



Design, Manufacture, Supply, Installation, Testing and Commissioning of 4 sets of 25 kWp Grid Interactive Roof Top Solar Power Plant, one each for Kailash Nagar Barrack, Camp Office-Dep.11C, Time Office-Dep.11 B & Service Centre-Dep.14, at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC(CAMC) for 5 years.

The Employer and Contractor shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.

A.3 In this Clause 'A' hereof, the expression "Facilities executed" shall include all work executed, Installation Services provided, and all Plant & Equipment, Structures and Refractories, acquired (*or subject to a legally binding obligation to purchase*) by the Contractor and used or intended to be used for the purpose of the Facilities, up to and including the date of termination.

A.4 In this Clause 'A' hereof, in calculating any money due from the Employer to the Contractor, account shall be taken of any sum previously paid by the Employer to the Contractor under the Contract, including any advance payment paid pursuant to 'Terms of Payment' as per the contract.

20.0 NO WAIVER OF RIGHTS

Neither the inspection by the Owner or the Engineer or any of their officials, employees or agents or any order by the Owner or the Engineer for payment of money or any payment for or acceptance of, the whole or any part of the Works by the Owner or the Engineer, nor any extension of time, nor any possession taken by the Engineer shall operate as a Waiver of any provision of the Contract, or of any power herein reserved to the Owner, or any right to damages herein provided, nor shall any waiver of any breach in the Contract be held to be a waiver of any other subsequent breach.

21.0 CERTIFICATE NOT TO AFFECT RIGHT OF OWNER AND LIABILITY OF CONTRACTOR

No interim payment certificate of the Engineer, nor any sum paid on account, by the Owner, nor any extension of time for execution of the Works granted by the Engineer shall affect or prejudice the rights of the Owner against the Contractor or relieve the Contractor of his obligations for the due performance of the Contract, or be interpreted as approval of the works done or of the equipment supplied and no certificate shall create liability for the Owner to pay for alterations, amendments, variations or additional works not ordered, in writing, by the Engineer or discharge the liability of the Contractor for the payment of damages whether due, ascertained, or certified or not, or any sum against the payment of which he is bound to indemnify the Owner.

22.0 SETTLEMENT OF DISPUTE

22.1 Except as otherwise specifically provided in the contract, all disputes concerning questions of facts arising under the contract shall be decided jointly by designated representatives of the parties and their decision shall be final to the parties thereto.

22.2 If amicable settlement cannot be reached, then such disputed issues shall be settled by arbitration as provided in the clause '**Arbitration**' below.



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23.0 ARBITRATION

- a) All disputes or differences which may arise between the Owner and Contractor in connection with the Contract (*other than those in respect of which the decision of any person is expressed in the Contract to be final and binding*) shall, after written notice by either party to the other and to the Chairman cum Managing Director of the NMDC Limited (*who will be the appointing authority*), be referred for adjudication to the sole Arbitrator to be appointed as hereinafter provided.
- b) The appointing authority will send within ninety days of receipt of the notice of arbitration a panel of three names of persons not directly connected with the work to the Contractor who will select any one of the persons named to be appointed as a sole Arbitrator within 30 days of receipt of names. If the appointing authority fails to send to the Contractor the panel of three names as aforesaid within the period specified, the contractor shall send to the appointing authority a panel of three names of persons who shall also be unconnected with the organisation by which the work is executed. The appointing authority shall on receipt of the names as aforesaid select any one of the persons named and appoint him as the sole Arbitrator. If the appointing authority fails to select the person and appoint him as the sole Arbitrator within 30 days of receipt of the panel and inform the Contractor accordingly, the Contractor shall be entitled to invoke the provisions of the Indian Arbitration and Conciliation Act 1996 as amended from time to time.
- c) The further progress of any work under the contract shall unless otherwise directed by the Owner / Engineer continue during the arbitration proceedings and no payment due or payable by/to the Owner shall be withheld on account of such proceedings. It shall not be open to arbitrator to consider and decide whether or not such work shall continue during the arbitration proceedings.
- d) The laws applicable to the Contract shall be the laws in force in India. The Courts of Hyderabad (Telangana State) shall have exclusive jurisdiction in all matters arising under this Contract. The venue of the arbitral proceedings shall be Hyderabad, India.
- e) The arbitral tribunal shall give reasons for its award. Each party shall bear its own cost and the cost of arbitration shall be equally borne by each party. The award rendered in any arbitration hereunder shall be final and binding upon the parties. The parties agree that neither party shall have any right to commence or maintain any suit or legal proceeding concerning any dispute under this agreement until the dispute has been determined in accordance with the arbitration proceeding provided for herein and then only to enforce or facilitate the execution of an award rendered in such arbitration.
- f) Arbitration between a Central Public Sector Undertaking of the Government of India (not under the Ministry of Steel) and the Employer (NMDC) shall be as per the guidelines of Ministry of Heavy Industries and Public Enterprises, Government of India.
- g) Arbitration between a Central Public Sector Undertaking of the Government of India under the Ministry of Steel, Government of India and the Employer (NMDC), shall be as per the guidelines of the Ministry of Steel.



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- h)** The mechanism for settling the dispute through Arbitration shall be applicable only in cases where the disputed amount or the amount of all claims put together does not exceed 25% of the contract value or maximum of disputed claim amount shall not exceed Rs.100 crores whichever is lower. In case the disputed amount exceeds the above referred percentage of 25% of contract value or maximum value of total claim value of Rs.100 crores, the parties shall be within their rights to take recourse to remedies that may be available to them under the applicable laws other than Arbitration after the prior intimation to the other party.
- i)** Parties agree that neither party shall be entitled for any pre-reference or pendente-lite interest, i.e. date of cause of action till the date of the Award by the Arbitral Tribunal. Parties agree that claim for any such interest shall not be considered and shall be void. The Arbitral Tribunal shall have no right to award pre-reference or pendente-lite interest in the matter.
- j)** Parties further agree that following matters shall not be referred to Conciliation and Arbitration
- i.** Any claim, difference or dispute relating to, connected with or arising out of NMDC's decision to initiate any proceedings for suspension or banning, or decision to suspend or to ban business dealings with the Bidder/Contractor and /or with any other person involved or connected or dealing with bid/ contract/ bidder/ contractor.
- ii.** Any claim, difference or dispute relating to, connected with or arising out of NMDC's decision under the provisions of Integrity Pact executed between the NMDC and the Bidder/ Contractor.

24.0 GRAFTS AND COMMISSIONS ETC.

Any graft, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner, agent, officers, director, employee or servant or any one on his or their behalf in relation to the obtaining or to the execution of this or any other Contract with the Owner, shall, in addition to any criminal liability which it may incur, subject the Contractor to the cancellation of this and all other contracts and also to payment of any loss or damage to the Owner resulting from any cancellation. The Owner shall then be entitled to deduct the amount so payable from any moneys otherwise due to the Contractor under the Contract.

25.0 LANGUAGE AND MEASURES

All documents pertaining to the contract including specifications, schedules, notices, correspondence, operating and maintenance instructions, drawings or any other writing shall be written in English language. The metric system of measurements shall be used exclusively in the Contract.

26.0 RELEASE OF INFORMATION

The Contractor shall not communicate or use in advertising, publicity, sales releases or in any other medium photographs or other reproduction of the Works under this Contract, or description of the Site, dimensions, quantity, quality or other information, concerning the works unless prior written permission has been obtained from the Owner.



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27.0 COMPLETION OF CONTRACT

Unless otherwise terminated under the provisions of relevant clauses, the LSTK Contract shall be deemed to have been completed at the expiration of the “Guarantee period” as provided for under the clause entitled guarantee in this section GCC.

28.0 ENFORCEMENT OF TERMS

The failure of either party to enforce at any time of the provisions of the Contract or any rights in respect thereto or to exercise any option herein provided, shall in no way be construed to be a waiver of such provisions, rights or options or in any way to affect the validity of the Contract. The exercise by either party of any of its rights herein shall not preclude or prejudice either party from exercising the same or any other right it may have hereunder.

29.0 ENGINEER'S DECISION

29.1 In respect of all matters which are left to the decision of the Engineer including the granting or withholding of the certificates, the Engineer shall, if required to do so by the Contractor give in writing a decision thereof.

29.2 If in the opinion of the Contractor, a decision made by the Engineer is not in accordance with the meaning and intent of the Contract, the Contractor may file with the Engineer within fifteen (15) days after receipt of the decision, a written objection to the decision. Failure to file an objection within the allotted time will be considered as acceptance of the Engineer's decision and the decision shall become final and binding.

29.3 The Engineer's decision and the filing of the written objection thereto shall be a condition precedent to the right to request arbitration. It is the intent of the Agreement that there shall be no delay in the execution of the works and the decision of the Engineer as rendered shall be promptly observed.

30.0 COOPERATION WITH OTHER CONTRACTORS AND CONSULTING ENGINEERS

The Contractor shall cooperate with the Owner's other contractors and Consulting Engineers and freely exchange with them such technical information as is necessary to obtain the most efficient and economical design and to avoid unnecessary duplication of efforts. The Engineer shall be provided with three copies of all correspondence addressed by the Contractor to other sub-contractors and Consulting Engineers in respect of such exchange of technical information.

31.0 SUSPENSION OF WORK

- a) The Employer may, by notice to the Contractor, order the Contractor to suspend performance of any or all of its obligations under the Contract. Such notice shall specify the obligation of which performance is to be suspended, the Effective Date of the suspension and the reasons thereof. The Contractor shall thereupon suspend performance of such obligation (*except those obligations necessary for the care or preservation of the Facilities*) until ordered in writing to resume such performance by the Engineer.



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If, by virtue of a suspension order given by the Engineer, other than by reason of the Contractor's default or breach of the Contract, the Contractor's performance of any of its obligations is suspended for an aggregate period of more than ninety (90) days, then at any time thereafter and provided that at that time such performance is still suspended, the Contractor may give a notice to the Engineer requiring that the Employer shall, within thirty (30) days of receipt of the notice, order the resumption of such performance.

If the Employer fails to do so within such period, the Contractor may, by a further notice to the Engineer, elect to treat the suspension as termination of the Contract under the provisions of '**Termination for Employer's Convenience**'.

- b) If the Contractor's performance of its obligations is suspended pursuant to this Clause hereof, then the time for completion shall be extended in accordance with provisions relating to extension of time for completion as per contract, and any and all additional costs or expenses incurred by the Contractor as a result of such suspension shall be paid by the Employer to the Contractor in addition to Contract Price on mutually agreed basis.
- c) During the period of suspension, the Contractor shall not remove from Site any plant & equipment, any part of the Facilities or any Contractor's equipment, without the prior written consent of the Employer.

32.0 POWER TO VARY OR OMIT WORK

- 32.1 No alterations, amendments, omissions, suspensions or variations of the Works (hereinafter referred to as 'Variation') under the Contract as detailed in the Contract Documents, shall be made by the Contractor except as directed in writing by the Engineer, but the Engineer shall have full power subject to the provision hereinafter contained from time to time during the execution of the Contract, by notice in writing, to instruct the Contractor to make such Variation without prejudice to the Contract. The Contractor shall carry out such Variation and be bound by the same. If any suggested Variation would, in the opinion of the Contractor, if carried out, prevent him from fulfilling any of his obligations or guarantees under the Contract, he shall notify the Engineer thereof in writing within fifteen days stating the reasons and the Engineer shall decide forthwith, whether or not the same shall be carried out and if the Engineer confirms his instructions, Contractor's obligations and guarantees may be modified to such an extent as may be mutually agreed.
- 32.2 In the event of the Engineer requiring any Variation such reasonable notice shall be given to the Contractor to enable him to work out his arrangements accordingly and in case where goods or materials are already prepared or any design or drawings made or work done requires to be altered, a reasonable and agreed sum in respect thereof shall be paid to the Contractor.
- 32.3 In any case in which the Contractor has received instructions from the Engineer as to the requirement of carrying out the altered or additional substituted work which either then or later on, will in the opinion of the Contractor, involve a claim for additional payments, the Contractor shall immediately and in no case later than thirty (30) days, after receipt of the instructions aforesaid and before carrying out the instructions, advise the Engineer to the effect. But the Engineer shall not become liable for the payment of any charges in respect of any such variations, unless the instructions for the performance of the same shall be confirmed in writing by the Engineer.



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32.4 If any variation in the Works, results in reduction of Contract Price, the parties shall agree, in writing, to the extent of any change in the price, before the Contractor proceeds with the change.

32.5 In all the above cases, in the event of a disagreement as to the reasonableness of the said sum, the decision of the Engineer shall be final and binding.

33.0 **GUARANTEE**

33.1 The Contractor guarantees that the system / all equipment and items supplied by him shall be new and in accordance with the Contract Documents and shall be free from defects in material and workmanship for a period of **twenty-four (24) calendar months commencing from the date of successful commissioning (i.e. from the date of issue of FAT certificate) of the entire system under the turnkey contract or 30 (thirty) calendar months from the date of receipt of last consignment (supply) at site, whichever is earlier.** The Contractor shall be liable for the replacement of any defective parts in the equipment under normal use and arising due to faulty design, materials, and/or workmanship or any other reason attributable to the Contractor. Such replaced defective parts shall be returned to the Contractor unless otherwise agreed.

33.2 In the event of an emergency where, in the judgement of the Engineer, delay would cause serious loss or damage, repairs or adjustments may be made by the Engineer or by a third party chosen by the Engineer without advance notice to the Contractor and the cost of such work shall be paid by the Contractor or by the Surety. In the event such action is taken by the Engineer, the Contractor will be notified promptly and he shall assist wherever possible in making the necessary repairs. This shall not relieve the Contractor's liability under the terms and conditions of the Contract.

33.3 If it becomes necessary for the Contractor to replace or repair any defective portion of the plant under this clause, the provision of this clause shall apply to the portions of the plant so replaced or renewed until the expiration of **twenty-four (24) months** from the date of such replacement or repair. If any defects be not remedied within a reasonable time, the Engineer may proceed to replace the equipment or part or rectify at site at the Contractor's sole risk and costs and without prejudice to any other rights which the owner may have against the Contractor in respect of such defects. In case the rectification of the defects could not be done due to which the equipment cannot be operated for some period, the guarantee for the complete equipment shall be extended by an equal period. The repaired or replaced parts will be supplied and erected free of cost by the Contractor

33.4 The repaired or new parts will be furnished and erected free of cost by the Contractor. If any repair is carried out on his behalf at the Site, the Contractor shall bear the cost of such repair.

33.5 The cost of any special or general overhaul rendered necessary during the maintenance period due to defects in the plant or defective workmanship of the Contractor shall be born by the Contractor.

33.6 The acceptance of the equipment by the Engineer shall in no way relieve the Contractor of his obligation under this clause.



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- 33.7 In the case of those defective parts which are not repairable at Site but are essential for the commercial operation of the equipment, the Contractor and the Engineer shall mutually agree to a programme of replacement or renewal which will provide for minimum interruption to the operation of the equipment.
- 33.8 At the end of the guarantee period, the Contractor's liability will cease except for latent defects. In respect of goods supplied by Sub-contractor to the Contractor where a longer guarantee (more than **24** months) is provided by such sub-contractors, the Owner shall be entitled to the benefit of such longer guarantees.
- 33.9 The provision contained in this clause will not be applicable in cases of normal wear & tear of the parts to be specifically identified by the contractor in the offer.
- 33.10 The guarantee period for spare parts shall be 24 months after first industrial use or at the latest 30 months after delivery. The spare parts shall be packed by the Contractor in such a manner so as not to require any re-conservation by the Owner within the guarantee period in case of extended storage till such extended period lapses.

Note: 1. *In case, even after all possible repairs and replacements, the Contractor fails to attain the minimum level of performance guarantee parameters the Owner may reject the equipment and the facilities and recover the entire cost paid to the Contractor or alternatively the Owner may proceed for commercial settlement with the Contractor for acceptance of the facilities at a negotiated price.*

2. For specific provisions on Warranty / Guarantee including guarantees for extended periods for Solar PV Modules, the relevant section of Vol-II (*Scope of Work and Technical Specifications*) of tender document may be referred. [Ref. Cl. 31.0 (ii) (under Guarantee) & Para below Sl. (n) of Cl. 3.1 (A), relating to extended Warranty / Guarantee of Solar PV Modules, Vol-II (*Scope of Work and Technical Specifications*)]

34.0 **REPLACEMENT OF DEFECTIVE PARTS AND MATERIALS**

- 34.1 If at any time prior to final acceptance the Engineer shall decide and inform in writing to the Contractor, that the Contractor has manufactured any equipment or part of the plant unsound or imperfect or has furnished any plant inferior to the quality specified, the Contractor on receiving details of such defects or deficiencies shall at his own expense within seven (7) days of his receiving the notice, or otherwise, within such time as may be reasonably necessary for making it good, proceed to alter, reconstruct or remove such work and furnish fresh equipment confirming to the standards of the specifications. In case the Contractor fails to do so, the Engineer may on giving the Contractor seven (7) days notice in writing of his intention to do so, proceed to remove the portion of the Works so complained of and, at the sole risk and cost of the Contractor, perform all such work or furnish all such equipment provide that nothing in this clause shall be deemed to deprive the Owner of or affect any rights under the contract which the Owner may otherwise have in respect of such defects and deficiencies.
- 34.2 The Contractor's full and extreme liability under this clause shall be satisfied by the payments to the Owner of the extra cost, of such replacement procured, including erection, as provided for the Contract, such extra cost being the ascertained difference between the price paid by the Owner for such replacement and the Contract Price portion for such defective equipment and



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repayments of any sum paid by the Owner to the Contractor in respect of such defective plant. Should the Owner not so replace the defective plant, the Contractor's extreme liability under this clause shall be limited to repayment of all sums paid by the Owner under the Contract for such defective plant.

- 34.3 If the completed plant and equipment or any portion thereof, after its acceptance or taken over found to be defective or fails to fulfil the requirements of the Contract, Owner shall give the contractor notice, setting forth particulars of such defects or failure and the contractor shall, forthwith make the defective plant /equipment good and make it comply with the requirement of the Contract. Should the contractor fail to do so within reasonable time Owner shall reject and replace at the risk and cost of the Contractor the whole or any portion of the plant and equipment as the case may be which is defective or fails to fulfil the requirements of the Contract. Such replacement shall be carried out by Owner within a reasonable time and at a reasonable price, and where reasonably possible to the same specification. The Contractor's liability under this clause shall be satisfied by the payment to Owner of the ascertained dues, if any, between the replacement price of the equipment including charges for erection and/or supervision of erection and the original Contract price including charges for erection and/or supervision of erection in respect of such defective plant. Should Owner not get rejected plant so replaced within a reasonable time, the Contractor's liability under this clause will be satisfied by the repayment of all moneys paid by Owner to him in respect of such defective plant.

In the event of such rejection Owner shall be entitled to use the plant in a reasonable and proper manner for a time reasonably sufficient to enable him to obtain other replacement plant.

35.0 DEFENCE OF SUITS

If any action in Court is brought against the Owner or Engineer or an officer or agent of the Owner for the failure or neglect on the part of the Contractor to perform any actions, matters, covenants or things under the Contract, or for damage or injury caused by the alleged omission or negligence on the part of the Contractor, his agents, representatives or his sub-contractors, workmen, suppliers or employees, the Contractor shall in all such cases indemnify and keep the Owner, and the Engineer and/or his representative, harmless from all losses, damages, expenses or decrees arising out of such action.

36.0 LIMITATIONS OF LIABILITIES

Except in cases criminal negligence of wilful non-performance or willful default,

- a) The contractor shall not be liable to the Employer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs.
- and
- b) The aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise including the cost of repairing or replacing defective equipment, shall not exceed the 100% (Hundred Percent) of the contract price plus escalation if applicable as per contract,



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provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Employer with respect to copyright, patent infringement, workman compensation and statutory liabilities in general that the Employer may be required to additionally bear due to default of the Contractor.

37.0 MARGINAL NOTES

The marginal notes to any clause of the Contract shall not affect or control the construction of such clause.

38.0 TAXES, PERMITS & LICENCES

The Contractor shall be liable and pay all taxes, duties, levies, lawfully assessed against the Owner or the Contractor in pursuance of the Contract. In addition, the contractor shall be responsible for payment of all duties, levies and taxes lawfully assessed against the contractor for his personal income and property only. The Contractor shall also be fully responsible for obtaining necessary recruits and licenses as may be required in connection with the performance of Contract.

39.0 PROGRESS REPORTS AND PHOTOGRAPHS

During the various stages of the Works in the pursuance of the Contract, the Contractor shall at his own cost submit monthly progress reports to the Engineer with such materials as charts, networks, photographs, test certificates, etc. Such progress reports shall be in the format and size as may be required by the Engineer and shall be submitted in five (5) copies.

40.0 LONG TERM AVAILABILITY OF SPARES

40.1 The Contractor shall guarantee the long-term availability of spares to the Owner for 15 years of the equipment covered under the Contract. The Contractor shall guarantee that before going out of production of spare parts of the equipment covered under the Contract, he shall give the Owner at least twelve (12) months advance notice so that the latter may order his bulk requirement of spares, if he so desires. The same provision will also be applicable to Contractor's Sub-Contractors and the Contractor shall ensure adherence of his Sub-Contractors to this requirement. Further, in case of discontinuance of manufacture of any spares by the Contractor or his Sub-Contractors the Contractor will provide the Owner one year in advance, with full manufacturing drawings, material specifications and technical information required by the Owner for the purpose of manufacture of such items.

40.2 Further, in case of discontinuance of supply of spares by the Contractor or his sub-contractors the Contractor will provide the Owner with full information for replacement of such spares with other equivalent makes, if so required by the owner.



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- 40.3 The Contractor shall provide the Owner with a 'directory' of his Sub-Contractors, giving the addresses & other particulars of his sub-contractor. The owner, if he so desires, shall have the option to procure the spares directly from Sub-Contractors.
- 40.4 The Contractor will indicate in advance the delivery period of the items of spares, which the Owner may procure. In case of emergency requirements of spares, the Contractor would make every effort to expedite the manufacture and delivery of such spares on the basis of mutually agreed time schedule.
- 40.5 The procedure specified in Clause 40.4 above shall apply for future procurement of items included in the spares list and special tools, plants and equipment list, specified in the bid documents.

41.0 CONTRACTORS DEFAULT:

If the Contractor shall neglect to execute the works with the diligence and expedition or shall refuse or neglect to comply with any reasonable orders given to him in writing by the Engineer in connection with the works or shall contravene the provisions of the Contract, the Owner may give notice in writing to the contractor to make good the failure, neglect or contravention complained of. Should the Contractor fail to comply with the notice within thirty (30) days from the date of service thereof, then and in such case the Owner shall be at liberty to employ other workmen and forthwith execute such part of the works as the contractor may have neglected to do if the owner shall think fit, it shall be lawful for him, without prejudice to any other right he may have under the contract to take the works wholly or in part out of the contractor's hands and recontract with any other person or persons, complete the works or any part thereof and in that event the owner shall have free use of all contractor's equipment that may have been at the time on the site in connection with the works without being responsible to the contractor for fair wear and tear thereof and to the exclusion of any right of the contractor over the same and the Owner shall be entitled to retain and apply any balance which may otherwise be part thereof as may be necessary, the payment of the cost of executing the said part of the works or of completing the works as the case may be. If the cost of completing the works or executing a part thereof as aforesaid shall exceed the balance due to the contractor, the contractor shall pay such excess. Such payment of excess amount shall be independent of the liquidated damages for delay which the contractor shall have to pay if the completion of works is delayed. In addition, such action by the Owner as aforesaid shall not relieve the Contractor of his liability to pay liquidated damages for delay in completion of Works.

42.0. Training

The Contractor shall undertake, to run the facilities after commissioning and PG Test for a period of 3 months / as may be specified in contract, and train free of cost, engineering personnel of the Owner. However, the nature of training for the individual personnel shall be finalized in consultation with the Owner prior to handing over the facilities to the User departments of the OWNER. These engineering personnel shall be given special training in the shops, where the equipment will be manufactured and/or under installation or test, to enable those personnel to become familiar with the equipment regarding operation and maintenance of the same being supplied by the Supplier.



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- 42.1 All traveling and living expenses for the engineering personnel of the Owner to be trained during the total period of training will be borne by the owner.
- 42.2 The contractor shall submit to the Owner a basic plan for training of Owner's personnel representative in similar units in India consistent with manpower requirements as approved by the Owner. The basic plan shall be finalized in consultation with the Owner and shall be subject to Owner's approval. Such training shall include training in contractor's design and engineering department, manufacturer's shops and operation/maintenance in similar working plant / installation.
- 42.3 The contractor shall provide free of charge office accommodation, office facilities, secretarial service, communication facilities, general and drawing office stationery etc., as may be reasonably required by Owner's personnel. Similar facilities shall also be provided by his sub-contractors, if such basic engineering activities are carried out in the design offices of sub-contractor.
- 43.0 Safety Code:** The CONTRACTOR shall at his own expense arrange for the safety provisions as appended to these conditions at Annexure 1 or as required by the ENGINEER in respect of all labour directly or indirectly employed for performance of the works and shall provide all facilities in connection therewith. In case the CONTRACTOR fails to make arrangements and provide necessary facilities as aforesaid, the Engineer shall be entitled to do so and recover the cost thereof from the CONTRACTOR.
- 44.0 Model Rules for Labour Welfare:** The CONTRACTOR shall at his own expense comply with or cause to be complied with Model Rules of Labour Welfare as appended to these conditions at Annexure 2 or rules framed by Central or State Government from time to time for the protection of health and for making sanitary arrangements for the workers employed directly or indirectly on the works. In case the CONTRACTOR fails to make arrangements as aforesaid, the ENGINEER shall be entitled to do so and recover the cost thereof from the CONTRACTOR
- 45.0 Insurance of workmen:** All workmen shall be covered under insurance against injury or any accident of fatal nature, at CONTRACTOR'S cost.
- 46.0 LABOUR**
- 46.1 Employment of labour in sufficient numbers: The CONTRACTOR shall employ labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the Contract and to the satisfaction of the ENGINEER. The CONTRACTOR shall not employ in connection with the works any person who has not completed his eighteen years of age.
- 46.2 Labour returns and reporting of accidents: The CONTRACTOR shall furnish to the ENGINEER at the intervals, a distribution return of the number and description by trades of the work people employed on the works. The CONTRACTOR shall also submit on the 4th and 19th of every month to the ENGINEER, a true statement showing in respect of the second half of the preceding month and the first half of the current month (i) the accidents, if any, that occurred during the said fortnight showing the circumstances under which they occurred and the extent of damage and injury caused by them and (ii) the number of female



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workers, if any, who have been allowed Maternity Benefit as provided in the Maternity Benefit Act, 1961 or Rules thereunder and the amount paid to them.

- 46.3 Wages: The CONTRACTOR shall pay to labour employed by him either directly or through sub-contractors wages not less than the fair wages as defined in the Contract Labour Regulations.
- 46.4 Observance of Contract Labour Regulations: The CONTRACTOR shall in respect of labour employed by him or his sub-contractors, comply with or cause to be complied with the Contract Labour (Regulation & Abolition Act 1970) and rules as framed by Central or State Government from time to time in Annexure-3 given in the provisions of the act for the guidance of the Contractor.
- 46.4.1 The CONTRACTOR shall comply with all the provisions of the payment of Wages Act 1936, Minimum Wages Act 1948, Employer's Liability Act 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act 1947, Maternity Benefit Act 1961 and Mines Act, 1952, Contractor Labour Regulation & Abolition Act 1970, Provident Fund Act or any order made there under/thereof or any other law relating to the work enacted from time to time.
- 46.4.2 **Tenderers are required to consider an additional amount of Rs. 170/- (Rupees One Hundred Seventy only) per man-day as SRNPP (Special Relief for NMDC Production Project applicable for the contract Labours to be engaged locally at production projects (BIOM-Bacheli and Kirandul/DIOM-Donimalai/Panna) for execution of the contract.**
- 46.4.3 NMDC's initiative towards improvement in the benefits to the Contract labour under the scheme named SRNPP has been implemented in the NMDC production projects of the company viz Kirandul Complex, Bacheli Complex, Donimalai and Panna Projects from 1/10/2010. Under this scheme an additional amount of **Rs. 170/- per day** over and above statutory minimum wages on actual attendance is payable as "Special Relief for NMDC Production Project (SRNPP)" to the Contract Labourers working in production projects of the company.

The payment of fair wages shall be ensured strictly by the contractors to the contract Labourers without fail. The fair wages shall not be less than SRNPP plus the minimum wages prescribed by the Statutory Authority.

Accordingly, Terms and Conditions regarding payment of SRNPP have been incorporated in the NIT. The Bidder must provide above said additional amount to be paid to all Contract Labour on actual attendance and record the same in attendance register along with maintaining the records of payment at the time of weekly payment. This shall be certified by the Engineer-in-charge concerned. In order to implement the SRNPP, the Bidder shall quote the amount towards SRNPP in the price bid along with the Basic Price of work.

- 46.4.4 As regards disbursement of wages to the Contract Labour and witnessing the payment by the Engineer-in-charge, the Executing Department shall ensure all Statutory provisions including the minimum Wages Act 1948, Employees' Provident fund & Miscellaneous



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Provisions Act 1952 and the Contract Labour (Regulation and abolition Act) 1970 and Rules made thereunder by the Contractors working under them.

- 46.4.5 The CONTRACTOR shall be liable to pay his contribution and the employee's contribution to the State Insurance Scheme in respect of all labour employed by him for the execution of the contract, in accordance with the provision of "The Employees State Insurance Act, 1948" and Provident Fund Act as amended from time to time. In case of default, the ENGINEER will be entitled to withhold an amount of contribution as assessed by him from the CONTRACTOR's bills till such time the CONTRACTOR produces evidence of remittance of the same to the concerned authorities.
- 46.4.6 The ENGINEER shall, on a report having been made by the Inspecting Officer as defined in the Contract Labour Regulations, have the power to deduct from the moneys due to the CONTRACTOR any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the Contract for the benefit of workers non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said Contract Labour Regulations.
- 46.4.7 The CONTRACTOR shall indemnify the OWNER against any payments to be made under and for observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractors.
- 46.4.8 The contractor shall take out necessary license under the Contract Labour (Regulation and Abolition) Act, 1970 within the time limit allowed by the appropriate Government and on his failing to do so within the prescribed time limit; the contract will be liable for termination including forfeiture of Earnest Money /Security Deposit.

47.0. Corrupt or Fraudulent Practices:

- 47.1 The Owner requires that Bidders/Suppliers/Contractors under this contract, observe the highest standard of ethics during the procurement and execution of this contract. In pursuance of this policy, the Owner:
- (a) defines, for the purpose of these provisions, the terms set forth as follows:
- (i) "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution &
- (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Owner, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Owner of the benefits of free and open competition.
- (b) will reject a proposal for award of work if he determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- (c) will declare a Bidder ineligible, either indefinitely or for a stated period of time, to be awarded a contract/contracts if he at any time determines that the Bidder has engaged in corrupt or fraudulent practices in competing for, or in executing, the contract.



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47.2 NMDC Policy on Banning of Business Dealings with Agencies:

NMDC has introduced NMDC Policy on Banning of Business Dealings with Agencies, which covers both suspension and banning of business dealings with the Agency that commits fraud and/or transgression in the dealings with NMDC. The Grounds for Banning of Business Dealings and the Banning Period as per the Policy are reproduced below:

(I) GROUNDS FOR BANNING BUSINESS DEALINGS

- a) For the sake of clarity, the grounds on which banning of business dealings can be considered are given below. These are only illustrative, not exhaustive. The Competent Authority may decide to ban Business Dealings with an Agency for any good and sufficient reason.*
- b) Security considerations, including questions of loyalty of the Agency to the State.*
- c) Conviction of the Director/owner/proprietor/partner of the Agency by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or NMDC during the last five years.*
- d) Evidence/strong justification for believing that the Director/owner/proprietor/partner of the Agency has/have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolation in tenders, etc.*
- e) The Agency's continuous refusal to return/refund the dues to NMDC without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in arbitration or Court of Law.*
- f) The Agency employs an employee who was dismissed / removed by NMDC for an offence involving corruption or abetment of such an offence.*
- g) The banning of business dealings with the Agency by the Government or any other public sector enterprise.*
- h) The Agency resorted to corrupt or fraudulent practices that may include misrepresentation of facts and/or fudging/forging/ tampering of documents.*
- i) The Agency used intimidation/threatening or brings undue outside pressure on NMDC/its officials in relation to a Business Dealing.*
- j) The Agency resorts to repeated and/or deliberate use of delay tactics in complying with contractual stipulations.*
- k) Willful act of the Agency to supply sub-standard material irrespective of whether pre-despatch inspection was carried out by NMDC or not.*
- l) The findings of CBI/Police about the Agency's involvement in fraud and/or transgressions in relation to the Business Dealings with NMDC.*
- m) Established litigant nature of the Agency to derive undue benefit.*
- n) Continued poor performance of the Agency in at least three preceding contracts with NMDC.*
- o) The Agency misuses the premises or facilities of NMDC and/or forcefully occupies, tampers or damages NMDC's properties including land, water resources, forests/trees, etc.*
- p) False allegation on NMDC officials by the Agency if found proved by the Investigating Department including Independent External Monitor.*



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(II) BANNING PERIOD

The Banning Period may range from six months to three years depending on the gravity of the case as decided by the Competent Authority. While deciding the Banning Period, the Suspension Period, if any, shall also be taken into account.

48.0 Property

All materials on the Site, Plant, Equipment, Temporary Works and Works for which payment has been made to the contractor by the *Owner*, are deemed to be the property of the Owner, if the Contract is terminated because of Contractor's default.

49.0. Release from Performance.

If the Contract is frustrated by the outbreak of war or by other event entirely outside the control of either the Owner or the Contractor, the *Owner* or his nominee shall certify that the Contract has been frustrated. The Contractor shall leave the Site and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.



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Annexure - 1

SAFETY CODE

(See Clause 43.0 of GCC)

1. Suitable scaffolds shall be provided for workmen for all work that cannot safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and hand-holds shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1 (1/4 horizontal and 1 vertical).
2. Scaffolding or staging more than 3.25 meters above the ground or floor, swing or suspended from an overhead support or erected with stationery support, shall have a guard rail properly attached, bolted, braced and otherwise secured at least 1 meter high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working platform, gangways and stairways shall be so constructed that they do not sag unduly or unequally, and if a height of a platform or gangway or stairway is more than 3.25 meters above ground level or floor level, it shall be closely boarded, have adequate width and be suitably fenced as described in 2 above.
4. Every opening in 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 with a minimum height of 1 meter.
5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 meters in length. Width between wide rails in a run ladder shall in no case be less than 30 cm for ladders upto and including 3 meters in lengths. For longer this width shall be increased at least 6 mm for each additional 30 cm of length. Uniform step spacing shall not exceed 30 cm.
 - 5.1.1 Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the Sites shall be so stacked or placed as to cause danger or inconvenience to any person or public. The Contractor shall provide all necessary fencing and lights to protect public from accidents and shall be bound to bear expenses of defense of every suit action or other proceedings at law that neglect of the above precautions and to pay any damages and costs which may with the consent of the Contractor to be paid to compromise any claim by any such person.
 - 5.1.2 All safety measures such as provision of safety helmets, belts, shoes to the workmen and supervisory staff employed by the contractor shall be statutory which shall be provided by the contractor to his workmen and labour at his cost.



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6. Excavation and Trenching: All trenches, 1.5 meter or more in depth, shall at all times, be supplied with at least one ladder for each 20 meters in length or fraction thereof. Ladder shall be extended from bottom of trench to at least meter above surface of the ground. Sides of trench which is 1.5 meters or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. Excavated material shall not be placed within 1.5 meters of edge of trench or half of depth of trench, whichever is more. Cutting shall be done from top to bottom. Under no circumstances shall undermining or undercutting be done.
- 7 Demolition: Before any demolition work is commenced and also during the process of the work:
- All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by operator shall remain electrically charged.
 - All practical steps shall be taken to prevent danger to persons employed from risk or fire or explosion, or flooding. No floor, roof, or other part of a building shall be so overloaded with debris or materials as to render it unsafe.
8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge shall be available for use of persons employed on the site and mentioned in a condition suitable for immediate use; and the contractor shall take adequate steps to ensure proper use of equipment by those concerned.
- Workers employed on mixing asphaltic materials cement and lime mortars/ concrete shall be provided with protective footwear and protective goggles.
 - Those engaged in handling any material, which is injurious to eyes, shall be provided with protective goggles.
 - Those engaged in welding works shall be provided with welder's protective eye-shields, gloves and footwears.
 - Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - When workers are employed in sewers and manholes, which are in use the contractor shall ensure that manhole covers are opened and manholes are ventilated at least for an hour before workers are allowed to get into them. Manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to public.
 - The Contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Whenever men above the age of 18 years are employed on the work of lead painting, the following precautions shall be taken:



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1. No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
2. Suitable facemasks shall be supplied for use by workers when paint is applied in the form of spray or surface having lead paint dry rubbed and scrapped.
3. Overalls shall be supplied by the contractor to workmen and adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
9. When work is done near any place where there is risk of drowning, all necessary equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
10. use of hoisting machines and tackles including their attachments, anchorage and supports shall conform to the following:
 - a). These shall be of good mechanical construction, sound material and adequate strength and free from patent defects and shall be kept in good working order and properly maintained.
 - b) Every rope used in hoisting or lowering or materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.
11. Every crane driver or hoisting appliance operator shall be properly qualified and no person under age of 21 years shall be in charge of any hoisting machine including any scaffold or give signal to operator.
12. In case of every hoisting machine and of every chain rink hook, shackle swivel and pulley block used in hoisting or lowering or as means of suspension, safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked.
13. A First – Aid box shall be kept by the contractor at the site office to meet any emergency that may arise.



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Annexure - 2

MODEL RULES FOR LABOUR WELFARE

(See clause 44.0 of GCC)

1. Definition

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

2. First Aid

- 2.1 At every workplace, there shall be maintained in a readily accessible place first aid appliances including adequate supply of sterilised dressings and sterilised cotton wool as prescribed in the Factory Rules of the State/Government of India. 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.
- 2.2 At large work places where hospital facilities are not available within easy distance of the works, First Aid posts shall be established and to run by trained compounders.
- 2.3 At large workplaces are remotely situated and far away from regular hospitals, an indoor ward shall be provided with one bed for every 250 employees.
- 2.4 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 of these hospitals. At other workplaces, some conveyance facilities shall be kept readily available to take injured person or persons suddenly taken seriously ill, to the nearest hospital.
- 2.5 At large workplaces there 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 this purpose the relevant provisions of the Factory Rules of the State Government of the areas where the work is carried on may be taken as the prescribed standard.
- 3.0 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.
- 4.0 Drinking Water in very workplace, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.
 - 4.1 Where drinking water is obtained from an intermittent public water supply each work place shall be provided with storage where drinking water shall be stored.
 - 4.2 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.



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4.3 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.

5.0 Washing and Bathing Places: Adequate washing and bathing places shall be provided separately for men and women. Such places shall be kept in clean and drain condition.

6.0 Scale of Latrines and Urinals (for men and women): These shall be provided within the precincts of every workplace latrines and urinals in an accessible place separately for each of these shall not be less than at the following scales:

	No. of seats
a) Where number of persons does not exceed 50	2
b) Where number of persons exceed 50 but does not exceed 100	3
c) For additional person per 100 or part thereof	3

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

7.0 Latrines and Urinals: Except in work workplaces provided with water flushed latrines connected with a water borne sewage system all latrines shall be provided with receptacles on dry earth system which shall be cleaned at least four times daily and at least twice during working hours and kept in a proper sanitary condition. Receptacles shall be tarred inside and outside at least once in a year.

7.1 If women are employed, separate latrine and urinals, screened from those from men and marked in the vernacular in conspicuous letters. "For women only" shall be provided on the scale laid down in rule. Those for men shall be similarly marked "For Men only" A poster showing the figure of a man and 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.

8.0 Construction of Latrines: Inside walls shall be constructed of masonry or other non-absorbent material and shall be cement-washed inside and outside at least once in 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.

9.0 Disposal of Excreta: Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration of the workplaces shall be made by means of a suitable 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 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).

9.1. The CONTRACTOR shall at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to affect 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.



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- 10.0 Provision of shelters during rest: At every workplace 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 the least 0.5 sq. mtr. per head.
- 11.0 Creches: 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 planks spread over mud floor and covered with matting.
- 11.1 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 attendants and mothers of children.
- 11.2 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.
- 11.3 Size of Creche (s) shall vary according to the number of women workers employed.
- 11.4 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 where it is considered necessary.
13. Structures: Planning, setting and erection of the above mentioned structures shall be approved by the Engineer 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 expense. 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.
- 13.1 On completion of the works the site shall be cleaned of the whole of such temporary structures, all rubbish shall be cleaned and burnt, excrete or other disposal pit of trenches filled in and effectively sealed off and 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 barrow pits which may have been dug by him.



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15. Enforcement: The Inspecting Officer mentioned in the CONTRACTOR's Labour Regulations or any other officer nominated on his behalf by the Engineer-in-charge shall report to 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: The OWNER 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 there



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Annexure - 3

CONTRACT LABOUR REGULATIONS

(Clause 46.0 of GCC)

1. Definition: In these regulations, unless otherwise expressed or indicated, the following words and expression shall have the meaning hereby assigned to them:
 - a) "Labour" means workers employed by a contractor directly, or indirectly through a sub-contractor, or by an agent on his behalf as per statutory regulations.
 - b) "Fair Wages" 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 employment in the neighborhood but shall not be less than the minimum rates of wages fixed under the payment of 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) Contractor's Name and Address.
 - c) Particulars of the Department for which the work is undertaken.
 - d) Name and address of sub-contractor(s) 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 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 the 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 days immediately before or after the rest day. Provided that no substitution shall be made which will result in the worker working or more than ten days consecutively without a rest day for a whole day.
- iii) Where in accordance with the foregoing provisions 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 to which a worker is entitled to.



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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 to its employees/workmen shall be payable. No wage period shall normally exceed one week.

6. Payment of wages:

- 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 in presence of owner's representative on a working day except when the work is completed before expiry of the wages 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 the relevant particulars of every workman shall be entered therein within THREE days of his employment.

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 relevant entries. On termination of employment the Employment Card shall again be endorsed by the Contractor and returned to the worker.



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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.
- 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.

10. Fines Deductions which may be made from wages

Wages of a worker shall be paid to him without any deductions of any kind except the following:

- a) Fines:
 - b) Deduction 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 damages to or losses 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 of overpayment of wages, advance granted shall be entered in the register; and
 - e) any other deduction which the Corporation may from time to time allow.
- i.** No fines shall be imposed on any worker save in respect of such acts and omissions on his part as have been approved by the Chief Labour Commissioner.
 - ii.** 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 cause against such fines or deductions.
 - iii.** 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 wages payable to him in respect of that wage period.
 - iv.** No fine imposed on a worker shall be recovered from him in instalments, 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.
 - v.** The Contractor shall maintain both in English and 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 good condition in a conspicuous place on the work site.
 - vi.** 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.

11. Register of accidents: The contractor shall maintain a register of accidents and injuries in such form as may be convenient at the work place and the same shall include the following particulars.



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- 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 Workman'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 Register: 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 lost entry is made therein.
13. Enforcement: The Inspecting Officer shall either on his own motion or on a complain received by him carry out investigations, and send a report to the QWNER 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 thereof. It shall be obligatory on the part of the OWNER on receipt of such a report to deduct such amounts from payments 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 case where there is an appeal, payment of workers dues would be arranged by the Engineer-in-Charge whenever such payments arise, within THIRTY days from the date of receipt of the decision of the Regional Labour Commissioner (R.L.C.)
15. Welfare Fund: All moneys that are recovered by the OWNER 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 a worker 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 OWNER. The decision of the Regional Labour Commissioner shall be final and binding upon the Contractor and the workmen.



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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 officer 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 or 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 of Association of Contractors to which the said association is affiliated or 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 any 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 OWNER or his authorised representative at any time and by the worker or his agent on receipt of due notice at a 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.



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REGISTER OF WORKMEN
(Regulation No.7)

1. Name and address of the CONTRACTOR
2. Number and date of the Contract
3. Name and address of the Company awarding the Contract: NMDC Ltd., 10-3-311/A, Masab Tank, Hyderabad.
4. Nature of the Contract and location of the work.
5. Duration of the Contract.

Sl No.	Name and surname of the workers	Age and Sex	Father's/ Husband's Name	Nature of employment Designation	Permanent/and Home address of employee (Vill.Dist.Thana)	Present address	Date of commencement of employment	Date of terminating or leaving employment	Sig. or thumb impression of the employee	Remarks
1	2	3	4	5	6	7	8	9	10	11



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EMPLOYMENT CARD

(Regulation No.8)

1. Name and sex of the worker
2. Father/Husband's Name
3. Address
4. Age or Date of Birth
5. Identification Marks
6. 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)

i) Name

ii) Full address of dependents
(Specify village, district and state)

1	2	3	4	5	6	7	8	9	10	11	12
S l. N o .	Name and address of the employer (specify whether contractor/subcontractor)	Particulars of location of work site and description of work done	Total period for which the worker employed (from to)	Actual no. of days worked	Leave taken (No. of days should be specified)	Nature of work done by the worker	Wage period	Wage rate with particulars of unit in case of piece work	Total wages earned by the worker during the period shown under (5)	R E M A R K S	S I G N A T U R E O F E M P L O Y E R

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



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REGISTER OF FINES
(Regulation No. 10 (vii))

Sl. No.	Name	Father's Husband's Name	Sex	Department	Nature & dt. of the offence for which fine imposed	Whether worker showed cause against or not if so enter dt.	Rate of wages	Dt. And amount of fine imposed	Date which fine realised	Remarks
1	2	3	4	5	6	7	8	9	10	11



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**REGISTER OF DEDUCTIONS FOR DAMAGES OR LOSS CAUSED TO THE OWNER
BY THE NEGLIGENCE OR DEFAULT OF THE EMPLOYED PERSONS**

(Regulation No. 10 (vii))

Sl. No.	Name	Father's Husband's Name	Sex	Depart- ment	Damage or loss caused with date	Whether worker showed cause against deduction if so enter dt.	Date amount of deduc- tion Imposed	Number of instal- ments if any realised	Date with total amount	Remarks
1	2	3	4	5	6	7	8	9	10	11



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WAGE SLIP
(Regulation No.9)

- i) Name of the CONTRACTOR
ii) Place
-

1. Name of the worker 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 of which overtime worked
 7. Overtime wages
 8. Gross wages payable
 9. Total deduction (including nature of deduction)
 10. Net wages payable
-

CONTRACTOR'S signature
Thumb impression

Employee's signature
Thumb impression



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GENERAL TECHNICAL CONDITIONS (GTC)



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GENERAL TECHNICAL CONDITIONS (GTC)

1.0 GENERAL

This part covers technical conditions pursuant to the Contract and will form an integral part of the Contract. The following provisions shall supplement all the detailed technical specifications and requirements brought out in the accompanying Technical Specifications. The contractor's proposal shall be based on the use of equipment and materials complying fully with the requirements, specified herein. It is recognised that the contractor may have standardised on the use of certain components, materials, processes or procedures different than those specified herein. Alternate proposals offering similar equipment based on the manufacturer's standard practice will also be considered provided such proposals meet the specified designs, standards and performance requirements and are acceptable to the Owner.

2.0 LIMIT OF CONTRACT

Equipment furnished shall be complete in every respect with all mountings, fittings, fixtures and standard accessories normally provided with such equipment and/or needed for erection, completion and safe operation of the equipment as required by applicable codes though they may not have been specifically detailed in the Technical Specification, unless included in the list of exclusions. All similar standard components/parts of similar standard equipment provided, shall be interchangeable with one another.

3.0 EQUIPMENT PERFORMANCE GUARANTEE

3.1 The performance guarantee of the equipment / system under the scope of the Contract are detailed separately in the **Technical Specifications (Volume-II) of tender document**. These guarantees shall supplement the general performance guarantee provision covered under GCC in Clause title "Guarantee".

4.0 ENGINEERING DATA

4.1 The furnishing of engineering data by the Contractor shall be in accordance with the schedule as specified in the Technical Specifications. The review of these data by the Owner will cover only general conformance of the data to the specifications and documents interfaces with the equipment provided under the specifications, external connections and of the dimensions which might affect plant layout. This review by the details of the equipment, material, any devices or items indicated or the accuracy of the information submitted. This review and/or approval by the Owner shall not be constrained by the Contractor, as limiting any of his responsibilities and liabilities for mistakes and deviations from the requirements, specified under these specifications and documents.

4.2 All engineering data submitted by the Contractor after final process including review and approval by the Owner/ Engineer in charge shall form part of the Contract Documents and the entire works covered under these specifications shall be performed in strict conformity, unless otherwise expressly stated by the Engineer in writing.

5.0 DRAWINGS



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- 5.1 All drawings submitted by the Contractor including those submitted at the time of bid shall be of sufficient detail to indicate the type, size, arrangement, weight of each component break-up for packing and shipment, the external connections, fixing arrangements required, the dimensions required for installation and interconnections with other equipment and materials, clearances and spaces required between various portions of equipment and any other information specifically requested in the specification.
- 5.2 Each drawing submitting by the Contractor shall be clearly marked with the name of Owner, the unit designation, the specifications title, the specification number and the name of the project. If standard catalogues pages are submitted the applicable items shall be indicated therein. All titles, notings, marking and writings on the drawing shall be in English. All dimensions shall be in metric units.
- 5.3 Copies of drawings returned to the Contractor will be in the form of a print with the Owner's Engineers marking.
- 5.4 The drawing submitted by the Contractor shall be reviewed by the owner as far as practicable within four (4) weeks of receipt and shall be modified by the Contractor if any modifications and/or corrections are required by the owner. The Contractor shall incorporate such modifications and/or corrections submit the final drawings for approval. Any delays arising out of failure by the Contractor to rectify the drawings in good time shall not alter the contract completion date.
- 5.5 The drawings sent for approval to the Owner shall be in five (5) copies. One print of such drawings will be returned to the Contractor by the Owner marked approved / not approved / approved 'with corrections'. The Contractor shall thereupon furnish the Owner with six prints and one reproducible of the original of the drawings after incorporation of all corrections.
- 5.6 Further work by the Contractor shall be in strict accordance with these drawings and no deviation shall be permitted without the written approval of the Owner.
- 5.7 The Contractor may make changes in the design which are necessary to make the equipment conform to the provisions and intent of the Contract but such changes will again be subject to approval by the Owner. Approval of Contractor's drawings or work by the Owner shall not relieve the Contractor of any of his responsibilities and liabilities under the Contract and the Contractor shall remain wholly responsible for any error in his drawings and documents, approved or otherwise.
- 5.8 Drawings shall include all installation and detailed piping drawings wherever applicable.
- 5.9 Finalised layout and GA drawings with sections and certified foundation outline drawings including dimensional anchor/foundation bolt location plans and loading drawings with drawings for foundation if any anchor bolts and inserts/ embeddings shall be furnished by the Contractor to the owner
- 6.0 **INSTRUCTIONS MANUALS**



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- 6.1 The Contractor shall supply to the Owner following documents at least one month before the expiry of the three fourth of the delivery period of the equipment.
- 6.2 Six sets of Erection Manual complete with descriptive literature and drawings to illustrate the method of assembly and dismantling and instructions for proper erection, balancing, alignment, checking and calibration as may be necessary.
- 6.3 One reproducible and five (5) copies of Maintenance Manuals complete with lubrication charts showing every point requiring lubrication, grade of lubricant, schedule of lubrication and where necessary correct amount and grade of oil or grease necessary for refill after drainage.
- 6.4 One reproducible and five (5) copies of Operating Manuals complete with all details necessary to ensure proper procedure with sequence of operation and safety instructions.
- 6.5 Six (6) sets of lists of suppliers for all bought out items.
- 6.6 If after the commissioning of the plant, the operation and Maintenance Manuals require any modifications, the same shall be incorporated and the updated manuals in the form of one reproducible original and five (5) copies each shall be furnished by the Contractor to the Owner.

7.0 **FIRST FILL OF CONSUMABLES, OILS AND LUBRICANTS**

All the first fill of consumable such as oils, lubricants and essential chemicals for pickling etc, which will be required to put in the equipment covered under the scope of the specifications up to successful commissioning shall be furnished by the contractor. Equipment shall be lubricated by systems designed for continuous operation. Lubricant level indicators shall be furnished and marked to indicate proper levels under both stand-still and operating conditions. The first fill of oils, lubricant, fuel etc. to be supplied shall include at least 10% extra quantities to cover the wastages/breakage during transportation, storage, handling, erection etc.

8.0 **MANUFACTURING SCHEDULE**

The Contractor shall submit to the Engineer his delivery schedule for all equipment within 15 days from the date of the Letter of award of contract. Such schedules shall be reviewed, updated and submitted to the Engineer, once every month thereafter by the Contractor. Materials and equipments proposed to be purchased from outside suppliers shall be separately identified and schedules thereof shall be also submitted.

9.0 **REFERENCE STANDARDS**



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9.1 The Codes and/or standards referred to in the specifications shall govern, in all cases wherever such references are made. In case of a conflict between such codes and/or standards and the specifications, the latter shall govern. Such codes and/or standards referred to shall mean the latest revisions, amendments/changes adopted and published by the relevant agencies. In case of any further conflict in this matter, the same shall be referred to the Engineer whose decision shall be final and binding.

9.2 Other internationally acceptable standards which ensure equal or higher performance than those specified shall also be accepted.

10.0 **DESIGN IMPROVEMENTS**

10.1 The Owner or the Contractor may propose changes in the specification of the equipment or quality thereof for effecting improvements in design and if the parties agree upon any such change the specification shall be modified accordingly.

10.2 If any such agreed upon change is such that it affects the price and schedule of completion, the parties shall agree in writing as to the extent of any change in the price and/or schedule of completion before the Contractor proceeds with the change. Following such agreement, the provision thereof shall be deemed to have been amended accordingly. NMDC's decision in this regard shall be final and binding.

11.0 **QUALITY ASSURANCE**

11.1 **Quality Assurance Programme**

To ensure that the equipment and services under the scope of this Contract whether manufactured or performed at the Contractor's work or at his Sub-contractor's premises or at the Owner's site or at any other place of work are in accordance with the specifications, the Contractor shall adopt suitable quality assurance programme to control such activities at all necessary points. Such programme shall be outlined by the Contractor and shall be finally accepted by the Owner after discussions before the award of Contract. A quality assurance programme of the Contractor shall generally cover the following:

11.1.1 His organisation structure for the management and implementation of the proposed quality assurance programme.

11.1.2. Documentation control system

11.1.3 Qualification data for bidder's key personnel

11.1.4 The procedure for purchase of materials, parts, components and selection of subcontractor's services including vendor analysis, source inspection, incoming raw material inspection, verification of materials purchased etc.

11.1.5 System for shop manufacturing and process controls and fabrication and assembly controls



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- 11.1.6 Control of non-conforming items and system for corrective actions
- 11.1.7 Inspection and test procedure both for manufacture and field activities
- 11.1.8 Control of calibration and testing of measuring and testing equipment
- 11.1.9 System for indication and appraisal of inspection status
- 11.1.10 System for quality audits
- 11.1.11 System for authorising release for manufactured product to the Owner
- 11.1.12 System for maintenance of records
- 11.1.13 System for handling storage and delivery; and
- 11.1.14 A quality plan detailing out the specific quality control procedure adopted for controlling the quality characteristics relevant to each item of equipment furnished.
- 11.2 **Quality Assurance Documents (as applicable)**
 - The Contractor shall be required to submit the following Quality Assurance Documents within four weeks after despatch of the equipment.
 - 11.2.1. All non-destructive examination procedure, stress relief and weld repair procedure actually used during fabrication
 - 11.2.2 Welder and welding operator qualification certificates
 - 11.2.3 Welder identification list, listing welder's and welding operator's qualification procedure and welding identification symbols
 - 11.2.4 Material mill test reports on components as specified by the specification.
 - 11.2.5 The inspection plan with verification, inspection plan check points, verification sketches, if used, and methods used to verify that the inspection and testing points in the inspection plan were performed satisfactorily
 - 11.2.6 Sketches and drawings used for indicating the method of traceability of the radiographs to the location on the equipment
 - 11.2.7 All non-destructive examination result reports including radiography interpretation reports
 - 11.2.8. Stress relief time temperature charts



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- 11.2.9 Factory test result for testing required as per applicable codes and standard referred in the specifications
- 11.2.10 The Owner or his duly authorised representative reserves the right to carryout Quality Audit and Quality Surveillance of the systems and procedures of the contractor his vendor's Quality Management and Control Activities.

12.0 ENGINEER'S SUPERVISION

- 12.1 To eliminate delays and avoid disputes and litigation it is agreed between the parties to the Contract that all matters and questions shall be referred to the Engineer and his decision shall be final.
- 12.2 The work shall be performed under the direction and supervision of the Engineer. The scope of the duties of the Engineer, pursuant to the Contract, will include but not be limited to the following:
- 12.2.1 Interpretation of all the terms and conditions of these documents and specifications;
- 12.2.2 Review and interpretation of all the Contractor's drawings, engineering data etc.
- 12.2.3 Witness or authorise his representative to witness tests and trials either at the manufacturer's works or at site, or at any place where work is performed under the Contract.
- 12.2.4 Inspect, accept or reject any equipment, material and work under the Contract.
- 12.2.5 Issue certificate of acceptance and/or progressive payment and final payment certificates.
- 12.2.6 Review and suggest modifications and improvements in completion schedules from time to time.
- 12.2.7 Supervise the quality assurance programme implementation at all stages of the works.

13.0 INSPECTION, TESTING AND INSPECTION CERTIFICATE

- 13.1 The Owner/Engineer, their duly authorised representatives and/or any inspection agency acting on behalf of the Owner (hereinafter referred to as Inspector) shall have at all reasonable times access to the Contractor's premises or works and shall have the power at all reasonable times to inspect and examine the materials and workmanship of the Works during its manufacture and if part of the works is being manufactured or



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assembled at other premises or works, the Contractor shall obtain for the inspector permission to inspect as if the Works were manufactured or assembled on the Contractor's own premises or works.

- 13.2 The Contractor shall give the Inspector three (3) weeks written notice of any material being ready for testing. Such tests shall be to the Contractor's account except for the expenses of the Inspector. The Inspector, unless witnessing of the tests is virtually waived, will attend such tests within fifteen (15) days of the date on which the equipment is notified as being ready for test/ inspection, failing which the Contractor may proceed with the test which shall be deemed to have been made in the Inspector's presence and he shall forthwith forward to the Inspector duly certified copies of tests in triplicate.
- 13.3 The Inspector shall within fifteen (15) days from the date of inspection as defined herein give notice in writing to the Contractor of any objection to any drawings and all or any equipment and workmanship which in his opinion is not in accordance with the Contract. The Contractor shall give due consideration to such objections and shall either make the modifications that may be necessary to meet the said objections or shall confirm in writing to the inspector giving reasons therein as to why no modifications are necessary to comply with the Contract.
- 13.4 When the factory tests have been completed at the Contractor's or Sub-Contractor's work, the Inspector shall issue a certificate to this effect within fifteen (15) days after completion of tests but if the tests are not witnessed by the Inspector, the certificate shall be issued within fifteen (15) days of the receipt of the Contractor's Test certificate by the Inspector. Failure of the inspector to issue such a Certificate shall not prevent the Contractor from proceeding with the works. The completion of these tests or the issue of the certificate shall not bind the Purchaser / Owner to accept the equipment should it, on further tests after testing, be found not to comply with the Contract.
- 13.5 In all cases where the Contract provides for tests whether at the premises or works of the Contractor or of any sub-contractor, the Contractor shall provide free of charge such items as labour, materials, electricity, fuel, water stores, apparatus and instruments as may be reasonably demanded by the inspector to carryout effectively such tests of the equipment in accordance with the Contract and shall give facilities to the inspector to accomplish testing.
- 13.6 The inspection by inspector and issue of inspection certificate thereon shall in no way limit the liabilities and responsibilities of the Contractor in respect of the agreed quality assurance programme forming a part of the Contract. The Contractor shall remain solely responsible for the accuracy, quality and completeness of his work and supply.
- 14.0 **TESTS**
- 14.1 **Pre – commissioning:**
- 14.1.1 On completion of erection of the equipment (including Owner's supplied equipments, if any as per contract) and before the start-up, equipment shall be inspected by the Owner/Engineer and the Contractor for correctness and completeness of installation and acceptability of start-up, tending to initial pre-commissioning tests at site. The list



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of pre-commissioning tests to be performed shall be as mutually agreed and included in the Contractor's quality assurance programme.

14.1.2 The Contractor's Engineers for commissioning and start-up specifically identified shall carry out all the pre-commissioning tests at site. On completion of inspection, checking and after the pre-commissioning tests are satisfactorily over, the complete equipment shall be placed on initial operation during which period the complete equipment shall be operated Integral with sub-system and supporting equipment as a complete plant as referred to hereinafter as 'system'.

14.2 **Testing, Commissioning, Acceptance of System / Performance Guarantee etc.:**

For details on the above including the specific tests to be conducted on equipment / system, please refer Vol-II of Tender Document (Scope of Work and Technical Specifications) along with pertinent procedural details given in Special Conditions of Contract (SCC).

14.3 **Taking Over:**

Upon successful commissioning of the plant, the owner shall issue to the contractor a commissioning certificate after which the plant will be taken over by the owner for Commercial Operation. However, such certificate will not relieve the contractor of any of his guarantees and other obligations which survive by the terms and conditions of the contract after issuance of such certificate.

15.0 **TEST CODES**

The provisions outlined in the international and Indian approved equivalents shall generally be used as a guide for all the above test procedures unless otherwise specified in the Technical Specifications.

16.0 **PACKING AND TRANSPORTATION**

16.1 All the equipment shall be suitably protected, coated, covered or boxed and crated to prevent damage or deterioration during transit, handling and storage at Site till the time of erection. While packing all the materials, the limitations from the point of view of availability of railway wagon sizes in India should be taken into account. The contractor shall be responsible for any loss or damage during transportation, handling and storage due to improper packing.

16.2 The Contractor has option to transport the plant and equipment either by road or by railways, after notifying the Owner the mode of transportation.

17.0 **PROTECTION**

All coated surfaces shall be protected against abrasions, impact, discolouration and any other damages. All exposed threaded portions shall be suitably protected with either a metallic or a non-metallic protecting device. All ends of all valves and pipings and conduit equipment connections shall be properly sealed with suitable devices to protect them from damage. The parts which are likely to get rusted, due to exposure



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to weather shall also be properly treated and protected in a suitable manner. All mating surfaces and journals shall be protected by a rust-inhibiting coat.

18.0 PRESERVATIVE SHOP COATING

Preservative shop coating shall be rendered as specified in the General Specification for Painting.

19.0 PROTECTIVE GUARDS

Suitable guards shall be provided for protection of personnel on all exposed rotating and/or moving machine parts. All such guards with necessary spares and accessories shall be designed for easy installation and removal for maintenance purposes.

20.0 DESIGN CO-ORDINATION

The Contractor shall be responsible for the selection and design of appropriate equipment to provide the best co-ordinated performance of the entire system. The basic design requirements are detailed out in Technical Specifications. The design of various components, sub/assemblies and assemblies shall be so done that it facilitates easy field assembly and maintenance. All the rotating components shall be so selected that the natural frequency of the complete unit is not critical at or close to the operating range of the unit.

21.0 CO-ORDINATION MEETING

The Contractor will be called upon to attend co-ordination meetings with the Owner/Engineer, other Contractors and the Owner during the period of Contract. The contractor shall attend such meetings at his own cost at Hyderabad or at any other venue notified by the Owner as and when required and fully co-operate with such persons and agencies involved during those discussions.

22.0 TOOLS AND TACKLES

The scope of supply of the equipment shall include one (1) complete set of all special tools and tackles required for the erection, assembly, dis-assembly and maintenance of the equipment. These tools and tackles shall be separately packed and supplied at site.

23.0 COMMISSIONING SPARES

The Contractor shall make arrangements for an adequate inventory at Site of necessary commissioning spares prior to commissioning of the equipments supplied and erected so that any damage or loss during the commissioning activities until successful completion of commissioning test necessitating the requirements of spares will not come in the way of timely completion of the Works under the Contract.

24.0 NOISE LEVEL

The equivalent "A" weighed sound level measured at a distance of 1.5 metres above floor level in elevation and one metre horizontally from the base of any equipment



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furnished and installed under these specifications, expressed in decimals to a reference of 0.0002 microbar, shall not exceed 85 dBA.

25.0 **EQUIPMENT BASES**

A cast iron or welded steel base plate shall be provided for all rotating equipment which is to be installed on a concrete base unless otherwise agreed to by the Engineer. One common base plate shall support the unit and its drive assembly and shall be of a neat design with pads for anchoring the units, shall have a raised lip all around and shall have threaded drain connections.

26.0 **RATING PLATES, NAME PLATES AND LABELS**

26.1 Each main and auxiliary items of plant is to have permanently attached to it in a conspicuous position a rating plate of non-corrosive material upon which is to be engraved the manufacturer's name, equipment type or serial number together with details of the loading conditions under which the item of plant in question has been designed to operate and such diagram plates as may be required by the Engineer.

26.2 Each item of plant is to be provided with a name plate or label designating the service of the particular equipment. The inscriptions are to be approved by the Engineer unless already detailed in the appropriate sections of the Technical Specifications.

26.3 Such name plates or labels are to be of white non-hygroscopic material with engraved black letter or, alternatively, in the case of indoor circuit breakers, starters etc. of transparent plastic material with suitably coloured lettering engraved on the back.

26.4 Items of plant such as valves, which are subject to handling, are to be provided with an engraved chromium plated name plate or label with engraving filled with enamel.

26.5 All such name plates, instruction plates, lubrication charts etc. shall be bilingual with Hindi inscription first, followed by English. Alternatively, two separate plates one with Hindi and other with English inscriptions shall be provided.



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SPECIAL CONDITIONS OF CONTRACT (SCC)



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SPECIAL CONDITIONS OF CONTRACT (SCC)

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SPECIAL CONDITIONS OF CONTRACT (SCC)

Special conditions of contract shall be read in conjunction with Notice Inviting Tender, Instructions to Tenderers, General Conditions of Contract, General Technical Conditions etc. along with scope of work & technical specifications, bill of quantities, drawings and/or other supplementary documents detailing the work.

Provided that where any provisions of the General Conditions of Contract are repugnant to or at variance, unless a different intention appears, the provisions of the special conditions of contract shall be deemed to override the provisions of the General Conditions of the contract and shall to the extent of such repugnance of variation prevail.

1.0 TIME SCHEDULE

1.1 The Tenderer shall include in his offer programme for furnishing the equipment covered under this tender. The programme shall be in the form of a Bar chart and shall identify the various activities like design, engineering, procurement, manufacturing, fabrication and testing of the equipment, supply, erection and commissioning including associated civil & structural works, if any, as per the given scope of work and specifications.

Sl. No.	Activity	Duration in months from the date of issue of letter of award of contract	
		Start date	Finish date
01.	Finalisation of general arrangement drawings		
02.	Completion of supply of all equipment at site		
03.	Commencement to completion of all Installation (Erection) of the system including all activities/ works till readiness for pre-commissioning		
04.	Pre- commissioning of the system and completion of Preliminary Acceptance Tests.		
05.	Commissioning and Final Acceptance Tests completion, as per the given scope of work and specifications.		

1.2 Within 15 days of issue of award, contractor shall submit, for review and approval, detailed network schedules based on the Master Network (mutually agreed by the Owner and Contractor) to the Engineer showing the logic and duration of activities in the following areas.



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- 1.2.1 Design, detailed engineering, procurement (including bought out items and raw materials), manufacture, shop inspection, testing despatch/shipment, erection, commissioning.
- 1.2.2 Inputs required from Owner for smooth and timely execution of Contract and also major data/ information to be submitted by contractor for further related engineering to be done by Owner are to be identified in the network based on details finalised during post Tender discussions. After approval of the detailed network schedule, Contractor shall submit one reproducible with sufficient number of prints as desired by Owner for Master Network as well as detailed network.
- 1.3 The Contractor shall submit within 15 days from date of notification of award a master list of drawings incorporating the schedule date of submissions; The schedule of submission should match with the manufacturing programme submitted in the detailed networks schedules. The list shall be updated every two months reflecting the additions/deletions during the period.
- 1.4 The Contractor shall submit to the Owner his manufacture, despatch and delivery at site schedules for all equipments within thirty (30) days from the date of issue of the notification and Award. Such schedules shall be in line with the detailed network for all phases of the work of the contract. Such schedules shall be reviewed, updated and submitted to the Owner, once every two months thereafter, by the Contractor. Schedules shall also include the materials and equipments purchased from outside suppliers.
- 1.5 The Contractor shall submit to the Owner/Engineer the detail billing schedule within 30 days after the issue of notification of award for approval. Additions/ deletions to this Billing schedule during detailed engineering shall also be submitted within 2 weeks of the approval of the drawings.
- 1.6 Within one week of approval of the Network schedule, the contractor shall forward to the Owner copies of the computers initial run data. The type of output and number of copies of each type to be supplied by the contractor shall be determined by the Owner.
- 1.7 The network schedule shall be updated at a frequency mutually agreed upon for the purpose of progress, monitoring. But for the purpose of identification of Contractor's Contractual liability the agreed Master network and detailed network schedules referred above shall only be applicable.
- 1.8 Monthly review meeting shall be held for review of the progress and identification of necessary corrective actions, wherever possible at the works wherein the major items of the plant of equipment are being manufactured at a mutually agreed venue. The meeting will be attended by the Engineer and responsible representatives of the Contractor that the Engineer considers necessary for the meeting. The Contractor shall be responsible for minuting the proceedings of the meeting, with the concurrence of the Owner, a report of which shall reach the Engineer not later than seven (7) days after the meeting.



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1.9 Access to the Contractor's and Sub-Vendor's/ Sub-Contractor's works shall be granted to the Engineer at all reasonable times for the purpose of ascertaining the progress.

1.10 **PROGRESS REPORTS**

During execution of the Contract/manufacture the Contractor shall furnish monthly progress reports to the Engineer in a format as specified by the Owner, indicating the progress achieved during the month, and total progress upto the month as against scheduled and anticipated completion dates in respect of activities covered in programmes/schedules referred above. If called for by the Owner, Contractor shall also furnish to the Owner, resources data in a specified format and time schedule. The Contractor shall also furnish any other information necessary ascertain progress, as and when called for by the Owner. The progress reports shall cover Engineering, Manufacture, vendor approval, status of manufacture / supplies (including bought out items), the activities and hold up etc. and shall be submitted in six (6) copies each.

2.0 **INSPECTION**

2.1 Inspection and testing at the manufacturer's works shall be in an agreed manner. The contractor shall present sufficient documentary evidence that the materials used in the manufacture of the equipment will meet the requirements of specifications. With respect to materials used for construction such as structural steel, mild steel, cast iron, cast steel etc. the contractor shall produce requisite test certificate along with specifications and test pieces on which tests were carried out by the manufacturer. At the time of examination with respect to large castings and forging, the contractor shall arrange for necessary X-ray/Ultrasonic tests to be carried out at his own cost. Should the contractor be himself not in a position to carry out the tests, he shall arrange to get them tested by Government approved test houses and the cost of such tests shall be to the contractor's account.

2.2 The Owner or his duly authorised representative shall have the right to be present when the tests are carried out by the Contractor. If called for samples shall become the Owner's property. Before any assembly the contractor shall notify the Owner as to the progress of the work in order that the inspection and/or tests can be carried out as may be required to ascertain, without prejudice to the Contractor's liability, whether materials and other services are in conformity with the requirements.

2.3 The complete equipment, assembly and major sub-assemblies shall be shop tested before despatch. The Contractor shall give reasonable notice as may be acceptable to the Owner but not less than fifteen (15) days in advance of any equipment/assembly/major sub-assemblies being ready for testing, specifying the period likely to be required for such testing, and the owner or his authorised representative shall attend and witness the testing as soon as possible. Failing such visit, the Contractor shall proceed with the test.

2.4 In all cases, where examination, inspection and testing are to be carried out whether at the premises of the Contractor or Sub-Contractor's works, the contractor except where otherwise specified shall provide free of charge to the Owner or his duly authorised representative such labour, materials, electricity, fuel, water, stores, apparatus and



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instruments as may be reasonably required to carry out efficiently such tests and shall give facilities to the Owner or his representative to witness such testing.

- 2.5 When the tests have been satisfactorily completed at the Contractor's or sub-supplier's works, the owner or his authorised representative will issue a certificate to that effect. If final certificate cannot be issued, preliminary and a provisional certificate shall be issued. No equipment/ assembly/major sub-assembly shall be despatched before such certificates have been issued by the Owner. The satisfactory completion of these tests on the issue of certificates shall not bind the Owner to accept the machine should it on further tests after testing be found not to comply with the contract.

3.0 **TERMS OF PAYMENT**

3.1 **PAYMENT**

The payment to the contractor for the performance of the works under the contract will be made by the owner as per the conditions specified herein. All payments made during the contract shall be on account payments only. The final payment will be made on completion of all the works and on fulfilment by the contractor of all his liabilities under the contract.

3.2 **CURRENCY OF PAYMENT**

All payments under the Contract shall be in Indian Rupees only.

3.3 **DUE DATES FOR PAYMENT**

Owner will make progressive payment as and when the payment is due as per the terms of payment set forth herein. Payment will become due and payable by the Owner within thirty (30) days from the date of receipt of contractor's Bill/Invoice/Debit Note/Other relevant documents by the Owner, provided the documents submitted are correct and complete in all respects.

3.4 **BILL FOR PAYMENTS**

- 3.4.1 The Contractor shall submit bill for payment in the prescribed proforma of the Owner. Proforma for bill for payment is enclosed as Annexure - A to this Terms of payment.

- 3.4.2 Each such bill shall state the amount claimed and shall set forth in detail, in the order of Billing Schedule, particulars of the supply and of the equipment brought on to the site pursuant to the contract upto the date mentioned in the bill and for the period covered since the last preceding certificate, if any.

- 3.4.3 Every interim payment certificate shall certify the Contract value of the works executed upto the date mentioned in the bill for the payment certificate, provided that no sum shall be included in any interim payment certificate in respect of the works that, according to the decision of the Engineer, does not comply with the contract, or has been performed, at the date of certificate prematurely.