

**TENDER DOCUMENT FOR THE SUPPLY, INSTALLATION,  
CONFIGURATION, AND COMMISSIONING, TESTING  
AND ACCEPTANCE OF A CENTRALIZED DATA  
STORAGE SOLUTION (SAN STORAGE WITH BACKUP  
INFRASTRUCTURE), INCLUDING ASSOCIATED CIVIL,  
INTERIOR, ELECTRICAL, ELV, NETWORKING,  
COOLING, FIRE SUPPRESSION, UPS AND STABILIZER  
RELATED WORK  
FOR  
ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION  
AT VADODARA, GUJARAT, INDIA**

**GENERAL CONDITIONS OF CONTRACT-GCC**

**CLIENT:**



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## GENERAL CONDITIONS OF CONTRACT

### SECTION – I

#### DEFINITIONS AND INTERPRETATION

##### 1.0 DEFINITIONS

In this Contract [and in the Tender Documents], the following words and expressions shall have the following meanings:

- 1.1 **"Alteration Order"** shall mean an order given in writing by the Engineer-In-Charge to effect additions to or deletions from and alteration in the Works or Temporary Works;
- 1.2 **"Approved Brands"** shall mean the list of brands of materials approved by the ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION as set out in Schedule [Table-1] hereto;
- 1.3 **"Approved Manufacturers"** shall mean the list of manufacturers of materials approved by the ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION as set out in Schedule [Table-1] hereto.
- 1.4 **"Associated Work"** shall mean any work that is not specifically set out in the Schedule of Quantities and Rates or Specifications but is required for the Completion of the Works.
- 1.5 **"Certificate of Payment"** shall mean the certificate to be issued by the ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION upon reviewing and verifying an R.A. Bill in terms of Clause **Error! Reference source not found.** of the Special Conditions of Contract, which shall (i) certify that the R.A. Bill is accurate and in respect of works that have been executed in compliance with the Specifications and other terms of the Tender Documents and (ii) set out the amount payable by the Electrical Research & Development Association to the Contractor, taking into account the Retention Money;
- 1.6 **"Works"** shall mean the works to be executed in accordance with this Contract or any part hereof, including as set out in Clause **Error! Reference source not found.** (*Scope of Work*) of the Special Conditions of Contract and shall include all extra, additional, altered or substituted works and Alterations as may be required in terms of this Contract for the purpose of setting up the Plant;
- 1.7 **"Completion"** shall mean the completion of the Works in accordance with the provisions of this Contract, to the satisfaction of the [Electrical Research & Development Association/Engineer-In-Charge], marked by the issuance of the Completion Certificate by the Engineer-In-Charge;
- 1.8 **"Completion Certificate"** shall mean the certificate to be issued by the Engineer-In-Charge [to the Contractor] when the Works have been completed, and the Site cleared of any debris, additional materials, Temporary Works etc. by the Contractor in accordance with the Contract and the Tender Documents to his satisfaction;
- 1.9 **"Construction Equipment"** shall mean all appliances, instruments, equipment and things of whatsoever nature for the use in or for the execution, completion, operation, or maintenance of the Works or Temporary Works (as here-in-after defined) but does not include materials or other things intended to form or to

be incorporated into the Works or [camping facilities/Temporary Works];

- 1.10 **"Contract"** shall mean this contract among the Electrical Research & Development Association and the Contractor for the execution of the Works including the Special Conditions of Contract, the General Conditions of Contract, the Tender and the Tender Documents;
- 1.11 **"Contract Value"** shall mean the aggregate of the Quoted Rates as set out in the Tender, payable by the Electrical Research & Development Association to the Contractor for the entire execution and full completion of the Works.
- 1.12 **"Defects Liability Period"** shall mean a period of [12 (Twelve) months] from the date of receipt of the Virtual Completion Certificate by the Electrical Research & Development Association, during which the Contractor stands responsible for rectifying any and all defects that may appear in the Works, including workmanship defects, manufacturing/fabrication defects covering all materials, plants, equipment, components, and the like supplied by the Contractor;
- 1.13 **"Designs"** shall mean a plan or working drawing or decision, process, analysis produced to show the look/ function/ working of a building or other object before it is built.
- 1.14 **"Drawings"** shall include maps, plans and tracings or prints or sketches thereof with any modifications of or representing the Works or Temporary Works approved in writing by the Engineer-In-Charge and such other drawing as may, from time to time, be furnished or approved in writing by the Engineer-In-Charge;
- 1.15 **"Earnest Money"** shall have the meaning ascribed to it in paragraph **Error! Reference source not found.** of the Notice Inviting Tenders;
- 1.16 **"Engineer-In-Charge"** shall mean the person designated as such by [the Electrical Research & Development Association and shall include those who are expressly authorized by him to act for him or on his behalf;
- 1.17 **"Final Bill"** shall mean the last bill issued by the Contractor, the value of which, together with all R. A. Bills be less than or equal to the Contract Value;
- 1.18 **"Final Certificate"** shall mean the certificate regarding the satisfactory compliance of various provisions of the Contract by the Contractor issued by the Engineer-in-Charge/the Electrical Research & Development Association [to the Contractor] upon the expiry of the Defects Liability Period;
- 1.19 **"General Conditions of Contract"** shall mean these general conditions of Contract;
- 1.20 **"Letter for Submission of Tenders"** shall mean the letter submitted by Tenderers for submission of Tenders.
- 1.21 **"Letter of Award"** shall mean intimation by fax or letter issued to the successful Tenderer that [his/its] Tender has been accepted in accordance with the provisions contained in such fax or letter;
- 1.22 **"Mobilization"** shall mean the establishment of sufficiently adequate infrastructure by the Contractor at the Site comprising of construction equipment, aids, tools, tackles including setting of the Site Office, the Storage Area and the labour colony with facilities such as power, water, communication etc. establishing manpower organization comprising of

resident engineers, supervising personnel and an adequate strength of skilled, semi-skilled and unskilled workers, who, with the so established infrastructure shall be in a position to commence execution of the Works at Site in accordance with the Work Schedule for Completion. Mobilization shall be considered to have been achieved, if the Contractor is able to establish infrastructure as indicated above to begin work at the Site in accordance with the Work Schedule to the satisfaction of Engineer-in-Charge/the Electrical Research & Development Association.

- 1.23 **"Performance Guarantee"** shall have the meaning ascribed to it in Clause 16.1 hereof;
- 1.24 **"Plant"** shall mean the plant to be constructed at the Site;
- 1.25 **"Quoted Rates"** shall mean the rates quoted by the Contractor in [his/its] Tender in respect of the various aspects of the Works, including in the Schedule of Quantities and Rates, which rates shall be inclusive of all Taxes other than service tax;
- 1.26 **"R.A. Bill"** shall mean each running account bill issued by the Contractor in terms of Clause **Error! Reference source not found.** of the Special Conditions of Contract;
- 1.27 **"Retention Money"** shall have the meaning ascribed to it in Clause 16.2 hereof;
- 1.28 **"Schedule of Quantities and Rates"** shall mean the schedule of quantities and rates annexed to the Tender as duly filled in by the Contractor;
- 1.29 **"Site"** means where the execution of the Works is to be carried out and any other lands or places provided by the Electrical Research & Development Association for the purpose of the Contract;
- 1.30 **"Site Office"** shall have the meaning ascribed to it in paragraph **Error! Reference source not found.** of the Notice Inviting Tenders;
- 1.31 **"Special Conditions of Contract"** shall have the special conditions of this Contract as set out on page **Error! Bookmark not defined.** hereto;
- 1.32 **"Specifications"** shall mean the various technical specifications attached and referred to in the Tender Documents, including the Drawings and Designs, which pertain to the method and manner of performing the Works and Temporary Works, including the quantities and qualities of the Works, Temporary Works, materials to be furnished or used under the Contract for the Works or Temporary Works, as may be modified by the Electrical Research & Development Association or the Engineer-In-Charge, from time to time, in the best interests of the Works or Temporary Works [and shall include the latest edition of relevant Indian Standard Specifications including all addenda/corrigenda for the time being force, which shall be deemed to be included in the Tender Documents by reference];
- 1.33 **"Specified Completion Date"** shall mean the date falling **4 (Four) months (As Specified in Salient Features of Tender)** from the date of the Letter of Award;
- 1.34 **"Storage Area"** shall have the meaning ascribed to it in paragraph **Error! Reference source not found.** of the Notice Inviting Tenders;
- 1.35 **"Sub-Contractor"** shall mean any person or firm or company (other than the

Contractor) to whom any part of the Works has been entrusted by the Contractor, with the prior written consent of the Electrical Research & Development Association and the Engineer-in-Charge, by way of a written agreement to be entered into between the Contractor and such person or firm or company in a form acceptable to the Electrical Research & Development Association;

- 1.36 **"Taxes"** shall mean all forms of taxation, duties, levies, imposts and social security charges, including without limitation corporate income tax, wage withholding tax, provident fund, employee state insurance and gratuity contributions, Goods service tax, customs and excise duties, capital tax, stamp duties and other legal transaction taxes, dividend withholding tax, real estate taxes, other municipal taxes and duties, environmental taxes and duties and any other type of taxes or duties in any relevant jurisdiction, together with any interest, penalties, surcharges or fines relating thereto, due, payable, levied, imposed upon or claimed to be owed in any relevant jurisdiction;
- 1.37 **"Temporary Works"** shall mean all temporary works of every kind required in or about the execution, Completion or maintenance of the Works, including any structures built for the Site Office, the Storage Area and the labour colony;
- 1.38 **"Tender"** shall mean the proposal along with supporting documents submitted by the Contractor along with the Letter for Submission of Tender to the Electrical Research & Development Association;
- 1.39 **"Tender Documents"** shall mean, collectively, the Notice Inviting Tenders, format of the Contract, the Designs, the Drawings, the Specifications and the Schedule of Quantities and Rates and any variations made to any of the aforesaid these documents that are made in accordance with the provisions of the Tender Documents;
- 1.40 **"Deemed Completion"** shall mean that the works as stipulated in drawings and schedule of quantities are complete, in the opinion of the Architect, in all respects along with all finishing items for the purpose of handing over the possession to the Employer.
- 1.41 **"Work Schedule"** shall have the meaning ascribed to it in Clause 10.1 hereof; and
- 1.42 **"Works Diary"** shall have the meaning ascribed to it in Clause **Error! Reference source not found.** of the Special Conditions of Contract.

## **2.0 INTERPRETATION OF TENDER DOCUMENTS**

- 2.1 Except for and to the extent otherwise provided by the Contract, the provisions of the General Conditions of Contract and Special Conditions of Contract shall prevail over those of any other documents forming part of the Contract. Several documents forming the Contract are to be taken as mutually explanatory. Should there be any discrepancy, inconsistency; error of omission in the Contract, the matter may be referred to the Engineer-In-Charge who shall give his decision and issue to the Contractor instructions/directions pertaining to the manner in which the Works are to be executed. The decision of the Engineer-In-Charge shall be final and conclusive and the Contractor shall carry out the Works in accordance with this decision. Works shown in any Drawing but not mentioned in the Specifications or described in the Specifications without being shown in any Drawings shall, nevertheless, be deemed to be included in the same manner

as if they had been specifically shown in the Drawings and described in the Specifications.

- 2.2 All headings and marginal notes to the clauses contained anywhere in the Contract are solely for the purpose of giving a concise indication and are not a summary of the contents hereof, and they shall never be deemed to be part thereof or be used in the interpretation or construction of the Contract.
- 2.3 Unless otherwise stated specifically, the singular shall include the plural and vice versa wherever the context so requires.
- 2.4 'Person' shall include any individual, sole proprietorship, unincorporated association, unincorporated organization, body corporate, corporation, company, partnership, unlimited or limited liability company, joint venture, Governmental Authority or trust or any other entity or organization.
- 2.5 **SPECIAL CONDITIONS OF CONTRACT**
  - 2.5.1 Special Conditions of Contract shall be read in conjunction with the General Conditions of Contract, Specifications, Drawings and any other documents forming part of this Contract wherever the context so requires.
  - 2.5.2 Notwithstanding the sub-division of the documents into these separate sections and volumes, every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Contract so far as it may be practicable to do so.
  - 2.5.3 Where any portion of the General Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract then, 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 Contract and shall to the extent of such repugnancy, or variations, prevail.
- 2.6 Wherever stated in the Contract that the Contractor shall perform certain work or provide certain facilities, it is understood that the Contractor shall do so at [his/its] own cost.
- 2.7 References to the Contract, unless the context otherwise requires, shall be deemed to mean and include the Tender and the Tender Documents and the Tender and each of the Tender Documents is deemed to be incorporated into this Contract by reference and will be in full force and effect as if it were expressly set out in the body of this Contract.
- 2.8 The Schedules to this Contract form part of the Contract and will be in full force and effect as if they were expressly set out in the body of this Contract.
- 2.9 References to a particular recital or clause shall, unless the context otherwise requires, be a reference to that recital or clause in or to this Contract.
- 2.10 References to "in writing" or "written" include printing, typing, lithography and other means of reproducing words in permanent visible form.
- 2.11 Wherever provision is made for the giving of notice, approval or consent by any person, unless otherwise specified such notice, approval or consent shall be in writing and the words "notify" and "approve" shall be construed accordingly.
- 2.12 References to "day" means a period of 24 (twenty four) hours from midnight to midnight irrespective of the number of hours worked in that day.
- 2.13 References to this Contract or to any other agreement, deed or other instrument shall be construed as a reference to such agreement, deed or instrument as the same may from time to time be amended, varied or

supplemented.

- 2.14 References to "week" means any period of 7 (seven) consecutive days.
- 2.15 The terms "include" and "including" shall mean "include without limitation".
- 2.16 The Recitals shall constitute an integral and operative part of this Contract.
- 2.17 Clauses 2.1 to 2.16 apply unless the contrary intention appears.

**SECTION - II**  
**GENERAL INFORMATION**

**3.0 LOCATION OF SITE**

The proposed location of project site is stated in Clause 1.0 (Definitions) hereto.

**4.0 ACCESS BY ROAD**

4.1 The Contractor, if necessary, shall build a temporary access road to the Site at [his/its] own cost. The Contractor shall permit the use of the road(s) so constructed by any and all other contractors or persons engaged by the Electrical Research & Development Association for the Project.

4.2 The Contractor shall facilitate the construction of any permanent roads to the Site should such construction start while [he] is engaged on the Works.

4.3 The Contractor is deemed to have made due allowance for, and taken into account any inconvenience he suffers or is likely to suffer in [his] Tender. Non-availability of access roads to the Site shall in no case condone any delay in the execution of the Works by the Contractor nor be the cause for any claim for compensation against the Electrical Research & Development Association.

**5.0 SCOPE OF WORK**

The scope of work is defined in the Special Conditions of Contract. The Contractor shall provide all necessary materials, equipment, labour etc. for the execution and maintenance of the Works till Completion unless otherwise mentioned in the Tender Documents. All materials that go with the work shall be approved by Engineer-In-Charge prior to procurement and use.

**6.0 WATER SUPPLY**

6.1 Subject to the provisions of Clause 6.4 below, and subject to its availability, water required for construction of the Works by the Electrical Research & Development Association at one Point. However, distribution of water at the Site shall be the responsibility of the Contractor at with no extra cost to the Electrical Research & Development Association and the Contractor shall, at its own cost, and subject to the prior written approval of the Engineer-In-Charge, install any pumps, pipes and other components as may be necessary for it to create a distribution system for the water within the Site from the main supply point. The Contractor shall ensure that any such distribution system created by it shall not, in any way, interfere with, or otherwise be prejudicial to, the execution of the Works. The Contractor shall, at its own cost, remove or reroute the distribution system or any part thereof if requested to do so by any of the other contractors engaged by the Electrical Research & Development Association, or requested to do so by the Engineer-In-Charge if the distribution system or any part thereof is the cause of any hindrance to any other works being carried out at the Site.

6.2 In case of non-availability or inadequate availability of water for the Works from the main supply point, the Contractor shall make [his] own arrangements for water at [his] own cost.



- 6.3 Any distribution system set up by the Contractor in terms of this Clause 6.0 shall form part of the Temporary Works and shall be removed by the Contractor prior to Completion.
- 6.4 The Electrical Research & Development Association does not guarantee any supply of water and inability of the Electrical Research & Development Association to supply water in terms of this Clause 6.0 shall not, in any way, relieve the Contractor of [his] responsibility to complete the Works in terms of this Contract.

**7.0 POWER SUPPLY**

- 7.1 Electricity required for construction shall be arranged by Contractor. The Contractor shall arrange D.G set at his own cost for the same no additional cost for the same shall be paid for the same. The Contractor shall make [his] own arrangements for distribution of the electricity at [his] own cost. The Contractor shall ensure that any such distribution system created by it shall not, in any way, interfere with, or otherwise be prejudicial to, the execution of the Works. Any distribution system set up by Contractor in terms of this Clause shall comply with the regulations passed by the Indian Electrical Authority (IEA) in this regard and shall only be set up after the Contractor has procured the prior written approval of the Engineer-In-Charge.
- 7.2 The Contractor shall also take due precautions to keep the electrical points, switch boxes etc. safe and free from water. All safety precautions shall be taken as per the prevailing industry standard and at all times in compliance with applicable law.
- 7.3 The Contractor shall, at [his] own cost install suitable electric meters, fuses, switches, and other equipment as may be necessary, duly tested by state electricity board for the purposes of recording the Contractor's use of electricity at the Site. All such meters, fuses, switches and other equipment shall be in the custody and control of the Electrical Research & Development Association.
- 7.4 The Contractor shall, at its own cost, remove or reroute the distribution system or any part thereof if requested to do so by the Engineer-In-Charge if the distribution system or any part thereof is the cause of any hindrance to any other works being carried out at the Site. Any distribution system set up by the Contractor in terms of this Clause 7.0 shall form part of the Temporary Works and shall be removed by the Contractor prior to Completion.
- 7.5 Non-supply or delay in supply of electricity shall not, in any manner, relieve or decrease the responsibility of the Contractor to perform [his] obligations under the Contract or to complete the Works in terms of this Contract. In the event that the Electrical Research & Development Association is unable to supply the electricity or the electricity so supplied is insufficient, the Contractor shall make [his] own arrangements to procure an alternate source of power at [his] own cost.
- 7.6 It shall be the responsibility of the Contractor to provide and maintain the complete installation on the load side of the supply with due regard to safety and proper circuit protection requirement at the Site. All cabling, equipment, installations etc. shall comply in all respects with the latest statutory requirements, including those pertaining to safety, i.e. as per the Central/State Electricity Acts and Rules etc. The Contractor shall ensure at his cost that all electric lines and equipment and other electric installations are installed

modified and maintained by a licensed Electrician/ Supervisor. A test certificate is to be produced to the Engineer-in-Charge for this approval before electricity shall be made available to the Contractor. If, at any time, the Contractor is found not to be in compliance with the provisions of this Clause, the Engineer-In-Charge may penalize the Contractor in such manner and for such amounts as he deems fit.

- 7.7 If, at any time, the Contractor is found not to be in compliance with any statutory requirements pertaining to electric power, the Electrical Research & Development Association shall have the right to disconnect the electricity supply without any intimation to the Contractor and no claim shall be entertained for such disconnection by the Engineer-In-Charge. Electricity supply will be reconnected only after the Contractor produces a fresh certificate demonstrating compliance from a duly authorized/licensed electrical supervisor.
- 7.8 The Electrical Research & Development Association shall not be liable or responsible for any loss or damage to the Contractor's equipment as a result of variation in voltage or frequency or interruption in electricity supply or any other loss to the Contractor arising there from.
- 7.9 The Contractor shall ensure that the electrical equipment installed by [him] is such that average power factor does not fall below 0.90 in any month.
- 7.10 The Contractor shall reimburse the Electrical Research & Development Association on a monthly basis, all amounts paid by the Electrical Research & Development Association for units of electricity consumed at the Site.
- 7.11 The power supply required for the Contractor's labour colony (to be located outside the Site) shall be arranged for by the Contractor and shall be as per State Electricity Board rules and other statutory provisions applicable for such installations from time to time. The Contractor shall make [his/its] own arrangement at [his/its] own cost for distribution of power to the occupants of the labour colony as per the various electricity statutes.
- 7.12 Notwithstanding anything else contained herein, the Contractor shall ensure that the Site and labour colony shall, at all times, be sufficiently illuminated to avoid accidents.
- 7.13 The Contractor will have to provide and install [his] own light and power meters duly tested by which will be governed as per Central/State Government Electricity Rules. The meters shall be sealed by the Electrical Research & Development Association.
- 7.14 In case of damage to any of the Electrical Research & Development Association's equipment attributable to the Contractor, irrespective of whether such damage was caused intentionally or unintentionally, the Electrical Research & Development Association reserves the right to recover the cost of such damage from any amounts due by the Electrical Research & Development Association to the Contractor under any R.A. Bill or the Final Bill. Cost of HRC Fuses replaced at the Electrical Research & Development Association's terminals due to any fault in the Contractor's installation shall be to the Contractor's account at the rates decided by the Engineer-In-Charge. Ratings of fuses to be provided / used by the Contractor shall not be more than the ratings approved by the Electrical Research & Development Association.

- 7.15 Only motors up to 3 HP will be allowed to be started direct on line. For motors above 3 HP and upto 100 HP suitable starting devices approved by the Engineer-In-Charge shall be provided by the Contractor. For motors above 100 HP slip ring induction motors with suitable starting devices as approved by the Engineer-In-Charge shall be provided by the Contractor.
- 7.16 The Contractor shall ensure at [his] cost that all electric lines and equipment and all installations are approved by the State electricity Inspector before power can be supplied by the Electrical Research & Development Association.
- 7.17 The total requirement of power with equipment wise break-up shall be indicated by the Contractor along with his Tender.

**8.0 LAND FOR THE CONTRACTOR'S SITE OFFICE, GODOWN AND WORKSHOP**

- 8.1 The Electrical Research & Development Association may, at its own discretion and convenience and for the duration of the execution of the Works, make available to the Contractor, the area for the Site Office and the Storage Area required for the execution of the Works. The

Contractor shall at his own cost construct all necessary temporary buildings and structures and provide suitable water supply and sanitary arrangements, as approved by the Engineer-In-Charge in the Site Office and in the Storage Area. On Completion of the Works or on being notified by the Electrical Research & Development Association to do so, whichever is earlier, the Contractor shall remove all such temporary buildings and structures, including any water supply and sanitary arrangements, erected by him and have the Site cleaned as directed by Engineer-In-Charge. If the Contractor fails to comply with these requirements or the directions of the Engineer-In-Charge, the Engineer-In-Charge may at the expense of the Contractor remove such temporary buildings and structures and dispose of the same as he deems fit and get the Site cleared as aforesaid, and the Contractor shall forthwith pay for all expenses so incurred and shall have no claim in respect of any such materials disposed of as aforesaid. In the event that the Contractor fails or is otherwise unable to pay for such expenses, the Electrical Research & Development Association shall be entitled to deduct the amounts of such expenses from the next R.A. Bill, the Final Bill or the Retention Money.

- 8.2 The Contractor Site Office shall be open at all reasonable hours to receive instructions, notice or other communications. The Contractor at all times shall maintain a Site instruction book at the Site Office and compliance of these shall be communicated to the Engineer-In-Charge from time to time and the whole document shall be preserved and handed over after Completion of the Works.
- 8.3 The Electrical Research & Development Association reserves the right to ask the Contractor any time during the pendency of the Contract to vacate the Site by giving [him] 7 (seven) days' notice on security reasons or on national interest or otherwise. If the services of the Contractor are terminated for any reason whatsoever, then [he] shall immediately hand over the Site and peaceful occupancy thereof to the Electrical Research & Development Association.
- 8.4 The Contractor shall put up temporary structures (shed / movable porta cabin) as required by [him] for [his] Site Office, Storage Area fabrication shop and

construction stores only in the area allocated to [him] on the Site by the Electrical Research & Development Association or his authorized representative. No tea stalls/canteens should be put up or allowed to be put up by the Contractor anywhere on the Site without prior written permission of the Electrical Research & Development Association. No unauthorized buildings, constructions or structures should be put up by the Contractor anywhere on the Site. For uninterrupted fabrication work, the Contractor shall put up suitable temporary covered structures at [his] cost within the area allocated to [him] at the Site by the Electrical Research & Development Association or his authorized representative, but after procuring the prior written approval of the Electrical Research & Development Association.

- 8.5 The Contractor shall ensure that the erection of any temporary structures as dealt with in this Clause 8.0 is done in a peaceable and safe manner and does not give rise to any liability or cause a nuisance to any other persons.
- 8.6 Any structures set up by the Contractor in terms of this Clause 8.0 shall form part of the Temporary Works and shall be removed by the Contractor prior to Completion.

#### **9.0 LABOUR COLONY**

- 9.1 The Contractor at [his] own cost shall arrange land for setting up a labour colony outside the Site.
- 9.2 The Contractor shall make all necessary arrangement for the labour colony, such as supply of water, electricity, sanitation etc., ensuring that the labour colony, at all times, meets any statutory requirements set out in this regard and that the labour colony is a clean and safe place for the labourers to stay.

## SECTION-III

### GENERAL OBLIGATIONS OF THE CONTRACTOR

#### 10.0 TIME SCHEDULE

- 10.1 The Contractor shall, submit detailed project planning for work break up monthly plan in soft and hard copies with sign and seal as consent within 15 (fifteen) days of the execution of the Contract furnish a detailed work schedule to the Engineer-In-Charge for the Completion of the Works setting out the of various activities of work to be done, which will shall be discussed with and approved by Engineer-In-Charge (the “**Work Schedule**”). The Works shall be executed strictly as per the Work Schedule, which may be amended by the Contractor and the Engineer-In-Charge jointly from time to time. Period of construction given in Work Schedule shall be the time required for mobilization and Completion in all respects. The Contractor shall so organize its resources and perform its work as to complete it as per agreed schedule to the entire satisfaction of the Engineer-In-Charge.
- 10.2 Monthly and weekly programmes will be drawn up by the Engineer-In-Charge jointly with the Contractor, based on the availability of resources and in compliance with the Work Schedule. The Contractor shall scrupulously adhere to these programmes by ensuring the availability of adequate resources including personnel, construction tools and tackles and materials. In all matters concerning the extent of targets set out in the weekly and monthly programmes and the degree of achievement, the decision of the Engineer-In-Charge will be final and binding on the Contractor.

#### 11.0 FIELD MANAGEMENT BY ENGINEER-IN-CHARGE

- 11.1 The field management will be the responsibility of the Engineer-In-Charge. The Engineer-in-Charge may also authorize his representatives to perform his duties and functions.
- 11.2 Clause 59.0 of the General Conditions of the Contract shall be referred to in this connection.
- 11.3 The Engineer-In-Charge shall coordinate the works of various agencies engaged at the Site to ensure minimum disruption of work carried out by different agencies. It shall be the responsibility of the Contractor to plan and execute the Works strictly in accordance with the instructions of the Engineer-In-Charge to avoid hindrance to the work being executed by other agencies.

#### 12.0 SCHEDULE OF QUANTITIES & RATES

- 12.1 The quantities shown against the various items are only approximate. Any increase or decrease in the quantities shall not form the basis of alteration of the Quoted Rates. However, any likely increase in quantity of any items should be brought to the notice of Engineer-In-Charge well in advance.
- 12.2 The Electrical Research & Development Association reserves the right to interpolate the rates for such items of work falling between similar items of lower and higher magnitude.

#### 13.0 EXCAVATION MATERIALS

- 13.1 The Contractor shall not sell or otherwise dispose of or remove except for the purpose of this Contract, the sand, stone, clay, ballast, earth, rock or other substances, or materials obtained from any excavation made for the purpose

of the Works or any building or produce upon the Site at the time of delivery of the possession thereof, but all such substances materials, buildings and produce shall be the property of the Electrical Research & Development Association provided that the Contractor may with the permission of the Engineer-In-Charge, use the same for the purpose of the Works by payment of cost of the same at such a rate as may be determined by the Engineer-In-Charge.

**14.0 COMPLIANCE WITH STANDARDS/ SPECIFICATIONS**

- 14.1 The Contractor shall ensure that the Works, including the materials, design and workmanship satisfy the relevant Indian standards, the Specifications contained herein and any codes referred to. Where the Specifications stipulate requirements in addition to, or more stringent than, those contained in the Indian standards or other codes referred to herein, these additional or more stringent requirements shall also be satisfied.

**15.0 CONTRACTOR TO OBTAIN HIS OWN INFORMATION**

- 15.1 The Contractor in arriving at the Quoted Rates shall be deemed to have, [himself/itself], independently obtained all necessary information for the purpose of preparing [his/its] Tender and [his/its] Tender as accepted shall be deemed to have taken into account all contingencies as may arise due to such information or lack thereof. The Electrical Research & Development Association does not vouch for, or in any manner guarantee or warrant for, the correctness of any information given in the Tender Documents provided to the Contractor.
- 15.2 The Contractor shall be deemed to have examined the Tender Documents, including the Contract, to have generally obtained [his/its] own information in all matters whatsoever that might affect the execution of the Works and thereafter arrived at the Quoted Rates and to have satisfied [himself/itself] as to the sufficiency of [his/its] Tender. Any error in description of quantity or omission in the Tender Documents or Tender shall not vitiate the Contract according to Drawings and Specifications and/or the Scheduled of Quantities & Rates. The Contractor is deemed to have known the scope, nature and magnitude of the Works and the requirements of materials, equipment and labour involved to ensure Completion in accordance with the Contract, whatever be the defects, omissions or errors that may be found in the Contract/Tender Documents. The Contractor shall be deemed to have (i) visited the Site and its surroundings; (ii) familiarised [himself/itself] as to the nature of all existing structures, if any, and also as to the nature and the conditions of the railways, roads, bridges and culverts, means of transport and communication, whether by land, water or air to and from the Site, and as to possible interruptions thereto and the access and egress from the Site; (iii) made enquiries, examined and satisfied himself as to the Site and its surroundings for (a) obtaining/transporting sand, stones, bricks and other materials; (b) the disposal of surplus materials; and (c) the area and facilities available for accommodation of a labour colony, construction of depots and such other buildings as may be necessary for executing and Completing the Works; (iv) made local independent enquiries as to the sub-soil, sub-soil, water availability and variations thereof in and around the Site, storms, prevailing winds, climatic conditions and all other similar matters affecting the execution of the Works; and (v) acquainted himself as to his liability for payment of Taxes.

- 15.3 Any neglect or omission or failure on the part of the Contractor in obtaining necessary and reliable information in respect of the foregoing or any other matters affecting the Contract shall not relieve [him/it] from any risks or liabilities or the responsibility of Completion of the Works at the Contract Value, in accordance with the Work Schedule and in strict accordance with the Contract, including the Specifications. It is, therefore, expected that should the Contractor have any doubt as to the meaning of any portion of the Contract [he] shall have set forth the particulars thereof in writing to the Electrical Research & Development Association, before signing the Contract. The Electrical Research & Development Association will provide such clarification as may be necessary in writing to the Contractor and such clarifications as provided by the Electrical Research & Development Association shall form part of Tender Documents and therefore the Contract.
- 15.4 No verbal agreement or inference from conversation with any employee of the Electrical Research & Development Association, whether before, during or after the execution of the Contract, shall in any way affect or modify any of the terms or obligations herein contained.
- 15.5 Any change in the Works, Drawings or Specifications or any other Tender Document due to Site conditions or technological requirement shall be binding on the Contractor and no extra claim from the Contractor on this account shall be entertained.

#### **16.0 PERFORMANCE GUARANTEE, RETENTION MONEY AND DEDUCTIONS**

- 16.1 The Contractor shall within (ii) 15 (fifteen) days from the date of the Contract submit to the Electrical Research & Development Association an unconditional, irrevocable bank guarantee of a value of **5% (five percent)** of the Contract Value from any nationalised bank in favour of the Electrical Research & Development Association, for the due performance of the Contract, in a form acceptable to the Electrical Research & Development Association ("**Project Performance Guarantee**"). The Performance Guarantee shall subject to the provisions hereof, be released along with the payment of the Final Bill.
- 16.2 In addition to the Performance Guarantee issued under Clause 16.1 above, an additional **05% (Five percent)** of the value of each R.A. Bill will be deducted prior to payment to the Contractor of the R.A. Bill and shall be held as retention money (collectively the "**Retention Money**") by the Electrical Research & Development Association. The Retention Money shall not bear any interest. Upon receiving the Completion Certificate from the Electrical Research and Development Association, the Contractor will be paid 50% (fifty percent) of the Retention Money (subject to any deductions made in thereto in terms of this Contract) along with the payment made under the Final Bill. The balance 50% (fifty percent) of the Retention Money will be paid to the Contractor on the expiry of the Defects Liability Period, provided that no defects have been detected or any defects detected have been duly rectified by the Contractor at [his/its] cost and expense and subject to any deductions to be made from the Retention Money in terms of the Contract. The Contractor may, along with the payment of the Final Bill or at any time thereafter, submit to the Electrical Research & Development Association a bank guarantee equivalent to the amount of Retention Money then remaining with the Electrical Research & Development Association (not taking into account any deductions made therefrom) in a form acceptable to the Electrical Research &

Development Association ("**Retention Money Bank Guarantee**"). In the event the Contractor so submits a Retention Money Bank Guarantee, the Electrical Research & Development Association shall pay the Contractor the remaining Retention Money (subject to any deductions to be made there from in terms of this Contract) and the Retention Money Bank Guarantee shall be released upon the expiry of the Defects Liability Period subject to any amounts realised as a result of invocation of such Retention Money Bank Guarantee in accordance with the terms of this Contract. If a Retention Money Bank Guarantee is submitted to the Electrical Research & Development Association in terms of this Clause any references to deductions from Retention Money shall be deemed to mean and include realisation of amounts by invocation of the Retention Money Bank Guarantee.

- 16.3 If the Contractor, any Sub-Contractor or any of their employees damage, break, deface or otherwise destroy any property belonging to the Electrical Research & Development Association or any other person, the same shall be made good by the Contractor at [his] own expense and in default thereof, the Engineer-In-Charge may cause the same to be made good by other agencies and recover expenses from the Contractor (for which the certificate of the Engineer-In-Charge shall be final).
- 16.4 All compensation or other sums of money payable by the Contractor to the Electrical Research & Development Association under terms of this Contract may be deducted from the Retention Money or paid by invocation of the Performance Guarantee or from any sums which may be due or may become due to the Contractor by the Electrical Research & Development Association on any account whatsoever and in the event of the Retention Money or the value of the Performance Guarantee being reduced by reasons of any such deductions/invocation, the Contractor shall within 10 (ten) days thereafter make good any sum or sums which may have been deducted from the Retention Money or realised from the invocation of the Performance Guarantee. No interest shall be payable by the Electrical Research & Development Association for the Retention Money or the Performance Guarantee.

#### **17.0 TIME FOR PERFORMANCE**

- 17.1 The Mobilisation shall be commenced within **07 (Seven)** days of the receipt of the Letter of Award by the Contractor and the various milestones as set out in the Work Schedule shall be completed on or before the relevant dates as mentioned in the Work Schedule. The Contractor should bear in mind that time is the essence of this Contract. Request for revision of the Work Schedule after tenders are opened will not receive consideration. The above period of 10(ten) days is included within the overall Work Schedule, not over and above the completion time to any additional work or any other reasons.
- 17.2 The general time schedule of construction is given in the Tender Documents. The Contractor should prepare the detailed Work Schedule jointly with the Engineer-In-Charge within 15 (fifteen) days of the execution of the Contract. The Works shall be executed strictly as per the Work Schedule which includes the time required for mobilization, testing, rectification, if any, retesting and Completion in all respects in accordance with Contract to the entire satisfaction of the Engineer-In-Charge.

#### **18.0 FORCE MAJEURE**



- 18.1 Neither the Contractor nor the Electrical Research & Development Association shall be liable for the failure or the delay of performance of its obligations under, or arising from, this Contract to the extent that such failure or delay is caused by riots, civil commotion, wars, hostilities, embargoes, actions or inaction by government or any agency thereof, acts of God, earthquake, storms, fires, accidents, strikes, sabotage, acts of terror, explosions or other similar or different contingencies beyond the reasonable control of the Contractor or the Electrical Research & Development Association, as the case may be ("**Force Majeure Event**"), provided that the Party affected by such Force Majeure Event shall have taken all necessary steps to mitigate the losses suffered on account of such Force Majeure Event and immediately notifies the other Parties of the occurrence of such Force Majeure Event. If as a result of a regulation or other governmental action, any Party or Parties are precluded from receiving any benefit to which they are entitled hereunder, the Parties shall review and if required, modify the terms of this Contract so as to restore the Party or Parties to the same position as previously obtained hereunder.
- 18.2 Upon the occurrence of a Force Majeure Event, the Contractor shall endeavour to continue to perform [his] obligations under this Contract so far as reasonably practicable. The Contractor shall notify the Electrical Research & Development Association of the steps [he] proposes to take including any reasonable alternative means for performance, which are not prevented by the Force Majeure Event. The Contractor shall not take any such steps unless directed so to do by the Electrical Research & Development Association.
- 18.3 No additional costs shall be payable to the Contractor and Contract Value shall remain firm.
- 18.4 If circumstances of a Force Majeure Event continue for a period of more than 180 (One Hundred and Eighty) days then, notwithstanding that the Contractor may by reason thereof have been granted an extension in time for Completion, the Electrical Research & Development Association shall be entitled (but not obliged) to serve upon the Contractor 30 (thirty) days' notice to terminate this Contract.
- 18.5 If this Contract is terminated in terms of Clause 18.4 above, the Contractor shall be paid the value of the Work so completed by [him/it].

#### **19.0 EXTENSION OF TIME**

If the Contractor shall desire an extension of time for the Completion of the Works on the grounds of his having been unavoidably hindered in its execution or any other grounds, he shall apply in writing to the Engineer-In-Charge within 10 (ten) days of the date of the occurrence of the hindrance on account of which he desires such extension as aforesaid, and the Engineer-In-Charge shall, if in his opinion (which shall be final) reasonable grounds have been shown therefore, authorize such extension of time as may, in his opinion be necessary or proper.

#### **20.0 COMPENSATION FOR DELAY (LIQUIDATED DAMAGES / PENALTY)**

- 20.1 The time allowed for carrying out the Works as set out in the Works Schedule shall be strictly observed by the Contractor. The work shall throughout the stipulated period of the Contract be proceeded with all the diligence (time being deemed to be the essence of the contract) and the Contractor shall pay

to the Electrical Research & Development Association as compensation, an amount equal to 0.75% of [the Contract Value] or such smaller amount as the Engineer-In-Charge (whose decision in writing shall be final), may decide for every week that the Works remain incomplete beyond the Specified Completion Date. Subject to a maximum compensation of **5%** of the Contract Value after which action will be taken by the Engineer-In-Charge under the provision of the Contract.

- 20.2 To ensure good progress during the execution of the Works, the Contractor shall be bound, in all cases in which the time allowed for any work exceeds one month, to complete one-fifth of the work before one-fourth of the time allowed under the Contract. In the event of the Contractor failing to comply with this condition, he shall be liable to pay as compensation an amount as stipulated in Clause 20.1 above. The compensation so paid shall not relieve the Contractor from his obligations to complete the Works or from any other obligation and liabilities under this Contract.
- 20.3 In the event that the Contractor fails to compensate the Electrical Research & Development Association in terms of this Clause 20.0, the Electrical Research & Development Association shall be entitled to invoke the Performance Guarantee.
- 20.4 SUM PAYABLE BY WAY OF COMPENSATION TO BE CONSIDERED AS REASONABLE COMPENSATION WITHOUT REFERENCE TO ACTUAL LOSS:

All sums payable by way of compensation under any of the conditions shall be a genuine pre-estimate of damages and shall be considered as reasonable compensation without reference to the actual loss or damage which shall have been sustained.

**21.0 RIGHTS OF THE ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION TO FORFEIT RETENTION MONEY**

Whenever any claim against the Contractor for the payment of a sum of money arises out of or under the Contract, the Electrical Research & Development Association shall be entitled to recover such sum by appropriating in part or whole the Retention Money of the Contractor or invoking the Performance Guarantee. In the event of the Retention Money and/or the Performance Guarantee being insufficient, then the balance or the total sum recoverable, as the case may be shall be deducted from any sum then due or which at any time thereafter may become due to the Contractor. The Contractor shall pay to the Electrical Research & Development Association on demand any balance remaining due.

**22.0 FAILURE BY THE CONTRACTOR TO COMPLY WITH THE PROVISIONS OF THE CONTRACT**

- 22.1 If the Contractor (i) refuses or fails to execute the Works or any part thereof with such diligence as will ensure its Completion on or prior to the Specified Completion Date or extension thereof; (ii) fails to perform any of [his/its] obligations under the Contract; (iii) in any manner commits a breach of any of the provisions of the Contract; (iv) is in breach of any of its representations, warranties, undertakings or covenants of this Contract; (v) refuses to, or fails to comply with commercial obligations; (vi) abandons the Works at any time; or (vii) loses any accreditation, licenses, permits or approvals required by it to

fulfil its obligations hereunder, or is for any other reason unable to fulfil its obligations herein it shall be open to the Electrical Research & Development Association at its option by written notice to the Contractor:

- 22.1.1 To determine the Contract, in which event the Contract shall stand terminated and shall cease to be in force and effect on and from the date appointed by the Electrical Research & Development Association on that behalf, where upon the Contractor shall stop forthwith any work then in progress, except such work as the Electrical Research & Development Association may, in writing, require to be done to safeguard any property or work, or installations from damage, and the Electrical Research & Development Association, for its part, may take over the work remaining unfinished by the Contractor and complete the same through a fresh contractor or by other means, at the risk and cost of the Contractor, and the Contractor or any of his sureties if any, shall be liable to the Electrical Research & Development Association for any excess cost occasioned by such work having to be so taken over and completed by the Electrical Research & Development Association, over and above the Contract Value; or
- 22.1.2 Without determining the Contract, to take over the work of the Contractor or any part thereof and complete the same through a fresh contractor or by other means at the risk and cost of the Contractor. The Contractor and any of his sureties are liable to the Electrical Research & Development Association for any excess cost over and above the Contract Value, occasioned by such works having been taken over and completed by the Electrical Research & Development Association. The Contractor shall provide all assistance as may be required for such a purpose, including to the sub-contractors.
- 22.2 In such events as above:
  - 22.2.1 The whole or part of the Retention Money/Performance Guarantee furnished by the Contractor is liable to be forfeited/ invoked, without prejudice to the right of the Electrical Research & Development Association to recover from the Contractor the excess cost referred to above. Additionally, the Electrical Research & Development Association shall also have the right of taking possession and utilizing in completing the Works or any part thereof, such materials, equipment and plants available at the Site belonging to the Contractor as may be necessary and the Contractor shall not be entitled for any compensation for use or damage to such materials, equipment and plant.
  - 22.2.2 The amount that may have become due to the Contractor on account of work already executed by him shall not be payable to him until after the expiry of six (6) calendar months from (i) the date of termination of Contract or (ii) the taking over of the Works or part thereof by the Electrical Research & Development Association as the case may be, whichever is later, during which period the responsibility for faulty materials or workmanship in respect of any portion of the Works commenced shall, under the Contract, rest exclusively with the Contractor. This amount shall be subject to deduction of any amounts due from the Contractor to the Electrical Research & Development Association, which, under the terms of the Contract may be deducted by the Electrical Research & Development Association.
- 22.3 Before determining the Contract, if, in the judgment of the Electrical Research & Development Association, the default or defaults committed by the Contractor is/are curable and can be cured by the Contractor if an opportunity

is given to him, then the Electrical Research & Development Association may issue notice in writing calling the Contractor to cure the default within the time specified in the notice.

- 22.4 The Electrical Research & Development Association shall also have the right to terminate the Contract in terms of Clause 22.1.1 above, in the event that the Contractor becomes bankrupt, insolvent, compounds with his creditors, assigns the Contract in favour of his creditors or any other person or persons, otherwise than in accordance with the terms of this Contract, or being a company or a corporation goes into voluntary liquidation, provided that in the said events it shall not be necessary for the Electrical Research & Development Association to give any prior notice to the Contractor.
- 22.5 Termination of the Contract as provided for in this Clause shall not prejudice or affect the rights of the Electrical Research & Development Association, which may have accrued up to the date of such termination.
- 22.6 Any failure by the Electrical Research & Development Association to exercise its rights in terms of this Clause 22.0 shall not constitute a waiver of any of such rights and such rights shall, notwithstanding such failure to exercise, be exercisable in the event of any further default by the Contractor to and the liability of the Contractor for past and future compensation shall remain unaffected.
- 22.7 In the event of the Electrical Research & Development Association exercising any of its rights under this Clause 22.0 it may, if it so desires, take possession of all or any tools, and plants, materials and stores, belonging to the Contractor or procured by [him] and intended to be used for the execution of the Works or any part thereof, in or upon the Works or the Site, for Completion of the Works, otherwise the Engineer-In-Charge may give notice in writing to the Contractor, requiring [him] to remove such tools, plant, materials or stores from the Site (within a time to be specified in such notice), and in the event of the Contractor failing to comply with any such requisition, the Engineer-In-Charge may remove them at the Contractor's expense or sell them by auction or private sale at the cost of the Contractor and at his risk in all respects without any further notice as to the date, time or place of sale and the certificate of the Engineer-In-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the Contractor.

### **23.0 CHANGE IN CONSTITUTION**

Where the Contractor is a partnership firm the prior approval, in writing, of the Electrical Research & Development Association shall be obtained before any change is made in the constitution of the firm. Where the Contractor is an individual or Hindu undivided family business concern, such approval as aforesaid shall, likewise be obtained before the Contractor enters into any agreement with other persons for reconstitution or transfer of business, where under, the reconstituted entity or any other person would have the right to carry out the Works hereby undertaken by the Contractor. Where the Contractor is a corporation, the prior approval, in writing, of the Electrical Research & Development Association shall be obtained before any change is made in the shareholding of the corporation. In any of these cases if prior approval as aforesaid is not obtained, the Contract shall be deemed to be in breach of the Contract.

**24.0 TERMINATION OF CONTRACT FOR DEATH**

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies or if the Contractor is a partnership firm and one of the partners dies then unless, the Electrical Research & Development Association is satisfied that the legal representative of the individual or the proprietary concern or the surviving partners are capable of carrying out and completing Contract, [he] (the Electrical Research & Development Association) is entitled to cancel the Contract for the uncompleted part of the Works without being in any way liable for any compensation payment to the estate of the deceased Contractor and/or to the surviving partners of the Contractor firm on account of the cancellation of Contract. The decision of the Electrical Research & Development Association in such assessment shall be final and binding on the Parties.

**25.0 MEMBERS OF THE ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION NOT INDIVIDUALLY LIABLE**

No director, officer or employee of the Electrical Research & Development Association shall in any way be personally bound or liable for the acts or obligations of the Electrical Research & Development Association under the Contract or answerable for any default or omission in the observance or performance of any of the acts, matters or things which are herein contained.

**26.0 THE ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION NOT BOUND BY PERSONAL REPRESENTATIONS**

The Contractor shall not be entitled to any increase to the Contract Value or any other right or claim whatsoever by reason of any representation, explanation, statement, promise or guarantee given or alleged to have been given to [him] by any person.

**27.0 THE CONTRACTOR'S SUBORDINATE STAFF AND THEIR CONDUCT**

- 27.1 The Contractor, simultaneously with the execution of the Contract, and in no event more than ten (10) days thereafter, shall name and depute a qualified engineer having sufficient experience in carrying out work of similar nature, to whom the equipment, materials, if any, shall be issued and instructions given (the "**Contractor's Engineer**"). The Contractor shall also provide to the satisfaction of the Engineer-In-Charge sufficient and qualified staff to superintend the execution of the Works, competent sub-agents, foremen and leading hands including those specially qualified by previous experience to supervise the Works to ensure work of the best quality and expeditious working. Whenever, in the opinion of the Engineer-In-Charge, additional properly qualified supervisory staff is considered necessary, such staff shall be employed by the Contractor at [his] own cost. The Contractor shall ensure to the satisfaction of the Engineer-In-Charge that Sub-Contractors, if any, shall provide competent and efficient supervision, over the work entrusted to them.
- 27.2 If and whenever any of the Contractor's or Sub-Contractor's agents, sub-agents, assistants, foremen, or other employees are in the opinion of Engineer-In-Charge guilty of any misconduct or found indulging in theft or are incompetent or insufficiently qualified or negligent in the performance of their duties or in the opinion of the Electrical Research & Development Association or the Engineer-In-Charge, it is undesirable for administrative or any other reason for such person or persons to be employed in the execution of the

Works, the Contractor, if so directed by the Engineer-In-Charge, shall at once remove such person or persons from employment thereon. Any person or persons so removed shall not again be employed in connection with the Works without the prior written permission of the Engineer-In-Charge. Any person so removed shall be immediately replaced at the expense of the Contractor by a qualified and competent substitute. Should the Contractor be requested to replace any person removed from the Works he shall do so and shall bear all costs in connection therewith.

- 27.3 The Contractor shall be responsible for the proper behaviour of all the staff, foremen, workmen, and others, and shall exercise a proper degree of control over them and in particular and without prejudice to the generality of the aforesaid, the Contractor shall be bound to prohibit and prevent any employees from trespassing or acting in any way detrimental or prejudicial to the interest of the community or of the properties or occupiers of land and properties in the neighbourhood of the Site and in the event of such employee so trespassing or acting, the Contractor shall be responsible therefore and relieve the Electrical Research & Development Association of all consequent claims or actions for damages or injury or any other grounds whatsoever. The decision of the Engineer-In-Charge upon any matter arising under this clause shall be final. The Contractor shall be liable for any liability to the Electrical Research & Development Association on account of the staff of the Contractor, any Sub-Contractor or any agent of the Contractor or any Sub-Contractor misappropriating materials, indulging in theft, fraud etc. on the Site or generally misbehaving.
- 27.4 If and when required by the Electrical Research & Development Association the Contractor's personnel entering upon the Site shall be properly identified by badges of a type acceptable to the Electrical Research & Development Association which must be worn at all times on the Site. The Contractor may be required to obtain daily entry passes for [his] staff/employees from the Electrical Research & Development Association to work within the Site. These being safety requirements, no relaxations on any account shall be given to the Contractor.

## **28.0 SUB-CONTRACTING OF WORKS**

- 28.1 No part of the Contract nor any share or interest therein shall in any manner or degree be transferred, assigned or sub-contracted by the Contractor directly or indirectly to any person whosoever without the prior consent in writing, of the Electrical Research & Development Association.

### **28.2 Sub-Contracts for Temporary Works etc.:**

The Electrical Research & Development Association may give written consent to the Contractor to sub-contract the execution of any part of the Works provided that each individual sub-contract is submitted to the Engineer-In-Charge before being entered into and is approved by him in writing. The Electrical Research & Development Association can request any replacement or substitution of the proposed Sub-Contractor.

### **28.3 List of sub-Contractors to be supplied:**

At the commencement of every month the Contractor shall furnish to the Engineer-In-Charge a list of all Sub-Contractors engaged by the Contractor

and working at the Site during the previous month with particulars of the general nature of the sub-contract or work done by them. The Contractor shall obtain all registrations and approvals as may be required for this purpose.

**28.4 Contractor's liability not limited by sub-Contractors:**

Notwithstanding anything contained herein and notwithstanding that the Engineer-In-Charge shall have received copies of any sub-contracts, the Contractor shall be and shall remain solely responsible for the quality and proper and expeditious execution of the Works and the performance of all the conditions of the Contract in all respects as if no sub-contracting had taken place, and as if any sub-contracted work had been done directly by the Contractor.

**28.5 The Electrical Research & Development Association may direct to terminate sub-contracts:**

If the work of any Sub-Contractor engaged upon the Works, in the opinion of the Engineer-In-Charge, is not in accordance with the Contract, the Electrical Research & Development Association may by written notice to the Contractor ask [him] to terminate the sub-contract of such Sub-Contractor and the Contractor upon the receipt of such notice shall forthwith terminate such sub-contract and dismiss the Sub-Contractor and the latter shall forthwith leave the Site, failing which the Electrical Research & Development Association shall have the right to forcefully remove such Sub-Contractors from the Site.

**28.6 No remedy for action taken under this clause:**

No action taken by the Electrical Research & Development Association under this clause shall relieve the Contractor of any of his liabilities under the Contract or give rise to any right or compensation, extension of time or otherwise.

**29.0 POWER OF ENTRY**

If the Contractor does not commence the Works in the manner previously described or if he, at any time, in the opinion of the Engineer-in-Charge:

- i) Fails to carry out the Works or any part thereof in conformity with the Contract; or
- ii) Fails to carry out the Works or any part thereof in accordance with the Work Schedule; or
- iii) Suspends the Works or any part thereof for a period of 14 (fourteen) days without the prior written approval of the Engineer-In-Charge; or
- iv) Fails to carry out and execute the Works to the satisfaction of the Engineer-In-Charge; or
- v) Fails to supply sufficient or suitable constructional equipment, Temporary Works, labour, materials or things as may be required for the execution of the Works in terms of this Contract; or
- vi) Commits, suffers, or permits any other breach of any of the provisions of the Contract, or persists in any breach or allows the persistence of any breach of any of the provisions of the Contract for a period of 14 (fourteen) days in the aggregate, after notice in writing shall have been given to the Contractor by the Engineer-In-Charge requiring such breach to be remedied, or

- vii) Abandons the Works; or
- viii) Becomes bankrupt, makes any arrangement or composition with his creditors or goes into liquidation whether compulsory or voluntary (not being merely a voluntary liquidation for the purpose of amalgamation or reconstruction);

Then in any such case, without prejudice to any other rights the Electrical Research & Development Association may have in this respect, the Electrical Research & Development Association shall have the power to (i) enter and take possession of the Site and the Works and of the materials, Temporary Works, constructional equipment, and any stock on the Site; (ii) to revoke the Contractor's rights to use the same; and/or (iii) to Complete the Works through its agents, other contractors or workmen and the Contractor shall hand over the same upon any terms and to such other person, firm or corporation as the Electrical Research & Development Association in its absolute discretion may think proper to employ and for the purpose aforesaid the Electrical Research & Development Association shall have the right to use or authorize the use of any materials, Temporary Works, constructional equipment, and stock as aforesaid, without making payment or allowance to the Contractor for the same or being liable for any loss or damage thereto. If the Electrical Research & Development Association shall by reason of its taking possession of the Site and the Works or of the Works being completed by another contractor incurs costs than any amounts incurred by the Electrical Research & Development Association (including such amounts as have already been paid to the Contractor) in excess of the Contract Value, as certified by the Engineer-In-Charge shall be (i) deducted from any money which may be due for work done by the Contractor under the Contract and not paid for or from the Retention Money or (ii) may be recovered by invocation of the Performance Guarantee. Any deficiency shall forthwith be made good and paid to the Electrical Research & Development Association by the Contractor and the Electrical Research & Development Association shall have the power to sell in such manner and for such price as it may think fit all or any of the constructional equipment, materials etc. constructed by or belonging to the Contractor and to recoup and retain the said deficiency or any part thereof out of proceeds of the sale.

### **30.0 THE CONTRACTOR'S RESPONSIBILITY WITH RESPECT TO OTHER AGENCIES/CONTRACTORS**

Without prejudice to any other provision of this Contract, it shall be the responsibility of the Contractor to work in close cooperation with and co-ordinate with any other contractors and agencies engaged by the Electrical Research & Development Association at the Site and their personnel, including those engaged for civil & structural works, mechanical works, electrical works, air conditioning, instrumentation, insulation and painting, in providing the necessary grooves recesses, cuts, openings etc., in walls, slabs, beams, columns etc., and making good the same to the desired finish as per the Specifications, for the placement of electrical wires and other equipment, intercommunication cables, conduits, air-conditioning inlets and outlets grills and other equipment, where required. To give effect to the aforesaid, the Contractor shall, before commencing any work in this respect, in consultation with the relevant contractors and agencies prepare the necessary documentation, drawings and schemes, showing the proposed openings, grooves, recesses, cuts, etc. to the Engineer-In-Charge for his approval. The



Contractor before finally submitting the documentation, drawings and scheme to the Engineer-In-Charge shall procure the written agreement of the other contractors and agencies to such documentation, drawings and schemes. The Engineer-In-Charge, before communicating his approval to such documentation, drawings and schemes, with any required modifications, shall get the final agreement of all the other contractors and agencies, which shall be binding. No claim shall be entertained on account of the above.

**31.0 OTHER AGENCIES AT SITE**

The Contractor shall have to execute the work in such place and conditions where other agencies will also be engaged for other works. No claim shall be entertained due to work being executed in accordance with the byelaws of any local or duly constituted authorities or public bodies, which may be applicable from time to time to the Works or any Temporary Works. The Contractor shall keep the Electrical Research & Development Association and its officers, agents and employees (the “**Indemnified Persons**”) indemnified from and against any and all penalties, losses, claims, damages, actions, expenses (including reasonable attorneys’ fees) and liabilities of every kind (“**Losses**”), arising out of non-adherence to such statutes, ordinances, laws, rules, regulations etc. above circumstances.

**32.0 RIGHT OF VARIOUS INTERESTS**

- 32.1 The Electrical Research & Development Association reserves the right to distribute the Works between more than one agency. The Contractor shall cooperate and afford other agencies reasonable opportunity for access to the Works for the carriage and storage of materials and execution of their works.
- 32.2 Wherever work is being done by any department of the Electrical Research & Development Association or by other contractors employed by the Electrical Research & Development Association is contingent upon work covered by this Contract, the respective rights of the various interests involved shall be determined by the Engineer-In-Charge to secure the completion of the various portions of the work in general harmony.

**33.0 LIENS**

- 33.1 If, at any time there should be evidence or any lien or claim for which the Electrical Research & Development Association might have become liable and which is chargeable to the Contractor, the Electrical Research & Development Association shall have the right to retain out of any payment then due or thereafter to become due an amount sufficient to completely indemnify the Electrical Research & Development Association against such lien or claim and if such lien or claim be valid, the Electrical Research & Development Association may pay and discharge the same and (i) deduct the amount so paid from any money which may be or may become due and payable to the Contractor or from the Retention Money, or (ii) invoke the Performance Guarantee to appropriate such amount. If any lien or claim remains unsettled after all payments are made, the Contractor shall refund or pay to the Electrical Research & Development Association all money that the latter may be compelled to pay in discharging such lien or claim including all costs and reasonable expenses. The Electrical Research & Development Association reserves the right to do the same.
- 33.2 The Electrical Research & Development Association shall have a lien on all

materials, equipment including those brought by the Contractor for the purpose of erection, testing and commissioning of Works.

33.3 The payment of the Final Bill shall not become due until the Contractor delivers to the Engineer-In-Charge a complete release or waiver of all liens arising or which may arise out of this Contract or receipt in full or certification by the Contractor in a form approved by Engineer-In-Charge that all invoices for labour, materials, services have been paid in lieu thereof and if required by the Engineer-In-Charge in any case an affidavit that so far as the Contractor has knowledge or information the releases and receipts include all the labour and material for which a lien could be filled.

33.4 The Contractor will indemnify and hold the Indemnified Persons harmless, for a period of two years after the issue of the Final Certificate, from and against any and all liens and other encumbrances against an Indemnified Person on account of debts or claims alleged to be due from the Contractor or a Sub-Contractor to any person including a Sub-Contractor and on behalf of the Indemnified Person will defend at [his] own expense, any claim or litigation in connection therewith. The Contractor shall defend or contest at [his] own expense any fresh claim or litigation brought against the Electrical Research & Development Association by any person including a Sub-Contractor, till its satisfactory settlement even after the expiry of two years from the date of issue of the Final Certificate.

**34.0 DELAYS BY THE ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION OR HIS AUTHORISED AGENTS:**

34.1 In case the Contractor's performance is delayed due to any act or omission on the part of the Electrical Research & Development Association or his authorized agents, then the Contractor shall be given due extension of time for the Completion of the Works, to the extent such omission on the part of the Electrical Research & Development Association has caused delay in the Contractor's performance.

34.2 No adjustment to the Contract Value shall be allowed for reasons of such delays and extensions granted, except wherein the Electrical Research & Development Association seeks the indulgence of the Contractor to Complete the Works by the Specified Completion Date.

34.2.1 In the event that the Electrical Research & Development Association, despite any delays caused by him, requires the Contractor to Complete the Works by the Specified Completion Date, the Contractor shall be obliged to arrange for [his] personnel for to work over and above the stipulated working hours as well as on Sundays and holidays at contractor's cost.

**35.0 PAYMENT IF THE CONTRACT IS TERMINATED**

35.1 If the Contract is terminated by the Electrical Research & Development Association for any reason other than as set out in Clause 22.0, the Contractor shall be paid by the Electrical Research & Development Association such amounts not already been covered by payments of amounts made to the Contractor for the works executed and accepted by Engineer-In-Charge prior to the date of termination at the rates and prices provided for in the Contract and in addition to, the following:

35.1.1 The amount payable in respect of any preliminary items, so far as the Works or service comprised therein has been carried out or performed and an

appropriate portion as certified by Engineer-In-Charge of any such items of the work or service comprised in which has been partially carried out or performed.

35.1.2 Any other expenses which the Contractor has expended for performing the Works under the Contract subject to being duly recommended by Engineer-In-Charge and approved by the Electrical Research & Development Association for payment, based on documentary evidence of [his] having incurred such expenses

35.2 All payments to the Contractor are subject to:

- i) withholding tax;
- ii) any dispute raised on the payments by the Electrical Research & Development Association;
- iii) itemized bills provided by the Contractor.

35.3 The Contractor will, upon termination of this Contract (including in terms of Clause 22.0), be further required to provide the following in the manner and as directed by the Electrical Research & Development Association:

35.3.1 Any and all parts of the Works.

35.3.2 Any drawings, information and Contract rights as the Contractor has specially performed, produced or acquired for the performance of the Contract.

**36.0 PAYMENTS, CERTIFICATE NOT TO AFFECT RIGHT OF THE ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION AND LIABILITY OF THE CONTRACTOR**

No payments made by the Electrical Research & Development Association, nor any extension of time for execution of the Works granted by the Electrical Research & Development Association shall affect or prejudice the rights of the Electrical Research & Development Association 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 Electrical Research & Development Association to pay for alterations, amendments, variations or additional works not ordered, in writing, by the Electrical Research & Development Association 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 Electrical Research & Development Association.

**37.0 LANGUAGE AND MEASURES**

All documents pertaining to the Contract including the Specifications, Schedules, notices, correspondence, operating and maintenance instructions as may be issued by the Engineer-In-Charge from time to time, drawings, or any other writing shall be written in English language. The Metric System of measurement shall be used in the Contract unless otherwise specified.

**38.0 TRANSFER OF TITLE**

38.1 The title of Electrical Research & Development Associationship of supplies furnished by the Contractor shall not pass on to the Electrical Research & Development Association for all supplies till the same are finally accepted by the Electrical Research & Development Association after the successful

completion of performance test and guarantee test and issue of Final Certificate.

- 38.2 However, the Electrical Research & Development Association shall have the lien on all such works, performed as soon as any advance or progressive payment is made by the Electrical Research & Development Association to the Contractor and the Contractor shall not subject these works for use other than those intended under this Contract.

**39.0 RELEASE OF INFORMATION**

The Contractor shall not communicate or use in advertising, publicity sales releases or in any other medium, photographs, other reproductions, descriptions, dimensions or any other details of the Works or the Site without the prior written permission of the Electrical Research & Development Association.

**40.0 BRAND NAMES**

The specific reference in the Specifications or elsewhere in the Contract to any material by trade name, make or catalogue number shall be construed as establishing standard or quality and performance and does not limit the materials to be used to those so specifically referred to.

**41.0 COMPLETION OF CONTRACT**

Unless otherwise terminated under the provisions of any other relevant clause, this Contract shall be deemed to have been completed at the expiration of the Defects Liability Period. However, all provisions pertaining to confidentiality, Electrical Research & Development Associationship, liability, indemnities, intellectual property rights, dispute resolution, governing law and jurisdiction and such other clauses, which by their nature are to survive expiry or earlier termination of this Contract shall remain in force even after expiry or earlier termination of this Contract.

## **SECTION-IV**

### **PERFORMANCE OF WORK**

#### **42.0 EXECUTION OF WORK**

The Works shall be executed in strict conformity with the provisions of the Contract and with such additional explanatory detailed Drawings, Specifications and instructions as may be furnished from time to time to the Contractor by the Engineer-In-Charge. The Contractor shall be responsible for ensuring that Works are executed in the most substantial, proper and workman like manner with the quality of material and workmanship in strict accordance with the Specifications and to the entire satisfaction of the Engineer-In-Charge.

The Contractor shall provide all necessary materials, equipment labour etc. for execution, and maintenance of work till completion unless otherwise mentioned in the Contract.

#### **43.0 CO-ORDINATION AND INSPECTION OF WORK**

The coordination and inspection of the day-to-day work under the Contract shall be the responsibility of the Engineer-In-Charge. The written instructions regarding any particular job will normally be passed by the Engineer-in-Charge or his authorized representative. A work order book will be maintained by the Contractor for each sector in which the aforesaid written instructions will be entered. These will be signed by the Contractor or his authorized representative by way of acknowledgment within 12 (twelve) hours from the Engineer-In-Charge having issued the aforesaid instructions.

#### **44.0 ALTERATIONS IN SPECIFICATIONS, DESIGNS AND EXTRA WORKS**

- 44.1 Subject to the provisions of this Clause 44.0, no changes shall be made to the Contract Value or the Specified Completion Date. The only exception to this will be a case where the Electrical Research & Development Association requests in writing to the Contractor to upgrade the Specifications or the size of any major pieces of equipment, plant or machinery beyond what is normally required to meet the scope of work as defined in the Contract.

In such cases, a change order will be initiated by the Contractor at the appropriate time for the Electrical Research & Development Association's prior approval giving the full back up data for their review and for final settlement of any impact on price within 30 (thirty) days thereafter.

- 44.2 The Engineer-In-Charge shall have the power to make any alterations in, omission from, additions to or substitutions for, the Schedule of Quantities & Rates, the original Specifications, Designs and instructions that may appear to him to be necessary or advisable ("**Alternations**") during the progress of the Works and the Contractor shall be bound to carry out such Alterations in accordance with any instructions which may be given to [him/it] in writing signed by the Engineer-In-Charge, and such Alterations shall not invalidate the Contract and any Alterations which the Contractor may be directed to do in the manner above shall be carried out by the Contractor on the same conditions in all respects on which [he/it] agreed to do the Works. The time of Completion of the Works may be extended at the discretion of the Engineer-In-Charge, for such Alterations as he may consider as just and reasonable. The amount payable for such Alterations shall be worked out as follows:

- 44.2.1 If the rates for the work that the Alterations entail are specified in the Contract, the Contractor is bound to carry out the Alterations at the same rates as are specified in the Contract.
- 44.2.2 If the rates for the work that the Alterations entail are not specifically provided in the Contract for the work, the rates will be derived from the rates for a similar class of work as are specified in the Contract. The opinion of the Electrical Research & Development Association/Engineer-In-Charge, as to whether or not the rates can be reasonably so derived from the items in the Contract will be final and binding on the Contractor.
- 44.2.3 If the rates for the work that the Alterations entail cannot be determined in the manner specified in sub-clauses 44.2.1 and 44.2.2 above, then the Contractor shall, within 7 (seven) days of the date of receipt of instructions to carry out the Alterations, inform the Electrical Research & Development Association/Engineer-In-Charge of the reasonable rates [he] intends to charge for the Alterations, supported by an analysis of the rate or rates claimed, and the Engineer-In-Charge shall determine the rate or rates on the basis of material costs at the prevailing market rates, labour cost as set out in the Schedule of Quantities & Rates plus 15% (fifteen percent) of such amount to cover the Contractor's supervision, overheads and profit and shall pay the Contractor accordingly. The opinion of the Engineer-In-Charge as to current market rates of materials and the quantum of labour involved will be final and binding on the Contractor.
- 44.2.4 Where the Alteration is to be executed through nominated specialist agency as approved by the Engineer-In-Charge, the Contractor shall be paid the actual amount paid to such nominated agency supported by documentary evidence and as certified by Engineer-In-Charge plus 7.5% (Seven and half percent) of such amount to cover all enabling works or scaffolding, contingencies, overhead, profits to arrive at the rates.
- 44.3 Provision contained in sub-clauses 44.2.1 to 44.2.4 above shall, however, not apply to the following:
- 44.3.1 Where the value of additions of new items together with the value of alterations, additions/deletions or substitutions is within the range or plus/minus 25% of the Contract Value, the item rates in the Schedule of Quantities & Rates shall hold good for all such variations between the above mentioned limits, irrespective of any increase / decrease of quantities in the individual items of Schedule of Quantities & Rates.

Where the value of addition of new items together with the value of alterations, additions/ deletion/substitution exceeds by more than (+/-) 25% of the Contract Value but is within the following limits the Contractor shall be paid compensation for increase / decrease in the value of work, as follows:

| <b>Sr. No.</b> | <b>Range of Variation</b>                           | <b>Percentage Compensation For Decrease in the Value of Work in Respective Range</b>   |
|----------------|---|--|
| <b>A.</b>      | Beyond <b>+25%</b> up to & inclusive of <b>+50%</b> | No increase and / or decrease shall be applicable for the Schedule of Quantities & Rates (The Quoted Rates, for this increase shall be valid).       |
| <b>B.</b>      | Beyond <b>-25%</b> up to & inclusive of <b>-50%</b> | <b>5%</b> (five percent) increase shall be applicable for the difference in value of work between <b>-25%</b> and <b>-50%</b> of the Contract Value. |

**This will be worked out as follows:**

**5%** of (75% of the Contract Value minus actually executed value of Contract, inclusive of extra item, if any)

**45.0 WORK ON SUNDAYS AND HOLIDAYS**

In the event that the Contractor wishes to carry out any work on any Sunday, or holiday, the Contractor shall obtain the written permission of the Engineer-In-Charge at least 2 (two) days prior to the relevant Sunday or holiday.

**46.0 GENERAL CONDITIONS FOR CONSTRUCTION AND ERECTION WORK:**

46.1 The Contractor shall work at the Site on the Works for a maximum of 48 (forty eight) hours per week from Monday to Saturday. Overtime work is permitted in case of need. However, unless required to so work by the Electrical Research & Development Association, the Electrical Research & Development Association will not compensate the Contractor for the same.

46.2 The Contractor shall be required to work in, at 2 (two) or 3 (three) shifts per day and the Contractor shall be deemed to have accounted for this in the Quoted Rates. No extra claims will be entertained by the Electrical Research & Development Association on this account.

46.3 In the event that the Contractor wishes or requires carrying out any work beyond 5 p.m. on any day [he/it] may do so with the prior written permission of the Engineer-In-Charge or his authorized representative.

46.4 The Contractor must arrange for the placement of workers in such a way that the delayed completion of the work or any part thereof for any reason whatsoever will not affect their proper employment. The Electrical Research & Development Association will not entertain any claim for idle time payment whatsoever.

46.5 The Contractor shall submit to the Electrical Research & Development Association reports at regular intervals regarding the state and progress of work. The details and proforma of the report will mutually be agreed within 15 days of the execution of this Contract.

46.6 The Contractor shall provide display boards showing progress and labour strength at Site, as directed by the Engineer-In-Charge.

**47.0 DRAWINGS TO BE SUPPLIED BY THE ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION**

47.1 The Drawings accompanying the Tender Documents are merely indicative of nature of the Works and were issued as part of the Tender Documents only for the purpose of enabling the Tenderers to make an offer in line with requirements of the Electrical Research & Development Association. However no extra claim whatsoever shall be entertained for any variations made to the Drawings. The Works shall be carried out as per the Drawings and the variations thereto issued/approved by the Engineer-In-Charge from time to time. Such variations shall be based on the detailed construction program evolved after the issue of the Letter of Award and also based on the progress of the Works.

47.2 Detailed working Drawings on the basis of which actual execution of the Works is to proceed will be furnished from time to time during the progress of the Works. The Contractor shall be deemed to have gone through the

Drawings and bring to the notice of the Engineer-In-Charge discrepancies if any, therein before actually carrying out the work.

- 47.3 Copies of the Drawings (including any variations thereto) shall be kept at the Site Office and shall be made available to the Engineer-In-Charge at any time he requires to see them during execution of the Works. The Drawings and all other documents issued by the Electrical Research & Development Association to the Contractor, including any copies thereof, shall be returned to the Electrical Research & Development Association on Completion of the Works.

#### **48.0 SETTING OUT WORKS**

- 48.1 The Engineer-In-Charge shall furnish the Contractor with only the four corners of the works Site and a level bench mark and the Contractor shall set out the works in accordance with the Drawings and shall provide an efficient staff for this purpose and shall be solely responsible for the accuracy of such setting out.
- 48.2 The Contractor shall provide, fix and be responsible for the maintenance of all stakes, templates, level marks, profiles and other similar things and shall take all necessary precautions to prevent their removal or disturbance and shall be responsible for the consequence of such removal or disturbance should the same take place and for their efficient and timely reinstatement. The Contractor shall also be responsible for the maintenance of all existing survey marks, boundary marks, distance marks and centre line marks, either existing or supplied and fixed by the Contractor. The above shall be set out to the satisfaction of the Engineer-In-Charge. The approval thereof or joining with the Contractor by the Engineer-In-Charge in setting out the above shall not relieve the Contractor of any of [his] responsibilities.
- 48.3 Before beginning the Works, the Contractor shall at [his] own cost, provide all necessary reference and level posts, pegs, bamboos, flags, ranging rods, strings and other materials for proper layout of the Works in accordance with the scheme for bearing marks acceptable to the Engineer-In-Charge. The centre, longitudinal or face lines and cross lines shall be marked by means of small masonry pillars. Each pillar shall have distinct mark at the centre to enable theodolite to be set over it. No work shall be started until all these points are checked and approved by the Engineer-In-Charge in writing but such approval shall not relieve the Contractor of any of [his] responsibilities. The Contractor shall also provide all labour, materials and other facilities, as necessary, for the proper checking of layout and inspection of the points during construction.
- 48.4 Pillars bearing geodetic marks located at the Site should be protected and fenced by the Contractor.
- 48.5 On Completion of Works, the Contractor must submit the geodetic documents according to which the Works was carried out to the Engineer-In-Charge.

#### **49.0 RESPONSIBILITY FOR LEVEL AND ALIGNMENT**

- 49.1 The Contractor shall be entirely and exclusively responsible for the horizontal and vertical alignment, the levels and correctness of every part of the Works and shall rectify effectively any errors or imperfections therein at [his] own cost, when instructions are issued to that effect by the Engineer-In-Charge.



**50.0 MATERIALS TO BE SUPPLIED BY THE CONTRACTOR**

- 50.1 The Contractor shall make [his] own arrangement to obtain all materials required for the Works other than cement and reinforcing steel which will be supplied free of cost (on accountable basis) by the Electrical Research & Development Association at the Site.
- 50.2 The Contractor shall properly store all materials either issued to [him] or brought by [him] in the Storage Area at the Site to prevent damage from exposure to sun, rain, wind or other weather conditions, as also from theft; pilferage, etc. for proper and speedy execution of his works. The Contractor shall maintain sufficient stocks of all materials required by him.
- 50.3 No material shall be dispatched from the Contractor's stores before obtaining the approval, in writing, of the Engineer-In-Charge.

**51.0 MATERIALS SUPPLIED BY THE ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION/ SECURITY OF MATERIALS/ EQUIPMENT**

- 51.1 If the Specifications provide for the use of any material of a special description to be supplied by the Electrical Research & Development Association or it is required that the Contractor shall use certain materials to be provided by the Engineer-In-Charge, the Contractor shall be bound to purchase and shall be supplied such materials as are from time to time required to be used by him for the purpose of the Contract only. The sums due from the Contractor for the value of materials supplied by the Electrical Research & Development Association will be recovered from the amounts payable by the Electrical Research & Development Association to the Contractor under the R.A. Bills on the basis of the actual consumption of materials in the Works for which the R.A. Bill has been prepared. After the Completion of the Works, however, the Contractor shall account for the entire quantity of materials supplied to him as per relevant Clauses in this document.
- 51.2 The value of the stores/materials as may be supplied to the Contractor by the Electrical Research & Development Association will be debited to the Contractor's account at the rates shown in the Schedule of Quantities & Rates and if they are not entered in the schedule, they will be debited at cost price, which for the purpose of the Contract shall include the cost of carriage and all other expenses whatsoever such as normal storage supervision charges which shall have been incurred in obtaining the same at the Electrical Research & Development Association's stores. All materials so supplied to the Contractor shall remain the absolute property of the Electrical Research & Development Association and shall not be removed on any account from the Site, and shall be at all times open for inspection to the Engineer-In-Charge. Any such materials remaining unused at the time of the Completion of the Works or termination of the Contract shall be returned to the Electrical Research & Development Association's stores or at a place as directed by the Engineer-In-Charge in perfectly good condition at the Contractor's cost.

**52.0 CONDITIONS FOR ISSUE OF MATERIALS**

- 52.1 Materials specified as to be issued by the Electrical Research & Development Association will be supplied to the Contractor by the Electrical Research & Development Association from [his] stores. It shall be responsibility of the Contractor to take delivery of such materials and arrange for their loading, transport and unloading at [his] own cost. The materials shall be issued

- between the working hours and as per the rules of the Electrical Research & Development Association as framed from time to time.
- 52.2 The Contractor shall bear all incidental charges for the storage and safe custody of materials at the Site after these have been issued to [him].
- 52.3 Materials specified as to be issued by the Electrical Research & Development Association shall be issued in standard sizes as obtained from the manufacturers.
- 52.4 The Contractor shall construct suitable go-downs at the Site for storing the materials safe against damage by rain, dampness, fire theft etc. The Contractor shall also employ necessary watch and ward establishment for the purpose.
- 52.5 It shall be the duty of the Contractor to inspect the materials supplied to [him/it] at the time of taking delivery and satisfy [himself] that they are in good condition. After the materials have been delivered by the Electrical Research & Development Association, it shall be the responsibility of the Contractor to keep them in good condition and if the materials are damaged or lost, at any time, they shall be repaired and /or replaced by the Contractor at [his] own cost according to the instructions of the Engineer-In-Charge.
- 52.6 The Electrical Research & Development Association shall not be liable for delay in supply or non-supply of any materials, which the Electrical Research & Development Association has undertaken to supply where such failure or delay is due to natural calamities, acts of enemies, transport and procurement difficulties and any circumstances beyond the control of the Electrical Research & Development Association. In no case shall the Contractor be entitled to claim any compensation or loss suffered by him on this account.
- 52.7 It shall be responsibility of the Contractor to arrange in time all materials required for the Works other than those to be supplied by the Electrical Research & Development Association. If, however, in the opinion of the Engineer-In-Charge the execution of the Works is likely to be delayed due to the Contractor's inability to make arrangements for supply of materials which normally he has to arrange for, the Engineer-In-Charge shall have the right (at his own discretion) to issue such materials, if available with the Electrical Research & Development Association or procure the materials from the market or elsewhere and the Contractor will be bound to take such materials at the rates decided by the Engineer-In-Charge. This, however, does not in any way absolve the Contractor from responsibility of making arrangements for the supply of such materials in part or in full, should such a situation occur nor shall this constitute a reason for the delay in the execution of the Works.
- 52.8 None of the materials supplied to the Contractor will be utilized by the Contractor for manufacturing items, which can be obtained from a standard manufacturer in finished form.
- 52.9 The Contractor shall, if desired by the Engineer-In-Charge, be required to execute an indemnity bond in such form as may be acceptable to the Engineer-In-Charge for safe custody and accounting of all materials issued by the Electrical Research & Development Association.
- 52.10 The Contractor shall furnish to the Engineer-In-Charge, sufficiently in advance a statement showing [his] requirement of the quantities of the materials to be supplied by the Electrical Research & Development Association and the time

when the same will be required by him, so as to enable the Engineer-In-Charge to make necessary arrangements for procurement and supply of the material.

- 52.11 An account of the materials issued by the Electrical Research & Development Association shall be maintained by the Contractor indicating the daily receipt, consumption and balance in hand. This account shall be maintained in a manner prescribed by the Engineer-In-Charge along with all connected papers viz. requisitions, issues, etc., and shall be always available for inspection at the Site Office.
- 52.12 The Contractor shall ensure that only the required quantities of materials are requisitioned from the Electrical Research & Development Association. The Contractor shall not be entitled to cartage and incidental charges for returning the surplus materials, if any to the stores where from they were issued or to the place as directed by the Engineer-In-Charge.
- 52.13 Materials supplied by the Electrical Research & Development Association shall not be utilized for any purpose(s) than that which they have been issued for.

**53.0 MATERIAL PROCURED WITH ASSISTANCE OF THE ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION**

Notwithstanding anything contained to the contrary in any other provisions of this Contract where any materials for the execution of the Contract are procured with the assistance of the Electrical Research & Development Association either by issue from the Electrical Research & Development Association's stock or purchases made under order or permits or licenses issued by Government to the Electrical Research & Development Association, the Contractor shall hold the said materials as trustee for the Electrical Research & Development Association and use such materials economically and solely for the purpose of the Contract and not dispose of them without the prior written permission of the Electrical Research & Development Association and shall return, if required by the Engineer-In-Charge, all surplus or unserviceable materials that may be left with [him/it] (the Contractor) after the Completion of the Works or termination of the Contract for any reason whatsoever on the Contractor's being paid or credited such price as the Engineer-In-Charge shall determine having due regard to the condition of the materials. The price paid to the Contractor, however shall not exceed the amount charged to [him]. The decision of the Engineer-In-Charge shall be final and conclusive in such matters. In the event of breach of the aforesaid condition, the Contractor shall be liable to compensate the Electrical Research & Development Association at double rate or any higher rate, in the event of those materials at that time having higher rate or not being available in the market, or any other rate to be determined by the Engineer-In-Charge and his decision in this regard shall be final and conclusive.

**54.0 MATERIALS OBTAINED FROM DISMANTLING**

If the Contractor in the course of execution of the Works is called upon to dismantle any part of work executed by [him], any materials obtained from such dismantling shall be considered as the Electrical Research & Development Association's property and shall be disposed of to the best advantage of the Electrical Research & Development Association.

**55.0 ARTICLES OF VALUE FOUND**

All gold, silver and other minerals of any description and all precious stones, coins, treasure, relics, antiquities and other similar things which are found in, under or upon the Site, shall be the property of the Electrical Research & Development Association and the Contractor shall duly preserve the same to the satisfaction of the Engineer-In-Charge and shall from time to time deliver the same to such person or persons as may be indicated by the Electrical Research & Development Association.

**56.0 DISCREPANCIES BETWEEN INSTRUCTIONS**

Should there be any discrepancy among the various instructions furnished or received by the Contractor, or should there be any misunderstanding between the Contractor's staff and the Engineer-In-Charge's staff as to the meaning of anything pertaining to the Works, the Contractor shall refer the matter immediately in writing to the Engineer-In-Charge whose decision thereon shall be final and conclusive and no claim for losses alleged to have been caused by such discrepancies between instructions, doubts, or misunderstanding shall in any event be entertained by the Electrical Research & Development Association.

**57.0 WORK IN MONSOON AND DEWATERING**

57.1 The execution of the Works may entail working during the monsoon. The Contractor shall maintain a minimum labour force as may be required for the Works and shall plan and execute the construction and erection of the Works in accordance with the Work Schedule. Quoted Rates shall be deemed to have taken into consideration any additional amounts payable for work during the monsoon.

57.2 It shall be the responsibility of the Contractor to keep the Site free from water at [his] own cost at all times, including during the monsoon.

**58.0 ACTION WHERE NO SPECIFICATION IS ISSUED**

In case of any work for which there is no Specification provided by the Electrical Research & Development Association such work shall be carried out in accordance with CPWD/ Indian Standard specifications and if the CPWD/ Indian Standard specifications do not cover the same, the work should be carried out as per standard engineering practice, subject to any instructions given by the Engineer-In-Charge.

**59.0 INSPECTION OF WORK**

59.1 The Engineer-In-Charge will have full power and authority to inspect the Works at any time wherever in progress either on the Site or at the Contractor's premises/workshops wherever-situated, premises/workshops of any person, firm or corporation where work in connection with the Contract has been undertaken or where materials are being or are to be supplied, and the Contractor shall afford or procure for the Engineer-In-Charge every facility and assistance to carry out such inspection. The Contractor shall, at all times during the usual working hours and at all other times for which reasonable notice of the intention of the Engineer-In-Charge to visit has been given to the Contractor, either himself be present to receive orders and instructions, or have a responsible agent duly accredited in writing, present for the purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the Contractor himself. The Contractor shall give not less than 7 (seven) days' notice in writing to the Engineer-In-Charge

before covering up or otherwise placing beyond reach of inspection and measurement any work in order that the same may be inspected and measured. In the event of breach of above the same shall be uncovered at the Contractor's expense for carrying out such measurement or inspection.

- 59.2 No material shall be dispatched from the Contractor's stores before obtaining the approval in writing of the Engineer-In-Charge.
- 59.3 The Contractor is to provide at all times so long as this Contract is in force proper means of access with ladders, gangways etc. and the necessary attendance to move and adopt as directed for inspection or measurements of the Works by the Engineer-In-Charge.
- 59.4 The Contractor shall make available to the Engineer-In-Charge free of cost all necessary instruments and assistance to enable the Engineer-In-Charge to carry out his functions as per the provisions of this Clause 59.0.

#### **60.0 TESTS FOR QUALITY OF WORK/ QUALITY ASSURANCE**

- 60.1 All workmanship shall be of good quality and in accordance with the Specifications, Drawings, Designs and instructions of the Engineer-In-Charge and shall be subjected from time to time to such test at the Contractor's cost as the Engineer-In-Charge may direct at the place of manufacture or fabrication or on the Site or at all or any such places. The Contractor shall provide assistance, instruments, labour and materials as are normally required for examining, measuring and testing any workmanship as may be selected and required by the Engineer-In-Charge.
- 60.2 All the tests that will be necessary in connection with the execution of the Works as decided by the Engineer-In-Charge shall be carried out at the field testing laboratory of the Electrical Research & Development Association by paying the charges as decided by the Electrical Research & Development Association from time to time at the cost of the Contractor. In case of non-availability of testing facility with the Electrical Research & Development Association, the required test shall be carried out at the cost of the Contractor at Government or any other testing laboratory as directed by Engineer-In-Charge.
- 60.3 If any tests are required to be carried out in relation to the Works or materials or workmanship not supplied by the Contractor, such tests shall be carried out by the Contractor as per instructions of Engineer-In-Charge and cost of such tests shall be reimbursed by the Electrical Research & Development Association. The Contractor shall have include in [his] Tender a quality assurance program containing the overall quality management and procedures, which are required to be adhered to during the execution of Contract. After the award of the Contract detailed quality assurance program to be followed for the execution of Contract under various divisions of work will be mutually discussed and agreed to between the Contractor and the Electrical Research & Development Association.
- 60.4 The Contractor shall establish, document and maintain an effective quality assurance system as outlined in recognized codes.
- 60.5 Quality assurance system plans/procedures of the Contractor shall be furnished in the form of a quality assurance manual. This document should cover details of the personnel responsible for the quality assurance, plans or procedures to be followed for quality control in respect of design, engineering,

procurement, supply, installation, testing and commissioning. The quality assurance system should indicate organizational approach for quality control and quality assurance of the construction activities, at all stages of the Works at the Site as well as at the manufacturer's premises and locations of dispatch of materials. The Electrical Research & Development Association reserves the right to inspect/witness, review any or all stages of the Works at shop/Site as deemed necessary for quality assurance.

**61.0 SAMPLES FOR APPROVAL**

The Contractor shall furnish to the Engineer-In-Charge for approval, when requested or if required by the Specifications, adequate samples of all materials and finishes to be used in the Works. Such samples shall be submitted before the materials are used and in ample time to permit tests and examination thereof. All materials furnished and finishes applied in the Works shall be fully equal to the approved samples.

**62.0 ACTION AND COMPENSATION IN CASE OF BAD WORK**

If it shall appear to the Engineer-In-Charge that any work has been executed with unsound, imperfect or unskilled workmanship, or with materials of any inferior description, or that any materials or articles provided by the Contractor for the execution of the Works are unsound, or of a quality inferior to that contracted for, or otherwise not in accordance with the Contract, the Contractor shall on demand in writing from the Engineer-In-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct the work so specified and provide other proper and suitable materials or articles at [his] own cost and in the event of failure to do so within the period specified by the Engineer-In-Charge in his demand aforesaid, the Contractor shall be liable to pay compensation at the rate of 0.75% (one percent) of the Contract Value, for every week that his failure to do so shall continue limited to a maximum of 5% (five percent) of the Contract Value and in the case of a continued failure by the Contractor to comply with the provisions above, for a period of more than 10 (ten) weeks, the Engineer-In-Charge may rectify or remove and re-execute the work or remove and replace with others, the materials or articles complained of, as the case may be at the risk and expense in all respects of the Contractor. The decision of the Engineer-in-Charge as to any question arising under this Clause shall be final and conclusive. The compensation may be recovered either by deduction from the Retention Money or by invocation of the Performance Guarantee.

**63.0 SUSPENSION OF WORKS**

Subject to the provisions of this Clause, the Contractor shall, if required to do so in writing by the Electrical Research & Development Association/Engineer-In-Charge temporarily suspend the Works or any part thereof for such period and such time as so ordered and shall not after receiving such written requisition, proceed with the work therein required to be suspended until, [he/it] receives a written notice from the Electrical Research & Development Association/Engineer-In-Charge to proceed therewith. The Contractor shall not be entitled to claim compensation for any loss or damage sustained by him by reason of temporary suspension of the Works or any part thereof as aforesaid. An extension of time for completion, corresponding with the delay caused by any such suspension of the Works or part thereof as aforesaid will be granted

to the Contractor should he apply for the same, provided that the suspension was not consequent to any default of failure on the part of the Contractor.

In case of suspension of the entire Works, ordered in writing by the Engineer-In-Charge, for a period of more than three months, the Contractor shall have the option to terminate the Contract.

**64.0 POSSESSION PRIOR TO COMPLETION**

The Engineer-In-Charge shall have the right to take possession of or use any completed or partially completed Works or part of the Works at any time. Such possession or use shall not be deemed to be an acceptance of any work. If such prior possession or use by the Engineer-In-Charge delays the progress of the Works, equitable adjustment in the time of Completion will be made.

**65.0 DEFECTS AND DEFECTS LIABILITY PERIOD**

- 65.1 The Contractor shall guarantee the Works for a period of 12 (twelve) months from the date of issue of virtual Completion Certificate i.e. the Defects Liability Period. Any damage or defect that may arise or lie undiscovered at the time of issue of Completion Certificate, but which comes to the notice of the Electrical Research & Development Association/Engineer-In Charge at any time during the Defects Liability Period, connected in any way with the equipment or materials supplied by the Contractor or in the workmanship of the Works, shall be rectified or replaced by the Contractor at [his/its] own expense as deemed necessary by the Engineer-In-Charge. Alternately, the Engineer-In-Charge may cause the same to be made good by other workmen and (i) deduct expenses (of which the certificate of Engineer-In-Charge shall be final) from any sums that may then or at any
- 65.2 time thereafter, become due to the Contractor or from the Retention Money or (ii) invoke the Performance Guarantee for such amounts as may be incurred by the Electrical Research & Development Association in this regard.
- 65.3 If the Contractor feels that any variation in the Works or in quality of materials or proportions would be beneficial or necessary to fulfil the guarantees called for, [he] shall bring this to the notice of the Engineer-In-Charge in writing and the Engineer-In-Charge shall duly take this into consideration, but shall not be bound to follow or agree with any such variation.
- 65.4 If during the Defects Liability Period, any portion of the Works is found defective and is rectified/replaced, the period of liability for such portion of the Works shall be operative from the date such rectification/replacement are carried out and (i) a fresh performance guarantee in the form of a bank guarantee of such amount as is decided by the Engineer-In-Charge/Electrical Research & Development Association shall be furnished by the Contractor to the Electrical Research & Development Association in a form acceptable to the Electrical Research & Development Association for such extended period of liability and (ii) the term "Defects Liability Period" for such part of the Works shall be construed accordingly. Notwithstanding the above provisions the supplier's, guarantees/ warranties for the replaced equipment shall also be passed on to the Electrical Research & Development Association.
- 65.5 Care of Works
- From the date of the Letter of Award to the Completion of the Works, the Contractor shall take full responsibility for the care for all works including all

Temporary Works and in case of any damages, loss or injury to the Works or to any part thereof or to any Temporary Works from any cause whatsoever, the Contractor shall at [his] own cost, repair and make good the same so that at Completion the Works shall be in good order and in conformity in every respect with the Specifications and other requirements of the Contract and the Engineer-In-Charge's instructions.

65.6 Defects Prior to Taking Over

65.6.1 If at any time, before the Works are taken over by the Electrical Research & Development Association, the Engineer-In-Charge finds that any work done or materials used by the Contractor or by any Sub-

Contractor is/are defective or not in accordance with Specifications or otherwise not in accordance with the Contract, or that the Works or any portion thereof is defective, or does not fulfil the requirements of Specifications or any other provisions of the Contract (each a "**Defect**"), and notifies the Contractor in writing of the Defect, specifying particulars thereof, then the Contractor shall, forthwith, at [his] own expense rectify the Defect or replace such portion of the Works that contain the Defect.

65.6.2 In the event the Contractor fails to rectify the Defect or replace such portion of the Works that contain the Defect in terms of Clause 65.6.1 within [10] days of the date of the notice sent by the Engineer-In-Charge in terms of Clause 65.6.1, the Electrical Research & Development Association may, at the cost and consequence of the Contractor, take such steps as it may consider reasonable to make good such Defect. The Electrical Research & Development Association shall be entitled to recover any and all expenses incurred by the Electrical Research & Development Association in rectifying any Defect from the amounts due to the Contractor, including by deductions from the Retention Money or invocation of the Performance Guarantee. The decision of the Engineer-In-Charge with regard to the amount to be recovered from the Contractor will be final and binding on the Contractor. As soon as the Works have been Completed in accordance with the Contract and have passed the tests on completion, the Engineer-In-Charge shall issue the Completion Certificate in which he shall certify the date on which the Works have been so Completed and have passed the said tests and the Electrical Research & Development Association shall be deemed to have taken over the Works on such date. If the Works have been divided into various groups in the Contract, the Electrical Research & Development Association shall be entitled to take over any group or groups before the other or others and thereupon the Engineer-In-Charge shall issue a Completion Certificate which will, however, be for such group or groups so taken over only. In such an event if the group / section / part so taken over is related to the integrated system of the work, notwithstanding date of grant of Completion Certificate for group/section/part, the Defects Liability Period in respect of such group / section / part shall be 12 (twelve) months from the date of Completion of the entire Works.

65.7 Defects After Taking Over

In order that the Contractor obtains a Completion Certificate [he] shall make good, with all possible speed, any Defect that may have been noticed or developed, after the Works or any part thereof has been taken over by the Electrical Research & Development Association, the period allowed for carrying out such work will be normally one month. If any Defect is not



remedied within a reasonable time, the Electrical Research & Development Association may proceed to have the Defect remedied at the Contractor's risk and expense and deduct from the Final Bill such amount as may be decided by the Electrical Research & Development Association. If by reason of any default on the part of the Contractor a Completion Certificate has not been issued in respect of any portion of the Works within 1 (one) month of the expiry of the Specified Completion Date, the Electrical Research & Development Association shall be at liberty to use such portion of the Works, provided it is reasonably capable of being used and that the Contractor was afforded reasonable opportunity for completing these works for the issue of Completion Certificate.

**66.0 GUARANTEE/TRANSFER OF GUARANTEE**

For works like water-proofing, acid and alkali resisting materials, pre-construction soil treatment against termite or any other specialized works etc. the Contractor may engage Sub-Contractors who are specialists in the field and firms of repute provided each such Sub-Contractor furnishes guarantees for [his] workmanship to the Electrical Research & Development Association, through the Contractor. In case any such Sub-Contractor is unwilling or unable to furnish such guarantee, the Contractor shall, [himself] provide such guarantee to the Electrical Research & Development Association directly.

**67.0 REPLACEMENT OF DEFECTIVE PARTS AND MATERIALS**

67.1 If during the execution of the Works, the Electrical Research & Development Association becomes aware of and informs the Contractor in writing of any Defect the Contractor shall, within 7 (seven) days of his receiving any notice in this regard, or otherwise within such time as may be reasonably necessary, make good, proceed to alter, re-construct or rectify such Defect. In the event the Contractor fails to so rectify the Defect, the Electrical Research & Development Association may, on giving the Contractor 7 (seven) days' notice in writing of [his] intention to do so, proceed to rectify the Defect at the cost and risk of the Contractor, provided that nothing in the Clause shall be deemed to deprive the Electrical Research & Development Association of or otherwise affect any rights of the Electrical Research & Development Association under the Contract, which the Electrical Research & Development Association may have in respect of such Defect.

67.2 The Contractor's liability under this Clause shall be satisfied by the payments to the Electrical Research & Development Association of the costs incurred by the Electrical Research & Development Association in rectifying the Defect. Such cost shall be the difference between the price paid by the Electrical Research & Development Association for rectifying the Defect and such portion of the Contract Value as is attributable to such portion of the Works as the Defect is found to affect. Should the Electrical Research & Development Association not so replace the defective part the Contractor's extreme liability under this clause shall be limited to [his] payment of all such sums paid by the Electrical Research & Development Association under the Contract for such portion of the Works as the Defect is found to affect.

**68.0 DEFENSE OF SUITS**

The Contractor shall indemnify and hold harmless the Indemnified Persons from and against any and all Losses suffered by an Indemnified Person (i) for any failure, omission or neglect on the part of the Contractor, a Sub-Contractor

or either the Contractor's or Sub-Contractor's agents, employees or personnel to duly perform [his/its] obligations under the Contract, or (ii) for any damage or injury caused by the alleged omission or negligence on the part of the Contractor, a Sub-Contractor or either the Contractor's or Sub-Contractor's agents, employees or personnel, (iii) in connection with any claim based on demands of the Contractor's, or a Sub-Contractor's workmen, suppliers or employees or (iv) resulting from any breach by the Contractor of any provisions of the Contract .

**69.0 CONSTRUCTION AIDS, EQUIPMENTS, TOOLS & TACKLES**

The Contractor shall be solely responsible for making available for executing the Works, all requisite construction equipment, special aids, barges, cranes and the like, all tools, tackles and testing equipment and appliances.

**SECTION - V**  
**CERTIFICATES AND PAYMENTS**

**70.0 SCHEDULE OF RATES AND PAYMENTS**

**70.1 THE CONTRACTOR'S REMUNERATION**

The price to be paid by the Electrical Research & Development Association to the Contractor for the whole of the Works and for performance of all the obligations of the Contractor under the Contract shall be the Contract Value. Payments shall be made based on the work actually executed and approved by the Engineer-In-Charge and shall be subject to:

- I. Withholding tax
- II. Any dispute raised on the payments by the Electrical Research & Development Association
- III. Itemized bills being provided by the Contractor.

The sums so ascertained shall (except to the extent expressly provided herein) constitute the sole and inclusive remuneration of the Contractor under the Contract and no further or other payments whatsoever shall be or become due or payable to the Contractor under the Contract otherwise than as provided in Clause 44.0.

**70.2 CONTRACT VALUE TO BE ALL INCLUSIVE**

70.2.1 The Quoted Rates and Contract Value shall remain firm and shall not be subject to escalation, otherwise than as provided for in Clause 44.0. The Quoted Rates and Contract Value shall be deemed to include and cover all costs, expenses and liabilities of every description and all risks of every kind to be taken in executing, completing and handing over the Works to the Electrical Research & Development Association by the Contractor. The Contractor shall be deemed to have known the nature, scope, magnitude and the extent of the works and materials required although the Contract and/or Tender Documents may not fully and precisely furnish them. The Contractor shall make such provision in the Quoted Rates, as [he] may consider necessary to cover the cost of such items of work and materials as may be reasonable and necessary to complete the Works. The opinion of the Engineer-In-Charge as to the items of work which are necessary and reasonable for Completion of the Works shall be final and binding on the Contractor, although the same may not be shown or described specifically in Contract or the Tender Documents.

70.2.2 The generality of this Clause 70.0 shall not be deemed to be limited in any way because (i) in certain cases it may and in other cases it may not be expressly stated that the Contractor shall do or perform a work or supply articles or perform services at [his/its] own cost or without addition of payment or without extra charge or words to the same effect or (ii) that it may be stated or not stated that the same are included in and covered by the Schedule of Quantities & Rates.

**70.3 CONTRACT VALUE TO COVER CONSTRUCTION EQUIPMENTS, MATERIALS, LABOUR ETC.**

Without prejudice to the generality of this Clause 70.0 the Contract Value shall be deemed to include and cover the cost of all construction of Plant, Temporary Works (except as provided for herein), pumps, materials, labour,

insurance, fuel, consumables, stores, and appliances to be supplied by the Contractor and all other matters in connection with each item in the Schedule of Quantities & Rates and the execution of the Works or any portion thereof finished and complete in every respect and maintained as shown or described in the Contract or as the Contractor may be instructed in writing during the execution of the Works.

**70.4 CONTRACT VALUE TO COVER ROYALTIES, RENTS AND CLAIMS**

The Contract Value shall be deemed to include and cover the cost of all royalties and fees for the articles and processes, protected by letters, patent or otherwise incorporated in or used in connection with the Works, as well as all royalties, rents and other payments in connection with obtaining materials, equipment, machineries and instruments of whatsoever kind for the Works.

**70.5 CONTRACT VALUE TO COVER TAXES AND DUTIES**

The Contract Value is deemed to include any and all Taxes (other than service tax) payable by the Contractor in the execution of the Works as well as any and all costs incurred or to be incurred by the Contractor in obtaining the permits, approvals, licenses and other privileges necessary for the Contractor to Complete the Works.

**70.6 CONTRACT VALUE TO COVER RISKS OF DELAY**

The Contract Value shall be deemed to include and cover the risk of all possibilities of delay and interference with the Contractor's execution of the Works which may occur from any causes including orders of the Electrical Research & Development Association in the exercise of [his] power (directly or indirectly, whether through the Engineer-In-Charge or otherwise) and on account of extension of time granted due to various reasons and for all other possible or probable causes of delay.

**70.7 SCHEDULE OF QUANTITIES & RATES CANNOT BE ALTERED**

70.7.1 For work under unit rate basis, no alteration will be allowed in the Schedule of Quantities & Rates by reason of the Works or any part of them being modified altered, extended, diminished or omitted. The Schedule of Quantities & Rates is fully inclusive of rates which have been fixed by the Contractor and agreed to by the Electrical Research & Development Association and cannot be altered.

70.7.2 For lump sum contracts, the payment will be made according to the work actually carried out, which items shall also be listed in the Schedule of Quantities & Rates item wise/work-wise in a manner suitable for evaluating the value of work done and preparing R.A. Bill.

**71.0 PROCEDURE FOR MEASUREMENT AND BILLING OF WORK IN PROGRESS**

**71.1 Billing Procedure**

The following procedure shall be adopted for billing of works executed by the Contractor.

71.1.1 All measurements shall be recorded on standard measurement sheets by the Contractor and submitted to the Engineer-In-Charge for scrutiny and passing. Measurements shall be recorded in accordance with the methods of measurement set out in the Specifications or elsewhere in the Contract.

- 71.1.2 The Engineer-In-Charge shall scrutinize and check the measurements recorded on the aforesaid sheets and shall certify the correctness and accuracy of the same on the said sheets. The Engineer-In-Charge shall be responsible for checking the measurements quantitatively and qualitatively as recorded in the measurement sheets.
- 71.1.3 The Contractor shall then prepare and submit the R.A. Bills, which shall be processed in the manner provided in the Special Conditions of Contract.
- 71.1.4 While preparing the Final Bill overall measurements will not be taken again. Only volume of work executed since the last measured bill along with summary of final measurements will be considered for the final Bill. However, a detailed check shall be made as to missing measurements and in case there are any missing items, or measurements, the same shall be recorded.
- 71.1.5 In case of any dispute as to the mode of measurement not covered by the Contract to be adopted for any item of work, the mode of measurement shall be in accordance with the latest Indian Standard specifications.
- 71.1.6 Every R.A. Bill shall be rounded down to the nearest rupee, i.e. sum of less than 50 paise shall be omitted and sum of 50 paise and more up to one rupee shall be reckoned as one rupee.

**71.2 LUMPSUMS IN TENDER**

For the item in Tender where it includes lump-sum in respect of parts of work, the Contractor shall be entitled to payment in respect of the items at the same rates as are payable under this Contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-In-Charge capable of measurement or determination, the Electrical Research & Development Association may at its discretion pay the lump-sum amount entered in the Tender or a percentage thereof and the certificate in writing of the Engineer-In-Charge shall be final and conclusive against the Contractor with regards to sum or sums payable to him under the provisions of this clause.

**71.3 RUNNING ACCOUNT PAYMENTS TO BE REGARDED AS ADVANCES**

All payments made under R.A. Bills shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed. No such payment shall preclude (i) the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the Contract, or any part thereof, in this respect, or (ii) the accruing of any claim by the Electrical Research & Development Association. No such payment shall conclude, determine or affect in any way the powers of the Electrical Research & Development Association under this Contract as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or affect the Contract. The Final Bill shall be submitted by the Contractor within 1 (one) month of the issuance of the Completion Certificate, failing which, a certificate issued by the Engineer-In-Charge of the measurement and of total amounts remaining payable to the Contractor shall be final and binding on all Parties.

It is clarified that in no case shall the aggregate amount of all the R.A. Bills and the Final Bill be greater than the Contract Value.

**71.4 NOTICE OF CLAIMS FOR ADDITIONAL PAYMENTS**

- 71.4.1 Should the Contractor consider that [he/it] is entitled to any extra payment or compensation or to make any claims whatsoever in respect of the Works [he/it] shall forthwith, and in all events within 10 (ten) days of the occurrence of the event or receipt of instruction of work for which the Contractor considers [he] is entitled to extra payment or compensation, give notice in writing to the Engineer-In-Charge of such claim. Such notice shall also include full particulars of the nature of such claim with full details and amounts claimed. Failure on the part of the Contractor to put forward any claim with the necessary particulars as above within the time above specified shall be an absolute waiver thereof. No omission by the Electrical Research & Development Association to reject any such claim and no delay in dealing therewith shall be waiver by the Electrical Research & Development Association of any rights in respect thereof.
- 71.4.2 The Contractor agrees, and undertakes, that if the claims are not raised within the said period of 10 (ten) days as above mentioned, then he shall be stopped and debarred from raising such claims later in arbitration proceedings or before any court of law. Such claims if presented before the arbitral tribunal shall be deemed to be rejected by the arbitral tribunal and shall be liable to be summarily dismissed forthwith.
- 71.4.3 The Electrical Research & Development Association shall review such claims within a reasonable period of time and cause to discharge these in a manner considered appropriate after due deliberations thereon. However, the Contractor shall be obliged to carry on with the Works during the period in which his claims are under consideration by the Electrical Research & Development Association, irrespective of the outcome of such consideration.
- 71.4.4 Where additional payments for works considered extra are justifiable in accordance with the provisions above, Electrical Research & Development Association shall arrange to release the same in the same manner as for normal work payments and the term Contract Value shall be construed to be amended to include of such additional payments. Such of the extra works so admitted by the Electrical Research & Development Association shall be governed by all the terms, conditions, stipulations and Specifications as are applicable for the Contract. The rates for extra works shall generally be the unit rates provided for in the Contract. In the event unit rates for extra works so executed are not available as per Contract, payments may either be released on day work basis for which daily/hourly rates for workmen and hourly rates for equipment rental shall apply, or on the unit rate for work executed shall be derived by interpolation/extrapolation of unit rates already existing in the Contract. In all the matters pertaining to applicability of rate and admittance or otherwise of an extra work claim of the Contractor the decision of Engineer-In-Charge shall be final and binding. The amounts payable shall be determined in accordance with the provisions of Clause 44.0.
- 71.5 PAYMENT OF THE CONTRACTOR'S BILL**
- 71.5.1 The Contractor shall be paid for the bills raised as per relevant clause specified in Special Conditions of Contract. Payment Certificate of such approval and passing of the sum so payable shall be final and conclusive against the Contractor. This payment will be made after making necessary deductions as stipulated elsewhere in the Contract document for materials, Retention Money, compensation, claims, etc.

71.5.2 Payment due to the Contractor shall be made by the Electrical Research & Development Association if so directed by the Electrical Research & Development Association by Account Payee check, forwarding the same to registered office or the notified office of the Contractor. In no case will the Electrical Research & Development Association be responsible if the check is mislaid or misappropriated by unauthorized person/persons. In all cases, the Contractor shall present his bill duly pre-recited on proper revenue stamp.

71.5.3 All payments shall be made in Indian currency.

**71.6 RECEIPT FOR PAYMENT**

A person duly authorised by the Contractor in this respect (in case the Contractor is an individual or a partnership or proprietary firm, by way of a power of attorney and in case the Contractor is a corporation, by way of a board resolution) shall acknowledge receipt of all payments within 15 days of such receipt.

**72.0 COMPLETION CERTIFICATE**

**72.1 Application for Completion Certificate**

72.1.1 When the Contractor Completes the Works [he] shall be eligible to apply for the Completion Certificate.

72.1.2 The Engineer-In-Charge shall issue to the Contractor the Completion Certificate for which an application has been made by the Contractor within one month of receipt of such application after verifying from the documents submitted by the Contractor provided that he is able to satisfy himself that the work has been completed in accordance with and as set out in the Contract.

72.1.3 It is clarified that no Completion Certificate shall be given nor shall the Works be deemed to have been executed until all scaffolding, surplus materials, Temporary Works (including labour and staff colonies) and rubbish are cleared off the Site completely to the satisfaction of the Engineer-In-Charge, nor until the Works have been duly measured and examined by the Engineer-In-Charge, the outcome of whose measurement and examination shall be binding and conclusive. If the Contractor shall fail to so clear the Site on or before the Specified Completion Date, or such later date as may be acceptable to the Electrical Research & Development Association and intimated to the Contractor in writing by the Electrical Research & Development Association, the Engineer-In-Charge may at the expense of the Contractor clear the Site and dispose of all materials, equipment etc., and the Contractor shall forthwith reimburse all expenses so incurred by the Engineer-In-Charge and shall have no claim in respect of any materials, equipment, etc. as aforesaid except for any sums actually realized by the sale thereof.

72.1.4 The Contractor, after obtaining the Completion Certificate, is eligible to present the Final Bill in accordance with the provisions of Clause 71.0.

**73.0 FINAL DECISION AND FINAL CERTIFICATE**

73.1 Upon the expiry of the Defects Liability Period, and subject to the Engineer-In-Charge being satisfied that (i) the Works have been duly executed and maintained by the Contractor and (ii) the Contractor has in all respects duly made up any subsidence or Defects and performed all [his/its] obligations under the Contract, the Engineer-In-Charge shall (without prejudice to the rights of the Electrical Research & Development Association to retain such

amounts as specified in the Contract) issue the Final Certificate to that effect and the Contractor shall be not considered to have fulfilled the whole of [his/its] obligations under the Contract until the Final Certificate has been so issued by the Engineer-In-Charge notwithstanding any previous entry upon the Site and/or the Works and taking possession, working or using of the same or any part thereof by the Electrical Research & Development Association.

- 73.2 Except the Final Certificate no other certificates or payments whether against a certificate or otherwise shall be taken to be an admission by the Electrical Research & Development Association of the due performance of the Contract or any part thereof or validity of any claim by the Contractor.

**74.0 DEDUCTIONS FROM THE CONTRACT VALUE**

All costs, damages or expenses which the Electrical Research & Development Association may have paid or incurred, for which, under the provisions of the Contract, the Contractor is liable or will be liable, will be claimed by the Electrical Research & Development Association. All such claims shall be billed by the Electrical Research & Development Association to the Contractor regularly as and when they fall due. Such claims shall be paid by the Contractor within 15 (fifteen) days of the receipt of the corresponding bills and if not paid by the Contractor within the said period, the Electrical Research & Development Association may, then, deduct the amount from any moneys due or becoming due to the Contractor under the Contract (including from Retained Money) or may be recovered by invocation of the Performance Guarantee or actions of law or otherwise, if the Contractor fails to satisfy the Electrical Research & Development Association of such claims.

**SECTION - VI**



## **TAXES AND INSURANCE**

### **75.0 TAXES**

- 75.1 The Contractor agrees to and does hereby accept full and exclusive liability for the bearing and payment of any and all Taxes now or hereafter imposed, increased, or modified, from time to time in respect of Works and materials used for the Works other than service tax payable on the Contract Value, which shall be borne and paid by the Electrical Research & Development Association.
- 75.2 The Contractor further agrees to defend, indemnify and hold the Electrical Research & Development Association harmless from and against any and all liabilities, losses, damages, claims or penalties which may be imposed by any authority for non-payment of any Taxes by the Contractor.

### **76.0 SALES TAX/ TURNOVER TAX**

The Contractor should have quoted the Quoted Rates as all-inclusive prices including the liability of sales tax/turnover tax whether on the Works/ the Contract as a whole or in respect of bought out components used by the Contractor in execution of the Contract. The Electrical Research & Development Association shall not be responsible for any such liability of the Contractor in respect of this Contract.

### **77.0 EXCISE DUTY (ON WORKS CONTRACT ONLY)**

- 77.1 Excise Duty on items fabricated at the Site, if applicable at a later date will be paid by the Contractor at actuals. The Contract Value shall be deemed to be inclusive of any such excise duty.

### **78.0 COMPLIANCE WITH OTHER LAWS**

- 78.1 The Contractor agrees to and does hereby accept full and exclusive liability for the bearing and payment of any and all contributions and Taxes for unemployment compensation, insurance and old age pensions or annuities now or hereafter imposed by any Central or State Govt. authorities which are imposed with respect to or covered by the wages, salaries, or other compensations paid to the persons employed by the Contractor and the Contractor shall be responsible for the compliance with all obligations and restrictions imposed by the various labour laws or any other law affecting employer-employee relationship and the Contractor further agrees to comply, and to secure the compliance of all Sub-Contractors, with all applicable Central, State, Municipal and local laws, regulations and requirements of Central, State and Local Government agencies and authorities.
- 78.2 The Contractor further agrees to defend, indemnify and hold the Indemnified Persons harmless from and against any and all Losses which may be suffered by the Indemnified Persons by reason of any violation by the Contractor or Sub-Contractor of any applicable laws, regulations or requirements and also from all claims, suits or proceedings that may be brought against the Electrical Research & Development Association arising under, growing out of, or by reason of the work provided for by this Contract, by third parties, or by Central or State Govt. authority or any administrative sub-division thereof.

## **79.0 INSURANCE**

### **79.1 General**

The Contractor shall, at [his/its] own expense arrange, secure and maintain insurance with reputable insurance companies to the satisfaction of the Electrical Research & Development Association as required under the Notice Inviting Tenders, subject to the following minimum requirements:

### **79.2 Contractor's All Risk Insurance**

The Contractor shall procure a "Contractor's all risk" policy for a minimum value equivalent to contract value, which shall remain in force until the expiry of the Defects Liability Period. The same shall be endorsed in favour of Electrical Research & Development Association.

### **79.3 Employees State Insurance**

The Contractor agrees to and does hereby accept full and exclusive liability for the compliance with all obligations imposed by the Employee State Insurance Act, 1948 and the Contractor further agrees to defend, indemnify and hold the Indemnified Persons harmless from and against any and all Losses, including any penalties which may be imposed by any authority by reason of any violation by the Contractor or Sub-Contractor of the Employees' State Insurance Act, 1948, and also from all claims, suits or proceeding that may be brought against the Electrical Research & Development Association arising under, growing out of or by reasons of the work provided for by the Contractor whether brought by employees of the Contractor, by third parties or by Central or State Govt. authority or any political sub-division thereof.

Without prejudice to the generality of the foregoing, the Contractor agrees to file with the Employee's State Insurance Corporation, the declaration forms, and all forms which may be required in respect of the Contractor's or any Sub-Contractor's employees, who are employed in the Works that fall within the purview of the Employee State Insurance Act, 1948, from time to time. The Contractor shall deduct and secure the agreement of all Sub-Contractors to deduct the employee's contribution as per the first schedule of the Employee's State Insurance Act, 1948 from employees' wages. The Contractor shall remit and secure the agreement of the Sub-Contractor to remit to the State Bank of India, Employee's State Insurance Corporation Account, each employee's contribution as may require by the Employee's State Insurance Act, 1948. The Contractor agrees to maintain all cards and records as required under the Employee's State Insurance Act, 1948 in respect of employees and payments and the Contractor shall secure the agreement of all Sub-Contractors to maintain such records. Any expenses incurred for the contributions, making contributions or maintaining records shall be to the Contractor's or Sub-Contractor's account. The Electrical Research & Development Association shall retain such sum as may be necessary from the Contract Value until the Contractor furnishes satisfactory proof that all contributions as required by the Employees State Insurance Act, 1948, have been paid.

### **79.4 Workmen's Compensation and Employer's Liability Insurance**

The Contractor shall procure WCP for each of its employees engaged in the execution of the Works and shall ensure that each Sub-Contractor procures for each of such Sub-Contractor's employees engaged in the execution of the Works, an insurance policy.

**79.5 Transit Insurance**

The Contractor shall procure and maintain a transit insurance policy in respect of all items to be transported by the Contractor to the Site and the Contract Value shall be deemed to be inclusive of any costs in this respect.

**79.6 Other Insurance**

The Contractor shall procure and maintain any and all other insurance(s) that may be required (i) under any law or regulation to procure and maintain (ii) by the Electrical Research & Development Association from time to time at [his/its] own cost.

**79.7 Accident or Injury to Workmen**

The Electrical Research & Development Association shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any Sub-Contractor, save and except an accident or injury resulting from any act or default of the Electrical Research & Development Association and the Contractor shall indemnify and hold harmless and shall keep indemnified and harmless the Indemnified Persons against any and all Losses (save and except and aforesaid) in relation thereto.

**79.8 Third Party Liability**

Third party liability risk insurance shall be procured by the Contractor, the cost of procuring which, shall be deemed to be included in the Contract Value.

**80.0 DAMAGE TO PROPERTY OR TO ANY PERSON OR ANY THIRD PARTY**

80.1 The Contractor shall be responsible for making good to the satisfaction of the Electrical Research & Development Association any loss or any damage to structures and properties belonging to the Electrical Research & Development Association, or any other persons engaged by the Electrical Research & Development Association, at the Site, if such loss or damage is due to the fault, negligence, wilful acts or omission of the Contractor, a Sub-Contractor or any of their employees, agents or representatives.

80.2 The Contractor shall take sufficient care in moving [his] plants, equipment and materials from one place to another so that they do not cause any damage to any person or to the property of the Electrical Research & Development Association or any third party including overhead and underground cables and in the event of any damage resulting to the property of the Electrical Research & Development Association or of a third party during the movement of the aforesaid plant, equipment or materials, the cost of such damage including eventual loss of production, operation or services as estimated by the Electrical Research & Development Association or ascertained or demanded by the third party shall be borne by the Contractor.

80.3 The Contractor shall indemnify and hold harmless and keep indemnified and harmless the Indemnified Persons from and against any and all Losses for damage to property caused by the Contractor, a Sub-Contractor or any of their agents, employees, representatives or personnel arising under or by reason of this Contract, if such claims result from the fault and/or negligence or wilful acts or omission of the Contractor, a Sub-Contractor or their employees, agents or representatives.



**SECTION-VII**

**LABOUR LAWS, DISPUTE RESOLUTION AND JURISDICTION**

**81.0 LABOUR**

- 81.1 No person below the age of 18 (eighteen) years shall be employed by the Contractor for the execution of the Works.
- 81.2 The Contractor shall not pay less than the statutorily permitted minimum amount to labourers and other employees and persons engaged by [him/it] for the execution of the Works.
- 81.3 The Contractor shall, at [his] expense comply with all applicable labour laws and keep the Electrical Research & Development Association indemnified in respect thereof.
- 81.4 The Contractor shall pay equal wages to men and women in accordance with applicable labour laws.
- 81.5 If the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 are applicable to the Contractor, [he] shall obtain a license from appropriate authority (i.e. Office of the Labour Commissioner), at [his/its] own cost, before starting any work under the Contract.
- 81.6 No person engaged by the Contractor shall have any privity with the Electrical Research & Development Association, nor shall any such person claim to have an employer-employee relationship with the Electrical Research & Development Association, nor shall the Electrical Research & Development Association be construed as the principal employer vis-à-vis such persons for whom the principal employer for purposes of Contract Labour (Regulation and Abolition) Act, 1970 shall be the Contractor.
- 81.7 The Contractor shall employ such number and quality of persons for the execution of the Works (either directly or through Sub-Contractors) as may be necessary to Complete the Works on or before the Specified Completion Date to ensure that quality of the workmanship is of the degree commensurate with other works of this nature and as specified in the Contract and to the satisfaction of the Engineer-In-Charge.
- 81.8 The Contractor shall furnish to the Engineer-In-Charge a statement of the number and description, by trades of the people employed by [him/it] for the execution of the Works. The Contractor shall also submit on the 7th and 22nd of every month to the Engineer-In-Charge a true statement showing in respect of the second half of the preceding month and the first half of the current month (1) the accidents that occurred during the applicable period, illustrating the circumstances under which they happened and the extent of damage and injury caused by them and (2) the number of female workers who have been allowed maternity benefit as provided in the Maternity Benefit Act 1961 or rules made thereunder and the amounts paid to them.
- 81.9 The Contractor shall comply with the provisions of all applicable labour laws, including the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employers Liability Act 1938, Employee's Compensation Act, 1923, the Contract Labour (Regulation and Abolition) Act 1970, the Employment of Children Act, 1938 and any modifications thereof or any other law relating thereto and rules made thereunder from time to time.
- 81.10 The Engineer-In-Charge shall have the power to deduct from any amounts due

to the Contractor any sum required or estimated to be required be paid by the Electrical Research & Development Association for any non-compliance by the Contractor with any applicable labour laws.

- 81.11 The Contractor shall indemnify the Indemnified Persons against any payments to be made under and for the observance of the provisions of any applicable labour laws without prejudice to the Contractor's right to obtain indemnity from any of [his] Sub-Contractors. In the event of the Contractor committing a default or breach of any provision of any applicable labour laws, the Contractor shall without prejudice to any other liability it may have or any other right the Electrical Research & Development Association may have under this Contract, pay to the Electrical Research & Development Association a sum not exceeding Rs. 50/- (Rupees Fifty only) as liquidated damages for every default or breach of the Contractor's as may be fixed by the Engineer-In-Charge and in the event of the Contractor's default continuing in this respect, the liquidated damages may be enhanced to Rs. 50/- (Rupees Fifty only) per day for each day of default subject to a maximum of 1% (one percent) of the Contract Value.
- 81.12 The Engineer-In-Charge shall be entitled to (i) deduct such amounts [as he deems necessary] from any amounts due under an R.A. Bill, the Final Bill or the Retention Money or (ii) invoke the Performance Guarantee for such amounts as he deems necessary and, if permissible by applicable law, credit the same to the funds constituted under the applicable labour laws. The decision of the Engineer-In-Charge in this respect shall be final and binding.
- 81.13 Notwithstanding anything to the contrary contained in this Contract, the Contractor will be liable for compliance with all applicable labour laws and regulations.

**82.0 IMPLEMENTATION OF APPRENTICES ACT, 1961/PROVIDENT FUND ACT :**

- 82.1 The Contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the Contract and the Electrical Research & Development Association may, at [his] discretion, cancel the Contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation by [him] of the provisions of the Apprentices Act, 1961.
- 82.2 The Contractor shall strictly comply with the provisions of the Employees Provident Fund Act, 1952.
- 82.3 It is to be noted that the Contract has been awarded to a Contractor based on [his] having fulfilled the following requirements:
- 82.3.1 Obtained a license under Contract Labour (Regulation and Abolition) Act, 1970 and submitted a copy to the Engineer-In-Charge.
- 82.3.2 Is duly registered under the Employees Provident Fund Act, 1952 and a registration number has been allotted to [him] by the Regional Provident Fund Commissioner ("RPFC") and has submitted proof of the same to Engineer-In-Charge.
- 82.4 The Contractor shall promptly deposit any provident fund deduction made by it along with the employer's contribution to the provident fund to the RPFC. The Contractor shall thereafter submit a certificate along with each R.A. Bill

certifying that the requisite amounts have been deducted from the eligible employees and along with employer's contribution have been deposited with RPFC along with the challan/receipt for such payment issued by the RPFC.

- 82.5 If the certificate and the challan/receipt referred to in Clause 82.4 above are not furnished, the Electrical Research & Development Association may deduct and retain 16% (sixteen percent) of the amount due under the relevant R.A. Bill, which amounts shall only be refunded to the Contractor on production of the challan/receipt.

**83.0 CONTRACTOR TO INDEMNIFY ELECTRICAL RESEARCH & DEVELOPMENT ASSOCIATION**

- 83.1 The Contractor shall indemnify and hold harmless the Indemnified Persons from and against any and all Losses whatsoever arising out of or in connection with the matters referred to in Clauses 81.0 and 82.0 and elsewhere and all actions, proceedings, claims, demands, costs and expenses which may be made against an Indemnified Person for or in respect of or arising out of any failure by the Contractor in the performance of his obligations under the Contract. The Electrical Research & Development Association shall not be liable for or in respect of any demand or compensation payable by law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the Contractor or [his] Sub-Contractors and the Contractor shall indemnify and keep indemnified the Indemnified Persons against all such damages and compensations and against all Losses whatsoever in respect thereof or in relation thereto.

**83.2 Payment of Claims and Damages**

- 83.2.1 Should the Electrical Research & Development Association be required to pay any amounts in respect of such claims or demands as aforesaid the amounts so paid and the costs incurred by the Electrical Research & Development Association shall be charged to and paid by the Contractor and the Contractor shall not be at liberty to dispute or question the right of the Electrical Research & Development Association to make such payments notwithstanding the fact that the same may have been made without the consent or authority of the Contractor.
- 83.2.2 In every case in which by virtue of the provisions of Section 12 of Employee's Compensation Act, 1923 or other applicable provision of Employee's Compensation Act, 1923 or any other law, the Electrical Research & Development Association is obliged to pay compensation to a workman employed by the Contractor in execution of the Works, the Electrical Research & Development Association shall be entitled to recover from the Contractor the amount of the compensation so paid, and without prejudice to the rights of the Electrical Research & Development Association under Section 12 of the said act, the Electrical Research & Development Association shall be at liberty to recover such amount or any part thereof by deducting it from the Retained Money or from any sum due to the Contractor whether under this Contract or by invoking the Performance Guarantee or otherwise. The Electrical Research & Development Association shall not be bound to contest any claim made under Section 12 of the said Act, except on the written request of the Contractor and upon his giving to the Electrical Research & Development Association full security for all costs for which the Electrical Research & Development Association might become liable in consequence of contesting

such claim.

**84.0 HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS**

- 84.1 In respect of all labourers directly or indirectly employed by the Contractor in the execution of the Works, the Contractor shall comply with all the laws, rules and regulations pertaining to sanitation as well as prevailing industrial standards pertaining to sanitation.
- 84.2 The Contractor shall provide in the labour colony all amenities such as electricity, water and other sanitary and health arrangements as may be required under law and in accordance with prevailing industrial standards in this regard.

**85.0 DISPUTE RESOLUTION**

- 85.1 All disputes and differences of any kind whatsoever arising out of or in connection with the Contract shall be referred to and settled by a person agreeable to both, the Electrical Research & Development Association and the Contractor and this person may be resident of Vadodara, Gujarat with at least 15 (fifteen) years of experience in the construction business or any other person mutually acceptable to both Parties (the “**Mediator**”).
- 85.2 The Mediator shall state his decision in writing within [7] ([seven]) days of the dispute or difference being referred to him.
- 85.3 If either the **Electrical Research & Development Association** or the Contractor is dissatisfied with the decision of the Mediator, or the Mediator fails to issue such decision within [7] ([seven]) days of the dispute or difference being referred to him, the dispute or difference shall be referred to arbitration by a single arbitrator, who shall be a fellow of the Indian Institute of Architecture or such other person as may be mutually acceptable to both Parties.
- 85.4 If the Contractor and the Electrical Research & Development Association fail to agree upon a single arbitrator within [14] (fourteen) days of either of them notifying the other of its intention to submit to arbitration, then the dispute shall be referred to a panel of three arbitrators, with each of the Electrical Research & Development Association and the Contractor appointing one arbitrator and the arbitrators so appointed jointly nominating a third presiding arbitrator.
- 85.5 The arbitral tribunal shall have the power to decide upon any dispute or difference, including but not limited to those in connection with the validity, interpretation, implementation or alleged material breach of any provision of this Contract, and the questions as to whether the termination of this Contract has been legitimate.
- 85.6 The place of arbitration shall be Vadodara. The arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996 and shall be conducted in the English language. The arbitral tribunal shall also decide on the costs of the arbitration proceedings.
- 85.7 The award of the arbitral tribunal shall be in writing and the Contractor and the Electrical Research & Development Association shall submit to the arbitral tribunal's award which shall be final, binding and enforceable in any competent court of law.

**86.0 GOVERNING LAW AND JURISDICTION**

The Contract shall be governed by and construed according to the laws in



force in India. Subject to the provisions of Clause 85.0 above, the Parties hereby submit exclusively to the jurisdiction of the Courts situated at [Vadodara] for the purposes of disputes, actions and proceedings arising out the Contract.

**SECTION – VIII**  
**SAFETY CODE**

**87.0 GENERAL**

The Contractor shall adhere to safe construction practice and guard against hazardous, and unsafe working conditions and shall comply with the Electrical Research & Development Association's safety rules as set forth herein.

**87.1 First Aid and Industrial Injuries**

87.1.1 The Contractor shall maintain first aid facilities for its employees and those of its Sub-Contractors at the Site in accordance with prevailing industry standard and at all times in compliance with applicable law.

87.1.2 The Contractor shall make arrangements, at its own cost, for ambulance services and for the treatment of industrial injuries to any persons in the execution of the Works and shall furnish the names and details of any agencies or other persons with whom it makes such arrangements to the Electrical Research & Development Association prior to start of construction and the telephone numbers of such agencies or persons shall be prominently posted in the Site Office.

87.1.3 All critical industrial injuries shall be reported promptly to the Electrical Research & Development Association, and a copy of the Contractor's report covering each personal injury requiring the attention of a physician shall be furnished to the Electrical Research & Development Association.

**87.2 Safety Regulations**

87.2.1 In respect of all labour, directly or indirectly employed in the execution of the Works by the Contractor, the Contractor shall at [his] own expense arrange for all the safety provisions as per safety codes of C.P.W.D., Indian Standards Institution, the Electricity Act and such other acts as applicable.

87.2.2 The Contractor shall observe and abide by all fire and safety regulations of the Electrical Research & Development Association and compliance with the provisions of this Clause 87.0 shall be responsibility of the Contractor.

**87.3 General Rules**

Smoking on the Site is strictly prohibited. The Contractor shall oversee and enforce this prohibition by putting up no-smoking signs on the Site and shall immediately discharge or cause to be discharged any violators of this prohibition.

**87.4 Barricades**

87.4.1 The Contractor shall erect and maintain sturdy and durable barricades around the following:

- i) Any and all excavated areas;
- ii) Any and all hoisting areas;
- iii) Areas adjudged hazardous by the Contractor or the Electrical Research & Development Association's inspectors or the Engineer-In-Charge;
- iv) Any existing property of the Electrical Research & Development Association susceptible to damage by the Contractor's execution of the Works;
- v) Rail road unloading spots; and

- vi) Any other areas that the Contractor or the Engineer-In-Charge is of the view, should be barricaded.
- 87.4.2 The Contractor shall ensure that all [his] employees and those of his Sub-Contractors are acquainted with the Electrical Research & Development Association's barricading practice and shall respect the provisions thereof.
- 87.4.3 Barricades and hazardous areas adjacent to normal routes of travel shall be marked by red flasher lanterns at nights.
- 87.5 Scaffolding and Ladders
  - 87.5.1 Suitable scaffoldings shall be provided for all works that cannot safely be done from the ground or solid construction, except such short period work as can be done safely from ladders. When a ladder is used an extra person shall be engaged for holding the ladder and if the ladder is used for carrying material as well, suitable foot holds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1 in 4 (1 horizontal and 4 vertical).
  - 87.5.2 Scaffolding or staging more than 4 meters above the ground or floor, swing suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise retarded at least one 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 fastened so as to prevent it from swaying from the building or structure.
  - 87.5.3 Working platforms, gangways and stairways shall be so constructed that they do not sag unduly or unequally and if the height of the platform, gangway or stairway is more than 4 meters above ground-level or floor level, such platform, gangway or stairway must be closely boarded, have adequate width and be suitably fastened as described in 87.5.2 above.
  - 87.5.4 Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 (one) meter.
  - 87.5.5 Safe-means of access shall be provided to all working platforms and other working places and every ladder shall be securely fixed. No portable single ladder shall be over 9 (nine) meters in length while the width between side rails in a rung ladder shall in no case be less than 30 cms (thirty centimetres) for ladders up to and including 3 meters in length. For longer ladders this width is required to be increased at least 5 mm (five millimetres) for each additional foot of length. Uniform steps spacing shall not exceeding 30 cms (thirty centimeters). Adequate precautions shall be taken to prevent danger from electrical equipment. No materials at the Site shall be so stacked or placed to cause danger or inconvenience to any person or the public in general.
  - 87.5.6 The Contractor shall also provide all necessary fencing and lights to protect the workers, staff and any third parties from accidents, and shall be bound to bear the expenses of the defence of every suit, action or other proceeding of law that may be brought by any person for injury sustained owing to neglect of the above precautions and pay any damages and costs which may be awarded in any such suit or action or proceedings to any such person or which

may with the consent of the Contractor be paid to compromise any claim by any such person.

**87.6 Excavations and Trenching**

All trenches 1.5 (one point five) meters or more in depth shall at all times be supplied with at least one ladder for each 50 (fifty) meters of length or fraction thereof. Such ladder must extend from the bottom of the trench to at least 1 meter above the surface of the ground. The sides of trenches which are 1.5 (one point) meters in depth or more shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of the sides collapsing. The excavated materials shall not be placed within 1.5 (one point five) meters of the edge of the trench or half of the trench width whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or under-cutting shall be done.

**87.7 Demolition/Safety Equipment/General Safety**

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

- i) All roads and open areas adjacent to the Site shall either be closed or suitably protected;
- ii) No electric cable or apparatus which is liable to be a source of danger shall be or remain electrically charged; and
- iii) All practical steps shall be taken to prevent danger to persons at the Site from risk of fire or explosion or flooding. No floor, roof or other part of any building or structure shall be so overloaded with debris or materials as to render it unsafe.

**87.7.2 All necessary personal safety equipment as considered adequate by the Engineer-In-Charge shall be kept available for the use of the persons employed on the Site and maintained in condition suitable for immediate use, and the Contractor shall take adequate steps to ensure proper use of such equipment by those concerned. At minimum, the following shall be adhered to:**

- i) Workers employed in mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective gloves.
- ii) Those engaged in white washing and mixing or stacking or cement bags or any materials which are injurious to the eyes shall be provided with protective goggles.
- iii) Those engaged in welding and cutting works shall be provided with protective face and eye-shields, hand gloves etc.;
- iv) Stone breakers shall be provided with protective goggles and protective clothing, and seated at sufficiently safe intervals.
- v) When workers are employed in sewers and manholes, which are in use, the Contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or board to prevent accidents.
- vi) 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. Wherever men above the age of 18 years are employed on the work of lead painting, the

following precautions should be taken;

- No paint containing lead or lead product shall be used except in the form of paste or ready-made paint;
- Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray;
- Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash them during and on cessation of work.

87.7.3 When any work is done near any place where there is a risk of drowning, all necessary safety equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

87.7.4 Use of hoisting machines and tackles including their attachments, anchorage and supports shall conform to the following standards or conditions:

- i) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept in good working order;
- ii) Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength and free from patent defects;
- iii) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 (twenty one) years should be in charge of any hoisting machine including any scaffolding, winch or give signals to the operator;
- iv) In case of every hoisting machine and of every chain ring hook, shackle, swivel and pulley block used in hoisting or lowering or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gears referred to above shall be plainly marked with the safe working load of the conditions under which it is applicable which shall be clearly indicated. No part of any machine, or any gear referred to above in this paragraph shall be loaded beyond safe working load except for the purpose of testing.
- v) In case of machines provided by the Electrical Research & Development Association, the safe working load shall be notified by the Engineer-In-Charge. As regards the Contractor's machines, the Contractor shall notify the safe working load of the machine to the Engineer-In-Charge whenever [he/it] brings any machinery to Site and have it verified by the Engineer-In-Charge.
- vi) Motors, gears, transmission lines, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as to reduce to a minimum the accidental descent of the load and adequate precautions should be taken to reduce the minimum risk of any part or parts of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energized, insulating mats, wearing apparel, such as gloves, sleeves, and boots as may be necessary should be provided. The workers shall not wear any rings, watches or carry keys or other materials, which are good conductors of electricity.

- 87.7.5 All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffolds, ladders or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
- 87.7.6 These safety provisions should be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work-spot. The Contractor shall appoint one person to be the person responsible for compliance of the safety, health and environmental norms as per the prevailing industry standards and at all times in compliance with applicable law and shall inform the Engineer-In-Charge of such person's appointment and details.
- 87.7.7 To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the Contractor shall be open to inspection by the Engineer-In-Charge.
- 87.7.8 Notwithstanding the above clauses nothing herein shall preclude the necessity for the Contractor to comply with any laws, rules or other statutory provisions applicable. The Works and the Temporary Works shall be carried out in such a manner as not to interfere in any way whatsoever with the traffic on any roads or footpaths at the site or in the vicinity thereto or any existing works whether the property of the Electrical Research & Development Association or of a third party.
- 87.7.9 In addition to the above, the Contractor shall abide by the safety code provisions as per C.P.W.D. Safety Code and Indian Standard Safety Code from time to time.

**87.8 Care in Handling Inflammable Gases**

The Contractor shall, and shall ensure that all precautionary measures are taken and utmost care is exercised in handling inflammable gas cylinder/inflammable liquids/paints etc. as required under law and/or as advised by the fire authorities or the Electrical Research & Development Association.

**87.9 Temporary Combustible Structures**

Temporary combustible structures will not be built near or around Site.

**87.10 Precautions Against Fire**

The Contractor shall provide such number of fire extinguishers/fire buckets and drums at such areas in the Site as may be recommended by Engineer-In-Charge from time to time.

**87.11 Explosives**

Explosives shall not be stored or used on or near the Site by without the prior permission of the Engineer-In-Charge in writing and then only in the manner and to the extent to which such permission is given. When explosives are required for the execution of the Works they will be stored in a special magazine to be provided at the cost of the Contractor in accordance with the Explosives Rules, 1983. The Contractor shall obtain the necessary license for the storage and the use of explosives and all operations in which or for which explosives are employed shall be at sole risk and responsibility of the Contractor and the Contractor shall indemnify the Electrical Research &

Development Association against any loss or damage resulting directly or indirectly therefrom.

**87.12 Preservation of Peace**

The Contractor shall take requisite precautions and use his best endeavours to prevent any riotous or unlawful behaviour by or amongst his workmen and others employed for the execution of the Works and for the preservation of peace, protection and security of the Site and its surrounding areas. In the event of the Electrical Research & Development Association requiring the maintenance of a special police force at or in the vicinity of the Site during such time as this Contract is in force, the expenses thereof shall be borne by the Contractor and if paid by the Electrical Research & Development Association shall be recoverable from the Contractor.

The Contractor shall indemnify and hold harmless and keep indemnified and harmless the Indemnified Persons from and against any and all Losses whatsoever arising out of or in connection with any unrest (including any labour unrest) at the Site.

**87.13 Outbreak of Infectious Diseases**

The Contractor shall remove from the labour colony such persons and their families as refuse protective inoculation and vaccination when called upon to do so by the Engineer-In-Charge. Should cholera, plague or any other infectious diseases break out the Contractor shall burn the huts, bedding, clothes and other belongings used by the infected parties and promptly erect new huts on healthy sites as required by the Engineer-In-Charge within the time specified in the Engineer-In-Charge's requisition failing which, the work may be done by the Electrical Research & Development Association and the cost thereof recovered from the Contractor.

**87.14 Use of Intoxicants**

The unauthorized sale of spirits or other intoxicating beverages at the Site and in the labour colony is forbidden and the Contractor shall exercise [his] influence and authority to the utmost extent to secure strict compliance with this condition.