

SECTION – II

ADDITIONAL CONDITIONS OF CONTRACT

2.1 Scope

The scope of work includes complete renovation, repair, overhauling of existing electro-mechanical equipments, design, detailed engineering, manufacture / procurement of missing/ irreparable equipment, shop testing, packing, transportation, loading & unloading, delivery, storage at site, painting, handling, dismantling, erection, pre-commissioning, test and commissioning of all equipment / systems including preliminary acceptance test, performance guarantee as set forth in these specifications.

Insurance during transit, storage, erection and commissioning of all the equipment and accessories is included in the scope. Provision of commissioning, spares required during testing and commissioning as also included in the scope.

- i. The equipment(s) shall be supplied complete in all respects i.e. with all fittings / accessories, apparatus and parts that are necessary for their usual efficient operation. Such parts shall be deemed to be within contractor's scope whether specifically mentioned or not.
- ii. The Additional Conditions of Contract and detailed technical specifications are supplementary to each other and are essential for complete interpretation of the requirements of the purchaser.

2.2 Manuals

The contractor shall furnish five sets of bound copies of erection, commissioning and operation, maintenance manuals giving detailed instructions, procedures, circuit diagrams, trouble shooting procedure individually for all major equipments precautions for all the equipments to the Purchaser. The manuals shall be specific to the equipment supplied / repaired and work carried out and not of general nature. Three sets of these manuals shall also be supplied with each set of equipment / work.

2.3. Safety

All units with respect to their location, layout, general arrangement and design and equipment, structural design, etc. shall be safe to the personnel and conform to the relevant safety rules and regulations / statutory requirement issued by Government and the Central Government as well as to the following :

Indian Electricity Rules
Indian Electricity Act
Indian Explosives Manual

Fire Protection Manual issued by Tariff Advisory Committee (India).

2.4. Compliance with Rules Regulations & Obtaining Statutory Approval

All equipment / materials shall be installed in accordance with the requirement of relevant Standards, Indian Electricity Rules and Acts. The contractor shall ensure that the electrical installation / repaired / supplied and erected by him shall be to the entire satisfaction of Chief Electrical Inspector, Central Electricity Authority or any other statutory body having Jurisdiction in the area and also to the purchaser / his authorized representative.

Electrical Inspectorate's approval for the installation and commissioning shall be the responsibility of the contractor. Preparation and submission of all necessary drawings, calculations, tests certificate and relevant details to the Electrical inspectorate and obtaining prior approval for commencing the work and for the complete installation work done shall be done by the contractor. Any statutory fee for inspection charge by Electrical inspectorate, shall be borne by the contractor.

2.5 Change In Constitution Of Firm And Address

Any change in the constitution and address of the Bidding firm and its Partners shall be forthwith notified by the Contractor to Department of Hydro Power Development for its information.

2.6 Sufficiency of Project Information

The data and information given in Tender Document are based on the information available from project site. The Contractor shall satisfy himself about the adequacy of the said data / information and interpretation there-of and if necessary, carry out further investigation at his own cost. Thus, DOHPD shall not be responsible for in-adequacy of the said data / information and interpretation there-of by the Contractor.

2.7 Effective Date Of Contract

The Contractor shall start the work immediately on receipt of Letter of Intent/signing of Contract, whichever is earlier & it shall be treated as effective date of contract for all purposes.

2.8 Work Schedule / Re-Scheduling & Progress Of Work

The Contractor shall submit a detailed PERT network and bar chart with the tender. The PERT network shall consist of adequate number of activities covering various key phases of the works such as design, procurement, repairing, manufacturing, shipment, installation of equipment, assembly and commissioning of units. This network shall also clearly indicate the interlinking/interdependencies of interface facilities to be provided by the Purchaser and the dates by which such facilities are needed. Contractor shall discuss the network so submitted with Engineer and the agreed network shall be deemed to form part of the contract.

The above PERT network shall be reviewed jointly by the Purchaser and the Contractor every month, wherein the holdups/delays, if any, in the progress of works, with reference to the agreed Schedule shall be given special attention. Necessary modifications (updating/revisions) of the programme, within the over all time for completion, shall be carried out by mutual agreement between Purchaser and the Contractor.

Supply of new parts of Electro-mechanical equipment at power house shall be planned to ensure their availability about one month in advance of the scheduled dates of installation and matching with the progress. No extra cost, whatsoever, on account of such rescheduling shall be payable to the Contractor.

Sequencing of works is to be planned to suit the said requirement.

2.9 Insurance

- i. The contractor shall arrange, secure & maintain insurance as may be necessary to protect his own interest and the interests of the purchaser against all risks. The risks that are to be covered under the insurance shall include, but not be limited to the loss or damage in transit, theft, pilferage / civil commotion, weather conditions, accidents of all kinds, fire, war risks during ocean transportation damage, during commissioning etc. Insurance is to be taken for the landed at site value of the equipment for transit from the manufacturer's ware house / factory to the site and storage there after.
- ii. All damages and shortages after its delivery to site and storage there-after shall be notified by the contractor's site representative by registered post to purchaser and action taken by him within 30 days for making good the damage or loss by way of replacement / repair / new supply against equipment damaged or lost.

The contractor shall take up the matter with insurance company on its own for finalization of claims. All actions in connection with making and settling of claims, if any, will be carried out by the contractor himself for which no extra payment will be made by the purchaser to the contractor in this regard.

The contractor shall be responsible to make good the damage or loss by way of repairs and / or replacement of equipment free of cost, irrespective of the fact whether claim is accepted by the insurance company or not, without waiting for settlement of claims.

The scope of such insurance shall cover the entire value of the contract from time to time.

2.10 Guarantee & Warranty

- i. The Contractor shall guarantee the performance of the equipment such as output and efficiency of turbine, generator and transformers and temperature rise of generator and transformers windings over the given ambient temperature as specified in respect of Technical Specifications of items, proper parallel operation of generator transformers as regards to equal and sharing and other technical parameters, proper operation of safety devices etc.

The Contractor shall further warrant that the equipment repaired / supplied under this Contract shall have no defect arising from design, material or workmanship or from any act or omission of the

Contractor or his approved sub-contractor that may develop under normal use of the equipment. The warranty shall remain valid for 8000 hours of operation or **18 (eighteen) months** after the commissioning and handing over of equipments whichever is later. To witness the operation the Contractor may depute their representative at the Power Station and the purchaser will provide him suitable accommodation at site at the cost of the Contractor.

The Contractor shall be responsible for fulfilling of all the warranties and making good as soon as practicable at his expenses, any defect in or damage to any section or part of the Work which may appear or occur during the Warranty Period. Repair, modification or replacement or work/part of Work as required to make good such defect or deficiency or damage shall constitute complete fulfillment of the Contractor's obligations under the Warranty provided under this Article.

The purchaser shall promptly notify the Contractor in writing of any claims arising under this warranty. Upon receipt of such notice, the Contractor with all reasonable speed, repair or replace the defective parts thereof free of cost. The Contractor shall take over the replaced parts at the time of their replacement. Replacement of such defective parts as are not repairable at the site and are not essential in the meantime to the maintenance in commercial use of the plant, shall be made promptly and the defective parts shall be returned to the Contractor works at the expense of the Contractor unless otherwise arranged.

If it becomes necessary for the Contractor to replace or renew any defective parts of the plant/works pursuant to the warranty clause, the Warranty Period for such parts shall, notwithstanding anything to the contrary contained herein, be operative for a further period of twelve months from the date of such repair/replacement or until the end of the above mentioned period of eighteen months whichever may be the later.

If effective steps for repair modification or replacement of defects, deficiencies or damages pursuant hereto are not taken within seven days of the date of notification thereof by the Purchaser to the Contractor or if such repair, modification or replacement is not completed with reasonable promptitude by the contractor at his own expense, as required by the Purchaser in accordance with this Article, the Purchaser shall be entitled to cause the same to be made good by other agencies or otherwise and deduct expenses (of which the certificate of Purchaser shall be final) from any sum that may by then or at any time thereafter become due to the Contractor under the Contract or from the amount released by encashing the bank guarantees provided by the Contractor under the Contract or recover otherwise from the Contractor including from any money due to the Contractor on any other accounts whatsoever.

2.11.1 Security Deposit.

The Department shall deduct 10 % of the contract value of each running bill on pro-rata basis as Security Deposit which shall be released by the Department after 6(six) months from the date of taking over of the machines by the Department after successful commissioning and continuous operation of the plant during the period.

Alternately the contractor shall deposit security @ 10 % of contract value in the form of bank draft, FDR / CDR or Govt. interest bearing security pledged in favour of Executive Engineer(C), Ziro Civil Division, DHPD, Ziro, Lower Subansiri District (A.P.) or Bank Guarantee from a Nationalized Bank of India duly executed on non-judicial stamp paper of requisite value in the prescribed enclosed format. The above security shall be sent within 15 day of award of contract. The validity of the security in any of the above form shall be kept valid till

6 (six) months after taking over the machines by the Department after successful commissioning and continuous operation of the plant during the period.

2.11.2 Performance Security

Performance security in the form of Bank Guarantee of any Nationalised Bank acceptable to the Purchaser duly executed on non-judicial stamp paper of requisite value in the enclosed Performa equivalent to 20% of the contract value shall be submitted by the Contractor which will remain valid upto 8000 hours of 18 months which ever is later after performance guarantee period after the date of completion of performance obligations including warranty obligations defined above. The performance security will be discharged by the Purchaser and returned to the Contractor after expiry of performance guarantee following the date of completion of the Contractor's performance obligation, including any warranty obligations, under the Contract.

In the event of default on the part of Contractor in the faithful execution of performance / warranty obligations, the performance security shall be forfeited and discharged by the Purchaser as compensation for any loss resulting from the Contractor's failure to complete its obligations under the Contract. The forfeiture of Performance Security shall be without prejudice to any other rights arising or accruing to the Purchaser under relevant provisions of the Contract like penalty/damages for delay in delivery or risk execution of work including suspension of business dealing with the Purchaser for a specific period.

2.12 PRICE VARIATION, TAXES, DUTIES & LEVIES ETC.

No variation in contract price in any form shall be entertained during the entire period of the contract, as the contract is a lump sum fixed tender on turnkey basis. The tendered price shall be inclusive of all taxes, duties and levies including entry Tax / VAT, Service Tax etc. and nothing extra shall be allowed over the tendered price.

In the event of any omission of item of work in the agreement, such items as needed to complete and commission the project shall be deemed to be included in the schedule of work as the contract is a lump sum fixed tender on turnkey basis.

2.13 CONTRACT DRAWINGS AND DETAILED TECHNICAL SPECIFICATIONS

- i. Within 30 days from the effective date of the Contract, the Contractor shall send to the Engineer a list of all the drawings with their respective titles and the dates on which they shall be supplied to the Purchaser. The list shall be amended or extended by the Contractor in consultation with the Purchaser or asked by the purchaser as and when necessary during the progress of work. The purchaser will prepare the list of drawings which shall require the approval of purchaser out of the above list supplied by the Contractor. The schedule of submission of drawings shall be coordinated with the work programme of other work components and shall successively be adjusted in order to meet the actual requirements of other components for completing the works, within the TIME for completion.
- ii. All the drawings pertaining to new / repaired plants and goods of Electro-Mechanical works shall preferably be worked out on computers using latest version of AutoCAD on maximum A1 size. Electrical drawings including schematic drawings, block diagrams,

flow diagrams, terminal details, panel outline drawings, circuit diagrams etc. shall be worked out on A3 size. All drawings shall have a uniform title-block as approved by the Engineer. Beginning with the very first submittal to the Engineer, the contractor's drawings shall bear a serial number corresponding to a drawing classification plan to be agreed upon by the Contractor and the engineer. The drawings of bought out items shall also be preferred in AutoCAD version, however, their scanned version will be allowed. Catalogue sheets, illustration, printed specifications, etc., shall be checked and prepared by the Contractor in such a way that the figures, statements and data valid for the delivered sizes and types of the works concerned are clearly marked. These documents also shall be scanned and stored on CD.

- iii. The contractor shall furnish seven prints of each of the following drawing to the Engineer of the contract, within four weeks of the date of order.

General arrangement drawings of the equipment offered. Detailed dimensional drawing and descriptive literature of all components supplied. Basic electrical diagrams.

In addition, the contractor shall also submit prints to the Engineer of contract within 30 days of the complete bill of material with each items identifiable in the detailed drawing with references. This will also form detailed packing list of the equipment.

- iv. The Engineer shall return to the contractor one print of each drawings; (a). Stamped APPROVED or (b). Marked Up with Comments. In case of (a). no further resubmission of drawings is required for Engineers approval. In case of (b) the contractor shall correct his original drawings to conform to the comments made by the Engineer and re-submit in the same manner as stated above, within two weeks after the receipt of the marked up print by him.
- v. The contractor on receipt of prints stamped APPROVED shall furnish to Engineer of the contract one direct reading reproducible of each drawing and bill of material within two weeks of receipt of approved set.
- vi. Electrical equipment layout for all electrical premises.
- vii. **Information Category Drawings / Documents.**

Cable schedule indicating type of cables, from to via, route, total length size of cable and a final summary sheet indicating total requirement of all types of cables (for control and power both).

Core wise control cable termination details indicating ferrule no. terminal block no. for each cable/each equipment. Internal wiring diagram for panel(s). Catalogues for each type of equipment, relay etc. Operation and Maintenance Manuals indicating trouble shooting procedure for all Equipment. Type Test Certificates for all the major equipment supplied. Details of Test results, for tests conducted at site for all equipment. Spare part list, number and ordering procedure for all recommended spares. Overall GA of all the panels/equipment, Fixing details of all the panels/equipment supporting structures etc. Static and dynamic loading of each equipment. Floor cutouts and wall opening details for cables and light conduits etc. Details and location of various inserts base plates, bolts, etc. required to be provided for support of cable structure, panel etc. As executed drawings incorporating site changes along with reproducible.

2.14 MATERIALS AND WORKMANSHIP

All the equipment, components and materials supplied under the Contract will be new, free from defects and of the respective kinds, grades and specifications conforming to the provisions of relevant codes of Bureau of Indian Standards and shall be subjected from time to time to all necessary tests at the place of manufacturing or fabrication and at the Site. The Contractor shall provide, at his cost such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the works for testing, as may be selected and required by the Engineer. The cost of making all tests be borne by the Contractor.

2.15 INSPECTION & TESTING

The contractor shall give 15 days notice to the Engineer of contract under intimation to purchaser, of every lot of material being ready duly packed for dispatch along with routine tests results of the material offered and details of dispatches made against last authorization for dispatch.

In addition to the tests specified in the relevant standards, the purchaser reserves the right of carrying out at site such tests as he may decide upon. Such additional tests will be carried out at the supplier's expenses.

The contractor shall also render necessary assistance to the inspecting officers in making random sampling. Wherever considered necessary, materials shall be marked embossed or sealed by the inspecting officer after inspection has been carried out and the material approved for dispatch.

The purchaser reserves the right to draw required number of samples of other major items of raw material. These samples shall however, be drawn and sealed in the presence of contractor or his authorized representative. The purchaser further reserves the right to get these samples tested from any Govt. recognized test house / laboratory to Govt. test house / laboratory.

The contractor shall record either of the following certificate on the invoice / packing list (Challan) as the case may be.

“Certified that the consignment (lot) of material supplied through this invoice / packing list (Challan) has been inspected and tested by representatives of DOHPD Arunachal and has been approved for dispatch”.

Or

“ Certified that the inspection and testing of consignment (lot) of material supplied through this invoice / packing list (Challan) has been waived off by the purchaser vide letter No. dated

It is further certified that the material has been tested and results have been found to be within the values specified in the relevant ISS / contract as per copies of Test certificate enclosed.”

Not with-standing the inspection carried out by the officer of Deptt. of Hydro Power Development Arunachal in case of any short / defective supply of material detected by the consignee, the contractor shall be liable to make good such shortage / rectify the defects. The consignment also be

subject to joint inspection by representatives of the contractor and the purchaser, in case of any dispute regarding quality and / or quantity of the material supplied.

In case, the material offered for inspection is not found ready when the inspecting party reaches the works of contractor, the cost incurred by the Deptt. on this account will become payable by the contractor on demand by the Engineer of Contract within 30 days.

2.16.1 At Works

- i. All the supplies will be subject to inspection and testing before clearances are given by the purchaser for dispatch. It is essential that : The tenderer / sub-vendors must have all necessary facilities at their works for carrying out such routine and acceptance tests as prescribed in the relevant standards and any other routine and acceptance tests as specified in the specification. Documentary evidence of existence of such facilities will be provided by the Contractor.
- ii. Quality assurance plan (QAP) for tests and inspection of equipment.
The Contractor shall submit four copies of QAP of equipment within 30 days after the award of contract for approval of the Purchaser. The approval of quality assurance plan shall form the basis for inspection and acceptance of the equipment. The Engineer shall have the right to ask for more relevant tests of their approval due to non availability of final design drawings.

2.16.2 Inspection of Works

- i. During erection, re-assembly, commissioning and trial operation, the Contractor shall perform at suitable intervals all inspections and tests in the presence of the Engineer in order to prove the orderly execution of the works in accordance with the Contract.

Unless otherwise specified, all costs for testing at site and of works and charges associated with it shall be borne by the Contractor. Thus includes the measuring devices – properly calibrated, and any pertinent accessories which shall be made available by the Contractor for the entire duration of the tests. The contractor shall delegate his experts to perform the tests at site. The contractor shall produced and submit latest calibration certificates from authorized agencies in respect of measuring devices used by him.

In case of disagreement between the Engineer and Contractor on the test result, an independent expert shall be appointed by Purchaser to whom both parties shall agree. If no amicable settlement can be reached, the Arbitration Clause shall be applied.

2.17 PACKING

- i. The contractor shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without Limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate the remoteness of the Goods final destination and the absence of heavy handling facilities at all points in transit.

Suitable lifting lugs should be provided in heavy consignments and clear instructions be marked on the package for handling.

All electrical parts shall be carefully packed in high-pressure polyethylene foils where parts may be affected by vibration, they shall be carefully protected and packed to ensure that no damage will occur while they are being transported and handled.

All bright parts shall be thoroughly protected from rust during transit. Each package shall contain a packing list in polythene cover and six copies shall be sent to the Purchaser. All points shall be marked to facilitate erection.

Large articles, which are not packed in case, shall have all screwed holes, plugged suitably and machined surfaces properly protected. Weight and size limitation for transport shall be ensured by the contractor.

The contractor will be required to make separate packages for each consignment and shall mark all containers with the implementing document number pertinent to the shipment. Each shipping container shall also be clearly marked on at least two sides as follows:

Consignee	:
Contract No.	:
Package number	:
Description	:
Item number (if applicable)	:
Net and gross weight	:
Volume	:

2.18 DELIVERY

The commencement of delivery / project completion period shall be counted from the date of issue of letter of intent or date of signing of contract, whichever is earlier.

The date of receipt of material in purchaser's store shall be deemed to be the date of delivery.

The delivery should be effected in serviceable lots / sets of equipment. In case of part dispatch, the delivery shall be deemed to have become effective when last component / part of the equipment of serviceable lot / set has been delivered. Notification of delivery or dispatch in regard to each and every consignment shall be made to the Purchaser immediately after dispatch or delivery.

2.19 DELAYS IN THE CONTRACTOR'S PERFORMANCE & LIQUIDATED DAMAGES

i. If the works or any part thereof is not completed in accordance with the Contract within the Time For Completion, the Purchaser shall be entitled to liquidated damages and the said damages shall be payable by the Contractor on demand without there being any proof from the Purchaser. The liquidated damages shall be payable for delay in completion of the work @ 1.0% (One

Percent) of the Contract Price per week or part of week. The liquidated damage so payable shall not exceed 10% (ten percent) of the Contract Price and will be recovered from any sums due to the Contractor.

Without prejudice to the right of the Purchaser under the Contract and its right to entitlement for liquidated damages, the Purchaser shall be entitled additionally to terminate the Contract without being liable in any manner whatsoever to the Contractor and/or to have the WORKS completed at the risk and cost of the Contractor, by a communication in writing to the Contractor in the following events :

In the event the liquidated damages have become payable in terms of this Article but the maximum limit of the amount of liquidated damages payable hereunder by the Contractor to the Purchaser have not been reached and the Contractor has failed to complete the delayed works within 30 (thirty) days of receipt of notice in this behalf from the Purchaser; or

In the event the liquidated damages have become payable in terms of this Article hereof and the maximum limit of the amount of liquidated damages for delay payable hereunder has been reached and the Contractor has failed to complete the WORKS within 30 (thirty) days of the receipt of notice in this behalf from the Purchaser; or

In the event of the Contractor, being in breach of any of the provision of the Contract and if the Contractor has failed to remedy such breach/default within 30 (thirty) days or such further period as may be mutually agreed between the Purchaser and the Contractor having regard to the nature of the breach or default or shortfall, of the receipt of notice in this behalf from the Purchaser.

2.18 FORCE - MAJEURE

If at any time during the continuance of the work the performance in whole or in part by either party of any obligation under this contract, shall be prevented or delayed by reasons of any war, earthquake measuring more than 7 on Richter Scale causing considerable damage, riot, natural calamity declared as a national calamity, (hereinafter referred to as eventualities) then, provided notice of the happening of any such eventuality is given by either party to the other within 15 days from the date of occurrence thereof, neither party shall by reasons of such eventuality be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non performance or delay in performance and construction of work under this contract shall be resumed as soon as practicable after such eventuality has ceased. Appropriate extension in time of completion shall be granted.

2.19 LABOUR

The contractor shall comply with all legislations and rules of State and / or Central Government or other Local Authority formed from time to time governing the protection of health, sanitary arrangements, wages, welfare and safety for labour directly or indirectly employed on construction works. The rules and other statutory obligations with regard to fair wages, welfare and safety measures including insurance etc, maintenance of register etc. shall be deemed to be part of the contract.

The age limit for employment of labour shall be strictly in accordance with the existing labour rules and Regulations.

The Contractor shall comply with the provisions of the Minimum Wages Act 1948 and the rules made there-under by the Government of Arunachal in respect of all employees employed by him or in carrying out this contract. He shall pay the employees wages not less than the minimum rates of wages, if any, fixed by the Government of Arunachal, Department of labour and employment for that category (including wages payable for weekly holidays contemplated under the minimum wages act of Govt. read with the applicable Rules for minimum wages)

The contractor shall at all times indemnify the purchaser against all claims arising out of provisions of the Minimum Wages act 1948 and the Rules framed there under as admissible in respect of any workman employed by the contractor in carrying out the contract and against all costs and expenses and penalties incurred by the purchaser in this connection. Without prejudice to other means of recovery, the purchaser shall be entitled to deduct from any money due or becoming due to the contractor all moneys paid or payable by the purchaser by way of wages and other dues (including compensation, penalty if any imposed for committing breach of any provision of the Act by the Contractor) in connection with any claim thereto and the contractor shall abide by the decision of the purchaser as to the sum payable by the contractor under the provisions of this clause.

The contractor shall provide at his own cost reasonable amenities for securing proper working and living conditions such as water supply, lavatories, bathing places cleanliness, etc. to the labour directly or indirectly employed on the works. Where the labour is employed, urinals / lavatories will be provided separately by the contractor for male and female workers as well as crèches for the infant children of labourers.

Labourers engaged on hazardous jobs and occupations will be provided with necessary safety appliances by contractor, free of charge.

The contractor's establishment will be subject to inspection, investigation etc. by the Engineer or by Engineer's Representative or such other Representatives of the purchaser as duly authorized on his behalf by him for assuring proper and faithful compliance of the provisions of this contract by the Contractor with regard to the implementation of labour laws and other matters anticipated herein.

The contractor shall abide by the decisions and orders of the Engineer with regard to any such matter and furnish, if required, necessary compliance report within the stipulated time.

The contractor shall be responsible for the observance of the provisions of above para by sub-contractors employed by him in the execution of the contract.

2.20 TERMS OF PAYMENT

Subject to any deductions from the contract price as per contract, the contractor shall be entitled to receive the contract price in the following manner.

All payments shall be released directly by the purchaser to the contractor except as otherwise provided in the contract.

1. 70 % of contract price on pro rata basis against delivery of new items / repaired items at site in good condition and on submission of invoice accompanied by Delivery Challans,

packing Lists, Inspection Certificate / Inspection waiver Certificate from Purchaser, Copy of Inland Transit Insurance and on furnishing of custody-cum-Indemnity Bond for full value of supplies. However, this payment shall be made based on agreed sequential supplies made in serviceable lots / complete sets of equipments. This payment shall be released based on certification by Purchaser.

2. 30 % balance amount of the Contract value after erection, testing and successful commissioning, completion of successful trial operation of complete project and on demonstration of performance guarantee parameters and designed generating capacity by contractor against submission of Bank Guarantee for an amount equivalent to 20 % of the contract value as performance Security to be kept valid till expiry of guarantee period as per Clause 2.11.2.

2.21 CERTIFICATE OF COMPLETION OF WORKS

Before taking over any part of the works into commercial use, the purchaser shall issue a certificate of completion based on the following certification by the Engineer:

- a. Acceptable quality and workmanship of the various works including dimensional accuracy and
- b. Acceptance of various field tests by the Engineer after commissioning the works.

2.22 FINAL ACCEPTANCE CERTIFICATES

- i. A Final Acceptance Certificates shall be issued by the Purchaser to the Contractor on his request within thirty days after the expiry of the Warrantee Period applicable to the works or part thereof, or the date of rectification of outstanding deficiencies / damages / defects whichever is later.

The request for issue of a Final Acceptance Certificate by the contractor shall be accompanied by a list of documents already handed over in accordance with the Conditions of the Contract and such other documents / information that may be mutually agreed between the Purchaser and the Contractor.

2.23 CONTRACTOR TO KEEP SITE CLEAR

During the progress of the works, contractor shall keep the site reasonably free from all unnecessary obstruction and shall store or subject to approval from the engineer and subject to the conditions, if any, imposed by the Government of India or the State Government of Arunachal Pradesh or any of its officers, dispose of any construction equipment and surplus materials and from time to time clear away and remove from the site any wreckage, rubbish or temporary works no longer required.

2.24 CLEARANCE OF SITE ON COMPLETION

On the completion of the works, the contractor shall clear away and remove from the site all the remaining construction equipment surplus materials, rubbish and temporary works of every kind, and leave the whole of the site and works of every kind clean and in a workmanlike condition to the

satisfaction of the Engineer. The old plant/goods which are replaced by the new ones, shall be stored in Purchaser's stored allocated by the Engineer for this purpose and handed over to the Engineer.

2.25 CO-OPERATION WITH CONSULTING ENGINEERS

The Contractor shall agree to co-operate with the Purchaser's consulting engineers and freely exchange with them such technical information as is necessary to obtain the most efficient and economical design. However, the Contractor shall do all correspondence with the Consultants in respect of such exchange of technical information through Engineer only.

2.26 REJECTION

- i. Purchaser reserves the right to reject any equipment / item if during the tests at works or site, the test values achieved do not comply with the respective standards / specifications and exceed the tolerable limits.
- ii. Contractor shall replace a rejected equipment with a new equipment complying with the guaranteed values as promptly as possible and no extra cost to the purchaser. Purchaser reserves the right to retain any rejected equipment and take it into service until the contractor supplies the new equipment.
- iii. Rejection of any equipment will not be held as a valid reason for delay in timely completion of the works.

2.27 MISCELLANEOUS

- i. Necessary stores required at site shall be constructed by the tenderer at his own cost.

The contractor shall be fully responsible for arranging the required tools and tackles, water and construction power supply at his end.

All precautions shall be taken by the contractor for taking proper shutdowns while working in the vicinity of live equipment or interfacing new equipment with line equipment.

- ii. The Contractor shall ensure that all personnel employed do not stray into other areas. Any injury caused due to this shall be the sole responsibility of the contractor.
- iii. The contractor shall ensure that all the workmen and supervisors engaged by him or by his sub- contractor are provided with proper safety appliances. Any violation in safety provisions or failure to maintain safe working conditions will lead to serious penalty on the contractor and finally may lead to termination of the contract.
- iv. The contractor shall ensure that skilled labours required for specific works have necessary trade certificates and adequate experience of the job.
- v. When the work is carried out in the obscure daylight or night, adequate arrangements for flood lighting in the working area shall be made by the contractor at his own cost.
- vi. The safety poster/regulation for prevention of accidents shall be displayed by the contractor at appropriate places. Notices and warning signs shall be displayed for all

sources of danger at places and in a manner that the same attract attention of the personnel.

2.28 JUDICIAL JURISDICTION

All disputes arising out of and touching or relating to subject matter of the agreement / contract shall be subject to jurisdiction of local courts of Lower Subansiri District and Gauhati High Court, Itanagar Permanent Bench, Naharlagun

2.29 ARBITRATION

Any dispute arising out of the contract shall be settled as per Arbitration and Conciliation Act 1996.

2.30 NOTICES

Any notice given by one party to the other pursuant to the Contract shall be sent in writing by registered / speed post to the following addresses of the Purchaser and Contractor. The notice shall be effective when delivered or on the notice's effective date, whichever is later.

2.31 ERECTION & SUPERVISION CONDITIONS OF CONTRACT

2.31.1 GENERAL :

These Additional conditions for erection of equipment shall be read and construed with General Conditions of Contract but if there be any conflict or inconsistency between the provisions hereof and other conditions of contract, the provisions contained in these conditions shall prevail so far as the erection work covered under the contract is concerned.

2.31.2 WORK AND SERVICES TO BE FURNISHED BY THE CONTRACTOR

Unless otherwise specified, the following works and services shall be provided by the Contractor for complete erection, testing and commissioning of equipment under turnkey project.

- (a) All labour, skilled and unskilled including supervisory personnel for expeditious and efficient erection of the equipment and material covered by the specification.
- (b) Taking delivery of all erection materials and equipment to be erected from the project Stores.
- (c) Safe transportation of the equipment and materials from the stores / Project Stores to the repair workshops and back to the site of erection.
- (d) All consumable materials, tools and tackles i/c any special T & P for the purpose of erection, and repair works unless otherwise specified.

- (e) All fastening materials, nuts, bolts, screws, clamps, washers and gaskets etc. unless otherwise specified.
- (f) All consumable and erection materials to be supplied by the Contractor shall be of the best quality and according to the specification approved by the Engineer.
- (g) All the materials procured by the Contractor shall be got inspected and approved by the Engineer before the same are used for erection work.
- (h) All equipment's, tools, platforms, scaffolding, temporary supports and facilities required for erection and for handling of heavy packages at site.

Purchaser equipments and tools may be made available on payment of hire charges, if and when available. The hire charges shall be those determined by the Engineer, who shall however be under no obligation to supply such tools.

Erection of the equipment and materials complying with the specifications satisfaction of the Engineer and design requirements and to the entireties.

Key Skilled and unskilled personnel as may be required for carrying out tests on the equipment during start – up, testing and commissioning.

- (I) All works shall be carried out as per requirements of relevant Codes applicable as on date and shall be electrically and mechanically corrected.

The Contractor shall supply and paint with anticorrosive paint damaged and rusty parts before erection.

- (n) All parts of an equipment delivered in disassembled condition, shall be checked for Zero % wear or damage, accumulation of dust, clean and assembled for erection.
- (o) Strict cleanliness shall be observed during the erection.
- (p) Accommodation of supervisory personnel and housing of all labour.
- (q) Daily transport for erection personnel as required.
- (r) Site office and covered storage as required.
- (s) Watch and ward to ensure security / and safety of materials under his custody.
- (t) Cleaning up of site after erection.
- (u) Any other works as required for completion of works.

2.31.3 INSURANCE OF EQUIPMENT AND MATERIALS TO BE ERECTED

The Contractor shall take an overall insurance cover for all equipment and materials issued to him for repair / erection against loss or damage during transit / transportation storage, erection, testing and commissioning of the plant. Such insurance shall remain valid till the plant and equipment are taken over by the Purchaser and cover the third party risk.

The Contractor shall report to the purchaser immediately any loss or damage, which is detected during the course of storage erection, testing and commissioning of the equipment and materials and shall settle the claims with his Insurance Company. The contractor shall, however, have to make good the loss or damage at his own cost. The Purchaser, however, reserves the right to ask the Contractor to arrange for Insurance cover with his approved underwriters but when called upon to do so, the Contractor shall obtain the desired cover.

2.31.4 REPAIR OF DAMAGES IN EQUIPMENT SUSTAINED DURING TRANSIT :

Repair of damage of equipment sustained during transit is to be carried out by the contractor at his own cost.

2.31.5 DELIVERY OF ERECTION EQUIPMENT AND MATERIALS

The Contractor shall take delivery of erection equipment materials from Project Stores. It will be the responsibility of the Contractor to arrange for transportation of equipments from the Project Stores to work sites.

The Contractor shall be responsible for bringing the materials safely to the site of erection. An authorized representative of the Contractor shall take delivery of the plant and equipment in accordance with the procedure prescribed by the engineer and shall submit a complete detailed account of the same after completion.

2.31.6 RESPONSIBILITY OF ERECTION

The Contractor shall be completely responsible for the satisfactory erection, testing and commissioning of the plant notwithstanding that he may have been assisted by the Engineer in doing so.

2.31.7 EXTRA WORK SHIFT :

Night work shall be permitted with the written approval of the Engineer provided that except in an emergency, sufficient notice is given by the Contractor. The Engineer may also direct such extra shift for the Contractor to ensure completion of contract on schedule if in his opinion such work is permitted.

2.31.8 PROTECTION OF WORK :

The Contractor shall take all reasonable care to protect the work under erection till such time the erected equipment has been taken over by the Purchaser. Where necessary, suitable fencing and lighting shall have to be provided by the Contractor as a safety measure against accident and damage of Purchasers property, Caution, notice shall be displayed by the Contractor to give warning to the persons working at site if access to any part may be deemed unsafe and hazardous.

The Contractor shall be responsible for any loss or damage of the equipment or material under his custody until the same is taken over by the Purchaser, in good condition and in complete shape.

2.31.9 CARE OF FINISHED WORK

The Contractor shall effectively protect the work from action of weather and from damage or defacement and shall cover finished parts where required for their through protection, Face work shall be perfectly clean and free from defects.

The Contractor and his sub-contractors shall be responsible during their work for protection of the work which has been completed by other Contractors. Suitable means shall be used to protect finished work when moving equipment over it.

2.31.10 CLEANING UP OF WORK SITE

During erection the contractor shall, without any additional payment, at all times keep the working and storage areas used by him free from accumulation of waste materials or rubbish. Upon completion of erection he shall remove or dispose of in a satisfactory manner all temporary structures, waste and debris and leave the premises in a condition satisfactory to the Engineer, and in the event of the Contractors failure to do so, the same may be removed by the Purchaser, and the cost incurred shall be recovered from the Contractor or his securities.

All stripped wooden packing of the equipment shall become the property of the Purchaser and they shall be delivered to the Purchaser store.

2.31.11 ERECTION PROGRAMME AND PROGRESS REPORT :

The Contractor shall submit such forms as may be requested by the Engineer, Schedule showing the programme and order in which the Contractor proposes to carry out the work, with dates and estimated completion time for various parts of the work. Such schedules shall be approved by the Engineer, prior to starting the erection. The Contractor shall also furnish when so directed by the Purchaser, the Organisation that line will set up completion of the work according to the approval Erection Schedule.

The Contractor shall also give sufficient notice in advance intimating in Writing his requirement of materials which are to be supplied by the Purchaser. During the progress of work the Contractor shall submit a fortnightly progress reports on the erection work and Organisation as the Engineer may direct. If for any reason the work is held up, the Contractor shall bring it to the attention of the Engineer in writing without any delay.

2.31.12 TESTING AND COMMISSIONING OF ERECTED EQUIPMENT BY THE CONTRACTOR:

The Contractor shall be completely responsible for conducting the pre-start checks and commissioning and trial run notwithstanding that he may have been assisted by the Engineer in doing so. The Contractor shall supply all labour in the execution of these tests. Operating personnel will be provided by the Purchaser.

If the first test is not satisfactory and the defect is due to Contractor, the contractor shall rectify the defects to the satisfaction of the Engineer at no extra cost to the Purchaser and subsequent tests shall be carried out as necessary by the Contractor till the tests are successful.

If however, the defect is not due to the Contractor the repeat tests shall be carried out as mutually agreed upon the maximum number of repetitive tests in such cases will be limited to two in number.

2.31.13 COMMISSIONING REPORT :

The Purchaser and Contractor shall properly maintain in the agreed format their respective records of all observations and measurements taken in respect of all tests and operations. Joint protocol shall be signed on completion of each and every test / check till the trial operation. During trial operations all readings shall be jointly maintained and signed. On successful completion of trial operations, a report shall be jointly prepared and signed indicating results of all the tests/checks and trial operation readings.

2.31.14 ITEMS OF WORK TO BE FURNISHED IF ONLY ERECTION SUPERVISORY SERVICES ARE CALLED FOR

If so desired by the Purchaser, the tenderer shall provide the services of an experienced Engineer for supervision of erection, testing and commissioning of the plant and equipment covered under his scope of supply.

The work and services to be rendered under this clause shall include but are not limited to

- (a) Complete checking of the materials at site and reporting to the Engineer in writing of any discrepancy, loss / damage thereof.
- (b) Assisting of Engineer to lodge claims with Insurance Company for any loss damage noted.

NOTE : If so desired by the Purchaser, the contractor shall arrange to depute his representative for rendering the services under item (a) & (b) on receipt of equipment / materials at site and within the class period of transit insurance.

- (c) Advising the Engineer regarding rectification of any damage during transit.
- (d) Preparation of schedules for constructions, pre-commissioning check-up and tests.
- (e) Preparation of material requirement schedule.
- (f) Advising the engineer on the procedure of erection to be followed,

- (g) Ensuring that the work is being carried out as per normally accepted engineering practice.
- (a) Exercising quality control for construction material and actual construction.
- (b) Submission of erection logs and all records of erection in proper proforma in triplicate.
- (c) Issuing completion certificate for readiness to start-up.
- (d) Testing, commissioning and putting the equipment in successful operation.

2.31.15 PAYMENT :

Subject to any deduction which the Purchaser may be authorized to make under the contract subject to any deduction provided under other clauses in the contract the Contractor shall be entitled to payment as detailed in this section at 2.20.

2.31.16 WITHHOLDING PAYMENT :

The Purchaser may withhold the whole or part of any payment for erection claimed by the contractor which in the opinion of the Purchaser is necessary to protect himself from loss on account of

- (a) Defective work not remedied or guarantees not met.
- (b) Claims filed against the contractor.
- (c) Failure by the Contractor to make due payments for materials or labour employed by him.
- (d) Damage to another Contractor.
- (e) In-sufficient progress,

When the grounds for withholding payment are removed, payments of the amount due to the Contractor shall be made by the Purchaser without delay.

2.31.17 CONTRACTOR'S EMPLOYEES AT SITE :

The Contractor shall provide at the proper time, the necessary erectors, supervisor and other personnel duly qualified and in sufficient number for the erection, testing and commissioning of the plant. The qualification and experience of different categories of personnel will require prior approval of the Purchaser.

Contractor's representatives shall abide by all general regulations in force on the site and to any special conditions affecting the local administration issued by the Purchaser or his duly authorized representatives. All the employees of the contractor living on the land belonging to the purchaser shall be deemed to be aware of all dangers and risks incidental to the activities of the Purchaser, and other.

Contractors and the conditions of the Purchaser's land and work from time to time and the Purchaser will not be responsible for any injury arising therefrom. The Contractor shall

discharge all the obligations under the Indian workmen's compensation Act and labour Laws so far as it will affect the work under his control.

2.31.18 QUALIFICATIONS OF CONTRACTOR'S SUPERVISORY PERSONNEL

The Contractor's supervisory personnel will be adequately qualified trained and experienced so as to carry out the duties most efficiently and effectively as expected of them. The Contractor's personnel shall have adequate experience of working on similar type of equipment and similar job. Notwithstanding above if any of the supervisory personnel is not found to be performing his services in a manner as expected of him under the contract, the Contractor on advice from the engineer, shall replace such person (s) at his cost with those acceptable to the engineer, by mutual agreement.

2.31.19 WORK AT SITE

In the execution of the work, no persons other than the contractor or his duly appointed representatives, subcontractors and workmen shall be allowed to do work at site, except by special permission, in writing of the Engineer or his representative but access to the work at all times shall be accorded to the Engineer and his representative and other authorized officials or representatives of the purchaser.

2.31.20 SITE LABOUR & WAGES

The Contractor shall not employ for the purpose of this contract any person who is below the age of eighteen years and shall pay to each labourer for the work done by such labourer, wages not less than the wages paid for similar work in the neighborhood and also not less than minimum wages.

The engineer shall have the right to enquire in to and decide any complaint alleging that the wages paid by the Contractor to any Labourer for the work done by such Labourer, is less than the wages paid for similar work in the, neighborhood.

The Engineer shall have the right to decide whether any labourer employed by the Contractor is below the age of eighteen years and to allow any labourer whom he decides to be below the age of eighteen years, to be employed by the Contractor.

The Contractor shall make regular and prompt payment of wages to the labourers engaged on the work irrespective of the fact whether the contractor, in turn, had received the payment from the Corporation or otherwise and that the corporation will in no way be responsible for arranging disbursement of wages to the workmen of the contractor within the time limit prescribed. If the workers are not paid regularly the contract is liable to be rescinded.

The Deptt. will have no liability to any stoppage caused in, the work resulting in the labour of the Contractor being idle due to maintenance work or breakdown of erection equipment and tools and plants to be supplied by the Deptt. if any.

2.31.21 LIABILITY FOR ACCIDENTS AND DAMAGES

The Contractor shall indemnify the Purchaser against any claims which may be made under the workmen compensation Act 1923 or any statutory modification or otherwise for or in respect of any damages or compensation payable in consequence of an accident or injury sustained by any workman or other person whether in the employment of the Contractor or not. In every case in which by virtue of the provision of the sub-section (1) of section 12 of the workmen's Compensation Act, 1923, the purchaser is obliged to pay compensation to a workman employed by the contractor in execution of works, the purchaser will recover from the Contractor the amount of the compensation so paid, and without prejudice to the rights of the purchaser under sub-section (2) of section 12 of the said act, the purchaser shall be at liberty to recover such amount or any part thereof by deducting it from the security Deposit from any such due by the Purchaser to the Contractor whether under this Contract or otherwise. The Purchaser shall not be bound to contest any claim made against it under section- 12, sub-section (1) of the said except on the written request of the Contractor and upon his giving to the purchaser full security for all costs for which the purchaser might become liable in consequence of contesting such claim.

In the event of any claim being made, or action brought against the purchaser involving the Contractor and arising out of the matters referred to and in respect of which the Contractor is liable under the clause, the contractor shall be immediately notified thereof, and he shall, with the assistance, if he so requires of the purchaser but at the sole expense of the Contractor, conduct, all negotiations for the settlement of the same or of any litigation that may arise therefrom. In such case the purchaser shall, at the expense of the Contractor, afford all available assistance for any such purpose.

The Contractor shall, during the progress of the work, properly cover up and protect the plant from injury to weather and shall take every reasonable, proper, timely and useful precaution against accident or injury to the same from any causes and shall be and remain answerable and liable for all accidents or injuries thereto which, until the same be, or be deemed to be taken over or be occasioned by the acts or omissions of the Contractor or his workmen or sub-Contractor and all losses and damages to the plant arising from such accidents or injuries as aforesaid shall be made good in the most complete and substantial manner by and at the sole cost of the Contractor and to the reasonable satisfaction of the Engineer.

Until the plant shall be or be deemed to be taken over as aforesaid the Contractor shall also be liable for and shall be deemed to have agreed to indemnify the Purchaser in respect of all damages to any property of purchaser or of other occasioned by the negligence or fault of the Contractor or sub-contractor or his or their workmen or representative or by defective design, work or material or otherwise.

Provided that the Contractor shall not be liable under the Contract of any loss (or profit or loss) of Contractor any other claims made against the purchaser not already provided for in the Contract, nor for any damage or injury caused by or arising from the acts of the purchaser or of any other person or due to circumstances over which the Contractor has no control, nor shall his total liability for loss, damage or injury exceed the total value of the Contract.

2.31.22 REGULATION OF LOCAL AUTHORITIES :

The purchaser will, throughout the continuance of the Contract and in respect of all matters arising in the performance thereof, serve all notices and obtain consents, way leaves, approvals and permissions required in connection with the Regulations and by laws of the local or other authority which shall be acceptable to the work.

All work shall be executed in accordance with the requirements of relevant standard codes with all statutory modification thereof to date, wherever applicable, unless otherwise agreed to in writing by the Engineer.

2.31.23 POSSESSION PRIOR TO COMPLETION

The Purchaser shall have the right to take Possession of use any complete or partially complete part of the work. Such possession or use shall not be deemed to be an acceptance of any work in terms of the Contract.

2.31.24 PENALTY :

In the event of the Contractor failing to complete the work within mentioned period, he shall pay as compensation one (1) percent of the cost of each Equipment, per each week of delay in completion, provided always that the entire amount of compensation to be paid under the provision of this clause shall not exceed, ten (10) percent of the total cost. No penalty shall be payable due to minor omission or defects which do not effect the final commissioning of the equipment, provided the contractor agrees to make good the omission or defect at the earliest possible date. The Contractor shall however be responsible for any damage that may be caused by such defects.

2.31.25 EXTENSION OF TIME :

If the Contractor is delayed at any time in the progress of works by any act, delay or neglect of the Purchaser or by any other Contractor employed by the Purchaser or by changes ordered in the work by the Engineer, or by strikes, lockout, fire, war, act of public enemy or by any cause which the Engineer shall decide to justify the delay, then the time of completion shall be extended by a reasonable time or by such time as the Engineer may decide. No such extension shall be allowed unless claims are made in writing to the Engineer within fifteen (15) calendar days from the date of occurrence of the cause of delay.

2.31.26 MEDICAL SUPERVISION & CARE :

The Contractor shall be fully responsible for any first aid and emergency medical treatment to his employees. Necessary arrangement for this purpose shall be made by the Contractor.