Board.
- b) The Employer and the Contractor shall have representatives at all hearings.
- c) During the hearings, no Board Member shall express any opinion concerning the merit of any facet of the case.
- d) After the hearing are concluded, the Board shall meet privately to formulate its Recommendations. All Board deliberations shall be conducted in private, with all individual views kept strictly confidential. The Board's Recommendations, together with an explanation of its reasoning shall be submitted in writing to both parties. The Recommendations shall be based on the pertinent contract provisions, applicable laws and regulations, and the facts and circumstances involved in the dispute.

The Board shall make every effort to reach a unanimous Recommendation. If this proves impossible, the majority shall decide, and the dissenting member any prepare a written minority report for submission to both parties.

- 13. If during the contract period, the Corporation and the Contractor are of the opinion that the Dispute Resolution Board is not performing its functions properly, the Corporation and the Contractor may together disband the Disputes Resolution Board. In such an event,

the disputes shall referred to Arbitration straightaway.

The Corporation and the Contractor shall jointly sign a notice specifying that the Board shall stand disbanded with effect from the date specified in the notice. The notice shall be posted by a registered letter with AD or delivery of the letter, even if he refuses to do so.

ADDENDUM :

Clause Ref. No.	Existing Clause	Revised Clause
7.9.3(ii)	If the total cumulative period of all such suspension exceeds 30 days the contractor shall, in addition, be entitled to compensation for the period of suspension beyond 30 days, as mentioned in the Schedule A. However, the contractor shall submit within 10 days his claim to the engineer-in-charge for every 15 days of suspension, over and above 30 days.	If the cumulative period of all suspension(s) exceeds 30 days, the Contractor shall, in addition, be entitled to compensation for the period of suspension beyond initial 30 days, in respect of wages for the employees and workers, idling charges for plants, machineries and equipments, etc. physically available at the site. However, the Contractor shall, at the earliest within a maximum period of 15 days, from the date of suspension, submit its claim to the Engineer-In-Charge, for every 15 days of suspension, over and above the initial 30 days period of suspension, along with all documentary evidence available in respect of the employees, workmen, plants, machineries and equipments remaining idle during such period of suspension. In this regard, the Engineer-In-Charge shall after giving an opportunity of being heard to the Contractor, assess, calculate, decide and settle the claims so submitted by the Contractor and that the decision of Engineer-In-Charge shall, in this regard, be final and binding upon the Contractor.

