



भारत सरकार रेल मंत्रलय
अनुसंधान अभिकल्प और मानक संगठन

Government of India Ministry of Railways
Research Designs & Standards Organisation

विद्युत अनुरक्षण अनुभाग
Electrical Maintenance Section

Open Tender Notice No. 16/2012-2013

Name of Work: - Air-conditioning work in Traction Installation Directorate.

Price Rs. 2000.00 Only.

Price Rs. 2500.00 Only {By Post}.

Issued by: -

Assistant Design Engineer,
Electrical Maintenance Section,
R.D.S.O., Manak Nagar,
Lucknow – 226 011

-: CHECK LIST:-

- | | |
|--|------------|
| 1. Have you purchased or Down Loaded the Bid Document? -----: | Yes / NO |
| 2. Have you paid the cost of Bid Documents. | : Yes / NO |
| 3. Have you enclosed earnest money as mentioned in bid document. | : Yes / NO |
| 4. Have you furnished a letter of authority. | : Yes / NO |
| 5. Have you furnished the technical credentials. | : Yes / NO |
| 6. Have you furnished the financial credentials | : Yes / NO |
| 7. Have you quoted rate in the prescribed work schedule. | : Yes / NO |
| 8. Have you kept your offer valid for 90 days. | : Yes / NO |
| 9. Have you furnished 'A' Class Electrical contractor License. | : Yes / NO |
| 10. Have you furnished the list of personals organization,
Plant & machinery. | : Yes / NO |

**Signature of Contractor
With Seal**

ADE / EMS

TENDER PAPERS

PART – I

REGARDING WORKS CONTRACT

OPEN TENDER NOTICE NO. 16/2012-13

NAME OF WORK – Air-conditioning work in Traction Installation Directorate..

To be received up to 03.01.13 at 15.00 hrs.

Price Rs. 2000.00 Only

Price Rs. 2500.00 By Post.

1. Approximate Cost : Rs. 37,83,000.00
2. Duration : Nine Months
3. Earnest Money : Rs.75,660.00
4. Date of Opening : 03/01/13
5. Name & Address of Party with date to whom Tender sold.

M/s

6. Tender Form No :

Note : -

1. Tender paper in original duly signed on each page must be returned with your tender offer.
2. Rates must be filled on the Work Schedule.
3. Rates should be quoted inclusive of Sales Tax, Excise Duty, Levies & Octroi etc.
4. Offer should be kept open for 90 (Ninety) days.
5. Tender form and Annexure from I to VIII must be filled by the tenderer positively.

FIRST SHEET – TENDER FORM

From: M/s :

To

The President of India,
Acting through Director Administration-II,
Research, Designs & Standards Organisation,
Manak Nagar,
Lucknow-226 011.

Dear Sir,

Sub:

I/We _____ have read the Instructions and Conditions of tendering and hereby agree to abide by the said conditions. I/We also agree to keep this after open for acceptance for a period of three months from the date fixed for opening the same and in default thereof. I/We _____ will be liable for forfeiture of my/our "Security Deposit". I/We offer to do the work as per top sheet i.e. relating to the design, manufacture and supply, erection, testing and commissioning for _____ at the rates quoted in the attached Schedule and hereby bind myself/ourselves to complete the work within _____ months, of the date of issue of Letter of Acceptance of Tender and to supervise operation and maintenance of Plant for a period of _____ at the prices quoted in the attached Schedule of price.

I/We also fully understand and hereby agree to abide by the general and Special Conditions of the Contract and do carry out the work according to the Specification for present Contract as modified by this Tender.

I/We have deposited with the Executive Director/Finance, RDSO, Manak Nagar, Lucknow the required sum of Rs. _____ as Earnest Money, in addition as Security Deposit in respect of above Tender for which Receipt No. _____ dated _____ has been granted.

I/We enclose a Bank Guarantee/from _____ Bank for a sum of Rs. _____ (Rupees _____) as Earnest Money and a sum of Rs. _____ (Rupees _____) as Security Deposit in respect of this Tender.

The full value of the Earnest Money shall stand forfeited without prejudice to any other rights or if :

- (a) I/We do not execute the Agreement within 7 (seven) days after receipt of the notice issued by RDSO so that such Agreement is ready for.
- (b) I/We do not commence the work within a reasonable period after the date stipulated in the approved Schedule of work.
- (c) Until a formal Agreement is prepared and executed acceptance of this Tender shall constitute binding Contract between us subject to modifications as may be mutually agreed to between us and indicated in the Letter of Acceptance of my/our offer for this work.
- (d) I/We enclose the Income Tax Clearance Certificate or a declaration to that effect on required, of the Tender papers pertaining to me/us for the year _____.
- (e) I/WE have no retired Engineer or retired Gazetted Officer of the Electrical Department of any of the Railways owned and administered by the President of India.

The list of the Retired Engineers or Retired Gazetted Officers who are associated with me/us included as an Enclosure to this letter.
Yours faithfully,

Signature of the Tenderer(s)

SEAL OF THE TENDERER

Place _____

Date _____

Witnessed by :

1. Signature _____

2. Signature _____

Name in Block Letters _____

Name in Block Letters _____

Address _____

Address _____

GOVERNMENT OF INDIA : MINISTRY OF RAILWAYS
RESEARCH, DESIGNS & STANDARDS ORGANISATION
MANAK NAGAR, LUCKNOW-226 011.

ELECTRICAL MAINTENANCE SECTION

OPEN TENDER NOTICE

Sealed offers against open tenders are invited by Electrical Maintenance Section, RDSO, Manak Nagar, Lucknow, for & on behalf of President of India, to be opened on **03.01.2013 at 15.30 hrs.** in the office of ADE/EMS. In case, the date of opening of tender happens to be a holiday, the tenders will be opened on the next working day at specified time and place.

Tender Notice No.	Description of Work	Approx. Cost Of Work	Earnest Money	Cost of Tender Document	Completion Time
16/2012-13	Air-conditioning work in Traction Installation Directorate	37,83,000.00	75,660.00	2000.00 OR 2500.00 (By Post)	Nine Months

Tender documents (Non-transferable) can be obtained from the office of the undersigned on any working day between **10.00 hrs to 17.00 hrs.** w.e.f. **04.12.2012 to 02.01.2013** and till **12.00 hrs.** on **03.01.2013**. The cost of Tender Document as mentioned above is non-refundable. Cost of tender documents is to be submitted in the form of Demand Draft of **State Bank of India** or of any of the **Nationalized/Scheduled Banks** in favour of **Executive Director Finance, RDSO, Lucknow** at the time of purchase / submission of the tender. For purchasing tender set by post, Demand Draft of State Bank of India or of any of the Nationalized/Scheduled Banks in favour of Exe. Director Finance/RDSO, Lucknow is required to be sent to this office. Department will not take any responsibility on account of delay/loss or miss-delivery of Tender Sets/Offeres sent by post. This shall be submitted separately and in addition to the earnest money, failing which the tender offer will be rejected summarily.

Earnest Money shall be furnished in any form mentioned in the Tender documents. Tenders not accompanied with requisite Earnest Money are liable to be summarily rejected.

A Copy of the License for **'A' Class** Electrical Contractor license, issued by Director, Electrical Safety of State Govt. Of U.P. or of equal Status of any other State Govt/ **OEM or his authorized dealer** duly attested by a Gazetted officer of State/Central Govt. shall be submitted with tender documents.

OEM or his authorized dealer which are not having 'A' Class contractor license has to engage a firm having electrical contractor license as defined above for executing electrical work related to safety of the system, however, the entire responsibility of the work will lie with the OEM, or his authorized dealer.

The original copy shall be produced to the office whenever required for verification.. In the absence of the above tender shall be liable for rejection

Tenderer shall submit necessary attested copies of works carried out during previous three years and current financial year, balance sheet/SARAL with the tender documents mentioned in tender paper "**Section – 1 "PREAMBLE AND GENERAL INSTRUCTIONS TO TENDERERS" – S.No.11-Tender's credentials**" without the above documents the tender shall be liable for rejection.

'Certificates from private individuals for whom such works are executed/being executed should not be accepted.'

Tender documents are also available at RDSO web-site www.rdsso.indianrailways.gov.in and can be downloaded along-with the application form for participation in tender.

Tender offers shall be submitted up to **15.00 hrs.** in the Tender Box kept for the purpose in the office of the undersigned on or before the specified date of opening.

Asstt. Design Engineer {EMS}
for Exe. Director Admin. & EMS.

Case No. : EL/9/ TI/Works/12

Dated: 30.11.2012

भारत सरकार: रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
मानक नगर , लखनऊ - 226011
विद्युत अनुसंधान अनुभाग
खुली निविदा सूचना

भारत के राष्ट्रपति की ओर से, विद्युत अनुसंधान अनुभाग, अनुसंधान अभिकल्प और मानक संगठन, मानक नगर, लखनऊ, द्वारा निम्नलिखित कार्य हेतु मुहरबंद खुली निविदा सूचना आमंत्रित की जाती है, जो सहा0अभि0अभि0/वि0अ0अ0 के कार्यालय में दिनांक 03.01.2013 को 15.30 बजे खोली जायेगी। निविदा खुलने की तिथि को अवकाश हो जाने की परिस्थिति में निविदायें उसके बाद के कार्य दिवस में नियत समय तक प्राप्त एवं खोली जायेगी।

निविदा सूचना	कार्य का नाम	कार्य की अनुमानित लागत	बयाना राशि	निविदा प्रपत्र का मूल्य	समय अवधि
16/2012-13	कर्षण संस्थापन निदेशालय में वातानुकूलन का कार्य।	37,83,000.00	75,660.00	2000.00 एवं 2500.00 डाक द्वारा	तीन माह

निविदा प्रपत्र (अहस्तान्तरिय) अघोहस्ताक्षरी के कार्यालय से दिनांक 04.12.12 से दिनांक 02.01.13 तक किसी भी कार्य दिवस में 10.00 बजे से 17.00 बजे तक एवं दिनांक 03.01.2013 को 12.00 बजे तक प्राप्त किए जा सकते हैं। निविदा प्रपत्र की उपरोक्त कीमत अप्रत्यर्पणीय है। निविदा प्रपत्र की कीमत खरीदने/जमा करने के समय मांग ड्राफ्ट जो कि भारतीय स्टेट बैंक या कोई भी राष्ट्रीयकृत/शेड्यूल बैंक के रूप में कार्य.निदे. वित्त, अ.अ.मा.सं., लखनऊ के पक्ष में जारी हो संलग्न करना होगा। डाक द्वारा निविदा प्रपत्र मंगाने के लिये का. निदे. वित्त अ.अ.मा.सं. लखनऊ के पक्ष में उपरोक्त वर्णित कीमत का मांग ड्राफ्ट जो कि भारतीय स्टेट बैंक या कोई भी राष्ट्रीयकृत/शेड्यूल बैंक के रूप में कार्य.निदे. वित्त, अ.अ.मा.सं., लखनऊ के पक्ष में इस कार्यालय को भेजे। डाक द्वारा भेजे गये निविदा प्रपत्र / प्रस्तावों के देर से पहुंचने, खोने, क्षतिग्रस्त होने या गलत बंट जाने पर विभाग की कोई जिम्मेदारी नहीं होगी। यह धन राशि बयाना राशि के अतिरिक्त अलग से जमा की जायेगी, जिसके न होने पर निविदा सस्सरी तौर पर निरस्त कर दी जायेगी।

बयाना राशि निविदा प्रपत्र में वर्णित किसी भी रूप में बनवाई जा सकती है। बयाना राशि के अभाव में निविदा सस्सरी तौर पर निरस्त कर दी जायेगी।

निविदा प्रपत्र के साथ 'क' श्रेणी के विद्युत टेकेंदारी के लाईसेंस की प्रमाणित प्रतिलिपि जो कि निदेशक, विद्युत सुरक्षा, उत्तर प्रदेश शासन या उसके समकक्ष अन्य राज्य सरकारों द्वारा जारी हो / ओईएम या उसके प्राधिकृत डीलर जो कि राज्य/केन्द्रीय सरकार के राजपत्रि अधिकारी द्वारा सत्यापित हो, निविदा के साथ संलग्न करें।

ओईएम या उसके प्राधिकृत डीलर जिनके पास 'क' श्रेणी का लाईसेंस नहीं है उन्हें सिस्टम की सुरक्षा से सम्बन्धित विद्युतीय कार्य को कराने के लिए एक फर्म को नियुक्त करना होगा, जिसके पास उपर्युक्त परिभाषित विद्युत टेकेंदारी का लाइसेंस हो। ऐसा होने पर, कार्य की सम्पूर्ण जिम्मेदारी ओईएम या उसके प्राधिकृत डीलर की होगी।

मूल प्रति आवश्यकतानुसार सत्यापन हेतु आफिस में प्रस्तुत करनी होगी। इसके अभाव में 'निविदा' को सस्सरी तौर पर निरस्त कर दिया जायेगा।

निविदाकर्ता अपने निविदा प्रपत्र के साथ आवश्यक प्रमाणित प्रतिलिपियाँ पिछले तीन वर्षों में एवं वर्तमान वित्त वर्ष में किये गए कार्य एवं बैलेंस शीट / सरल प्रपत्र जैसा कि निविदा प्रपत्र के "Section - 1 "PREAMBLE AND GENERAL INSTRUCTIONS TO TENDERERS" - S.No.11-Tender's credentials", में अंकित है, संलग्न करें। इसके अभाव में 'निविदा' को सस्सरी तौर पर निरस्त कर दिया जायेगा।

निजी व्यक्तियों से प्रमाण पत्र जिनके लिए इस तरह के कार्यों को किया गया/जा रहा है स्वीकार नहीं किया जायेगा।

निविदा प्रपत्र अ.अ.मा.सं. की वेब साइट www.rdso.indianrailways.gov.in पर आवेदन पत्र के साथ उपलब्ध हैं जिन्हें डाउन लोड करके टेण्डर में भाग लिया जा सकता है।

निविदा प्रस्ताव निश्चित तिथि को 15.00 बजे तक या उससे पहले अघोहस्ताक्षरी के कार्यालय में इस उद्देश्य के लिए रखे निविदा बक्से में डालने होंगे।

फाइल संख्या :- ईएल/9/टीआई/कार्य/12
दिनांक:- 30.11.12

सहा.अभि.अभि./वि.अ.अ.
कृते का.निदे./प्रशा.व वि.अनु.अनु

SECTION – I

PREAMBLE & GENERAL INSTRUCTIONS TO TENDERERS

SECTION –I

PREAMBLE AND GENERAL INSTRUCTIONS TO TENDERERS

1.0 INSTRUCTIONS TO TENDERERS

- 1.1 On behalf of the President of India, Exe. Dir./ Admin. & EMS, Dir./EMS and ADE/EMS hereinafter referred to as 'RDSO' invites tenders from established, experienced and reliable manufacturers, contractors for execution of electrical works as detailed in Part-II and advertised in notice inviting tender in RDSO/Lucknow.
- 2.0 The contract emerging out of this tender shall be referred to as "Work Contract" and the Contractor who is awarded the work contract shall be referred to "Work Contractor".

TENDER DOCUMENTS

- 1.0 This Tender document consists of two parts (Part-I & II).
- 1.1 Part-I consists of Tender Notice and the following :-
- 1.2 Section-I : Preamble and General Instructions to Tenderers.
- 1.3 Section-II : General Conditions of the Contract.
- 2.0 Part-II consists of the following :-
- 2.1 Section-III : Special Condition of the Contract..
- 2.2 Section- IV : Technical Specification
- 2.3 Section-V : Schedule of Work.
- 2.4 Section- VI : Annexures I to IX to be filled by the tenderer.

Two parts as explained above shall be collectively referred to as the Tender Papers or Tender Documents.

3.0 TENDER DOCUMENTS:

- 3.1 Tender documents can be had from the office of the ADE/EMS/RDSO, Lucknow on any working day from 10.00 hrs. to 17.00 hrs. w.e.f. 04.12.12 & up to 12.00 hrs on 03.01.13 on payment of Rs.2000.00 (Rupees Two Thousands Only) in shape of DD per set. If the same are required by post, an additional sum of Rs.500.00 (Rupees Five Hundred Only) per set should be deposited towards postal charges. The cost of the Tender Form is not refundable and the Tender Form is not transferable.
- 3.2 These Tender documents must be submitted duly completed in all respects in Sealed Cover Super scribed as "**Tender Notice No. 16/2012-13** and for the work "**Air-conditioning work in Traction Installation Directorate**" on top sheet and should be deposited in the Tender Box in the office of the ADE/EMS/RDSO/Lucknow up to 15.00 hrs. on **03.01.13**. The Tenders will be opened immediately thereafter and rates read out in the presence of such Tenderers as is/are present. Tenders who are received after the time and date specified above, may not be considered. In case, the intended date for opening of Tenders is declared a holiday then the tenders will be opened on the next working day at the same time.
- 3.3 Tenders Sealed and Super scribed as aforesaid can also be sent by Registered Post addressed to the ADE/EMS/RDSO, Lucknow but the Tender which is received after the time and date specified in para 3.1 above may not be considered. However, department will not take any responsibility on account of delay/loss or misplacement of tender offers sent by post.
- 3.4 The rates should be quoted in figures as well as in words. If there is variation between the rates quoted in figures and in Words, the rates quoted in "Words" shall be taken as correct. If more than one improper rates are tendered for, the same Item. The tender is liable to be rejected.
- 3.5 Each page of the Tender papers is to be signed and dated by the Tenderers or such person(s) on his/their behalf who is/are legally authorised to sign for him/them.

4.0 FINANCE OF THE CONTRACT

The Contract shall be financed from RDSO own resources.

5.0 VALIDITY OF TENDER

Tenderer shall keep his offer open for a minimum period of 90 (ninety) days from the date of opening of the Tender or as mentioned in the Tender Notice.

6.0 EARNEST MONEY

6.1 The tenderer shall be required to deposit earnest money with the tender for the due performance with the stipulation to keep the offer open till such date as specified in tender, under the conditions of tender. The earnest money shall be 2% of the estimated tender value as indicated in the Tender Notice. The earnest money shall be rounded to the nearest Rs. 10.

A.

It shall be understood that the tender documents have been sold/issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in manner not acceptable to the Engineer. If the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to the RDSO.

B. If the tender is accepted this earnest money mentioned in sub clause (A) above will be retained as part security for the due and faithful fulfillment of the contract in terms of clause 16 of the General Conditions of Contract. The earnest money of other Tenderers, shall save as herein before provided, be returned to them, but the RDSO shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon.

6.2 The Earnest Money shall be in the shape of DD or in any of the following forms in favor of **EXECUTIVE DIRECTOR FINANCE, RDSO, LUCKNOW**, without which the tender is liable to be summarily rejected

{i} Deposit receipts, Pay orders, Demand Drafts. These forms of Earnest Money should be either of the **STATE BANK OF INDIA OR OF ANY OF THE NATIONALIZED/SCHEDULED BANKS.**

{ii} Deposit receipt executed by the scheduled Banks (Other than the State Bank of India and the Nationalized Banks) approved by the Reserve Bank of India for this purpose.

6.3 The tenderer shall keep the offer open up to 90 days. If the tenderer fail to keep the offer open for entire validity or period or resile from the contract after acceptance of the tender, the aforesaid amount shall be liable to be forfeited to the RDSO.

6.4 The Tender must be accompanied by a sum of **Rs. 75,660.00 {Rs. Seventy Five Thousands Six Hundred Sixty Only}** as Earnest Money in the manner prescribed in Para 6.2 above, failing which the tender shall be summarily rejected.

7.0 SECURITY DEPOSIT ON ACCEPTANCE OF TENDER

7.1 The Earnest Money deposited by the contractor with his tender will be retained by the RDSO as part of Security for the due and faithful fulfillment of the contract by the contractor. The balance to make up the security deposit, the rates for which are given below, may be deposited by the contractor in cash or may be recovered by percentage deduction from the contractor's "On account" bills. Provided also that in case of defaulting contractor the RDSO may retain any amount due for payment to the contractor on the pending "On account bills" so that the amounts so retained may not exceed 10% of the total value of the contract.

7.2 Un less otherwise specified in the special conditions, if any, the security deposit/rate of recovery/mode of recovery shall be as under:-

(a) Security deposit for each work should be 5% of the contract value.

(b) The rate of recovery should be at the rate of 10% of the bill amount till the full security deposit is recovered.

(c) Security deposits will be recovered only from the running bills of the contract and no other mode of collecting SD such as SD inform of instruments like BG, FD etc. shall be accepted towards security deposits. Security deposit shall be returned to the contractor after the physical completion of the work as certified by the competent authority. The competent authority shall normally be the authority who is competent to sign the contract. If this competent authority is of the rank lower than JA grade, than a JA grade officer (Concerned with the work) should issue the certificate. The certificate, inter-alia, should mention that the work has been completed in all respects and that the contractors have fulfilled all the contractual/obligations and that there is no due from the contractor to RDSO against the contract concerned. Before releasing the SD, an unconditional and unequivocal no claim certificate from the contractor concerned should be obtained.

7.3 No interest will be payable upon the earnest money and security deposit or amounts payable to the contractor under the contract,

8.0 PERFORMANCE GUARANTEE (PG)

The procedure for obtaining Performance Guarantee is out lined below:

- a) The successful bidder shall have to submit a Performance Guarantee (PG) with in 30 (Thirty) days from the date of issue of letter of acceptance (LOA). Extension of time for submission of PG beyond 30 (Thirty) days and up to 60 days from the date of issue of LOA may be given by the authority who is competent to sign the contract agreement. However, a panel interest of 15% per annum shall be charged for the delay beyond 30 (Thirty) days, i.e. from 31st day after the date of issue of LOA. In case the contractor fails to submit the requisite PG even after 60 days from the date of issue of LOA the contract shall be terminated duly forfeiting EMD and other dues, if any payable against that contract. The failed contractor shall be debarred from participating in retender for that work.

- b) The successful bidder shall submit the performance guarantee (PG) in any of the following forms amounting to 5% of the contract value:
 - i) A deposit of cash
 - ii) Irrevocable Bank Guarantee.
 - iii) Government Securities including State loan Bonds at 5% below the market value.
 - iv) Deposit receipts, Pay orders, Demand Drafts and Guarantee Bond. These forms of performance guarantee could be either of the State Bank of India or of any of the Nationalized Banks.
 - v) Guarantee Bonds executed or Deposits receipts tendered by all schedule Banks.
 - vi) A deposit in the Post Office Saving Bank.
 - vii) A Deposit in the National Saving Certificates.
 - viii) 12 Years National Defense Certificates.
 - ix) 10 Years Defense Deposits.
 - x) National Defense Bonds and
 - xi) Unit Trust Certificates at 5% below market value or at the face value whichever is less.

Also FDR in favour of Exe. Director Finance, RDSO, Lucknow. (Free from any encumbrance) may be accepted.

Note: The instruments as listed above will also be acceptable for guaranties in case of mobilization advance.

- c) The performance guarantee shall be submitted by the successful bidder after the letter of acceptance (LOA) has been issued, but before signing of the contract agreement. This PG shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets extended, the contractor shall get the validity of PG extended to cover such extended time for completion of work plus 60 days.
- d) The value of PG to be submitted by the contractor will not change for variation up to 25% (Either increase or decrease). In case during the course of execution, value of contract increase by more than 25% of the original contract value, on additional performance guarantee amounting to 5% (Five percent) for the excess value over the original contract value shall be deposited by the contractor.
- e) Performance Guarantee (PG) shall be released after physical completion of the work based on "Completion certificate" issued by the competent authority stating that the contractor has completed the work in all respect satisfactorily. The security deposit shall, however, be released only after expiry of the maintenance period and after passing the final bill based on "No claim certificate" from the contractor.
- f) Whenever the contract is rescinded, the security deposit shall be forfeited and the Performance guarantee shall be en-cashed. The balance work shall be got done independently without risk and cost of the failed contractor. The failed contractor shall be debarred from participating in the tender for executing the balance work. If the failed contractor is a JV or a partnership firm, then every member/ partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV/Partnership firm.
- g) The engineer shall not make a claim under the performance guarantee except for amounts to which the President of India is entitled under the contract (Notwithstanding and / or without prejudice to any other provisions in the contract agreement) in the event of
 - i) Failure by the contractor to extend the validity of the performance guarantee as described herein above, in which event the engineer may claim the full amount of the performance guarantee.
 - ii) Failure by the contractor to pay President of India any amount due, either as agreed by the contractor or determined under any of the clauses/conditions of the agreement, within 30 days of the service of notice to this effect by engineer.
 - iii) The contract being determined or rescinded under provision of the GCC, the performance guarantee shall be forfeited in full and shall be absolutely at the disposal of the President of India.

9.0 TENDERER'S ADDRESS

The Tenderer should state in the Tender his Postal Address legibly and clearly. Any communication sent in time to the Tenderer by post at his said address shall be deemed to have reached the Tenderer duly and in time important documents should be sent by Registered Post.

10.0 METRIC UNIT

All the measurements shall be quoted in Metric Units.

11.0 CREDENTIALS OF TENDERERS

The tenderer shall provide satisfactory evidence acceptable to RDSO that: -

- 11.1 A Copy of the License for '**A**' Class Electrical Contractor license, issued by Director, Electrical Safety of State Govt. Of U.P. or of equal Status of any other State Govt/ **OEM or his authorized dealer** duly attested by a Gazetted officer of State/Central Govt. shall be submitted with tender documents.

OEM or his authorized dealer which are not having 'A' Class contractor license has to engage a firm having electrical contractor license as defined above for executing electrical work related to safety of the system, however, the entire responsibility of the work will lie with the OEM, or his authorized dealer.

The original copy shall be produced to the office whenever required for verification.. In the absence of the above tender shall be liable for rejection

11.2

- a) He should be an experienced and established contractor who regularly undertakes the execution of similar nature of work and has adequate technical knowledge and practical experience in this specific field. The tenderer has to establish to the full satisfaction of the RDSO, his credentials and technical competency for executing works.

- b) He has adequate financial stability and status to meet the obligations under the contract for which he is required to submit and report from a recognized Bank or a Financial institution.
 - c) He has established organization to ensure that there is adequate quality control at all stages of maintenance of assets offered to him.
 - d) He has adequate equipment, plant & machinery to undertake the work offered to him.
 - e) He would in respect of all materials be falling within the scope of supply as detailed in technical specification and procure only from proven and established manufacturers, tenderer will be required to obtain specific approval of EMS for the type, make and specification of each material proposed to be utilized in the execution of work.
- 11.3 In addition to above, further information regarding his credentials or the credentials of his associates shall, if required by the RDSO, be given by the tendered.
- 11.4 In order to ascertain the above the following documents should be specified for submission along with tender:-
- 11.5 List of personnel, organization available on hand & proposed to be engaged for the subject work.
- 11.6 List of plant & machinery available on hand {own} & proposed to be inducted {own & hired to be given separately} for the subject work.
- List of works completed in the last three financial years giving description of work, organization for whom executed, approximate value of contract at the time of award, date of award and date of scheduled completion of work, date of actual start, actual completion and final value of contract should also be given.
- 11.7 List of works on hand indicating description of work, contract value, approximate value of balance work yet to be done & date of award.

Note: Certificates from private individuals for whom such works are executed / being executed shall not be accepted.

12.0 PERIOD OF COMPLETION

12.1 The entire work is required to be completed in all respects within **09 Months** from the date of issue of the acceptance letter/telegram. Time is the essence of Contract. The Contractor will be required to maintain steady and regular progress to the satisfaction of the Engineer to ensure that the work will be completed in all respects within the stipulated time failing which action may be taken by the Railway Administration in terms of Clause 17 and Clause 62 of the General Conditions of Contract, 1989.

13.0 PRICES

13.1 All the prices shall be quoted as per details shown in material and work schedule, keeping the technical specifications, drawings and Special Conditions of Contract in view.

13.1.1 The unit prices and total prices of each item of work shall be furnished both in words and figures.

13.1.2 All prices shall be firm against all items including all taxes, Excise Duty, Levies, Octroi etc. Any of the forms for exemption of any taxes or duties will not be supplied by RDSO.

14.0 PAYMENTS

14.1 Payments for the work shall be made in accordance with approved designs and drawings and measured in relevant units, except where provided for otherwise. In case the dimensions of the work are more than those shown in approved designs and drawings, the contractor shall not be entitled to any extra payment unless the dimensions are increased on account of physical impossibility of carrying out the work in accordance with approved designs and drawings, subject to approval by the RDSO before execution. In case the dimensions of work are less than those shown in the approved designs and drawing and the work is accepted without being rejected, payment will be made for the quantity of work actually executed and accepted.

14.2 On account payments made to the Contractor shall be without prejudice to the final making up of the accounts and shall in no respect be considered or used as evidence of any facts stated in or to be inferred from such accounts not of any particular quantity of work having been executed.

14.3 Payment to the Contractor shall be made as under:-

14.3.1 80% of the item price (material cost) on receipt of materials in RDSO premises after successful inspection and due certification by Engineer representative at manufacturer's works and or at site of work for this purpose against furnishing of indemnity bond/insurance for supplied material 80% of contract value of each item will be considered as material cost of that item not indicated separately by the Tenderer subject to the submission of the following :

- (a) Suppliers' Challan
- (b) Inspection Certificate granted by the Engineer or his authorised representative.
- (c) Certificate of the receipt of material at Railway (RDSO) site of work fully accepted by the Engineer or his authorised representative.
- (d) Certificate that the stores have been issued against all risks.

14.3.2 Further payment of material and erection cost to cover 90% of the contract price on successful completion of inspection and due certification of installation and testing of all materials including equipment by Engineer's representative.

14.3.3 Balance 10% payment shall be released after successful completion of work and certification by Engineer's representative against Guarantee Bond/Bank Guarantee valid for 12 months of equal amount (10% of Contract value) towards performance guarantee.

14.3.4 The Security money already deposited by the Contractor (Para 6.2) of this Chapter at the discretion of the Contractor be adjusted towards payment of 10% Contract value for performance guarantee

valid for 12 months are as specified in guarantee period clause in the related specification as per requirements.

15.0 **TAXES**

15.1 Income Tax at the prevailing rates, will be deducted from all the Bills of the Contractor in accordance with the Section 1940 of the Income Tax Act 1961 as introduced through the Finance Act of 1972 or any amendment or modification thereof.

15.2 Sales Tax on works Contracts: Sales Tax on works contracts as per prevailing rates of 5% or as revised by the Govt. Tax Authorities from time to time will be deducted from the Contractors' payment on the whole or the part thereof.

16.0 **CESS CHARGES**

16.1 Cess Charges {If Applicable} will be deducted from the final payment for the following rates:

(A) 1 to 5 Labours or workmen - @ 64.00 Per Month.

(B) 6 to 10 Labours or workmen - @ 126.00 Per Month.

(C) 11 to 25 Labours or workmen - @ 317.00 Per Month.

Asstt. Design. Engineer / EMS

SECTION – II

GENERAL CONDITIONS OF THE CONTRACT

SECTION – II

1.0 DEFINITIONS AND INTERPRETATIONS

- 1.1 Definition - In these General Conditions of the Contract, the following terms shall have the meanings assigned here under except where the context otherwise required.
- 1.1.1 **“RDSO”** shall mean the President of the Republic of India or the Administrative Officers of the RDSO or of the successor RDSO authorised to deal with any matters which these presents as concerned on his behalf.
- 1.1.2 **“Director General”** shall mean the officer in charge of the General Superintendence and control of the RDSO and shall also include the ED/Admin.& EMS and shall mean and include their successors , of the successors RDSO.
- 1.1.3 Executive Director/Admin. & EMS shall mean the officer in-charge of the Electrical Maintenance Section of RDSO and shall also include ADE/EMS and shall mean and include their successors of the successor RDSO.
- 1.1.4 Engineer’s representative shall mean the Asstt. Design Engineer/EMS in direct charge of the works and shall include any SSE/JE appointed by the RDSO and shall mean and include the Engineer’s Representative of the successor RDSO.
- 1.1.5 **“Contractor”** shall mean the person/ firm/Co-operative Society or company whether incorporated or not, who enters into the contract with the RDSO and shall include their executor’s administrators, successors and permitted assign.
- 1.1.6 **“Contract”** shall mean and include the agreement of work order, the accepted schedule of rates or the schedule of rates of RDSO modified by the tender percentage for items of works quantified or not quantified, the general conditions of contract, the special conditions of contracts if any, the drawings, the specifications, the special specifications, if any, and tender forms, if any.
- 1.1.7 **“Work”** shall mean the works to be executed in accordance with the Contract.
- 1.1.8 **“Specifications”** shall mean the standard Specification for materials and works of RDSO issued under the authority of the ED/Admin. & EMS are as amplified, added to or superseded by Specification, if any.
- 1.1.9 Schedule of rates **RDSO** shall mean the schedule of rates issued under the authority of the ED/Admin. & EMS.
- 1.1.10 **“Drawings”** shall mean the maps, drawings, plans and tracings or prints thereof annexed to the Contract and shall include any modification of such drawings and further drawings as may be issued by the engineer from time to time.
- 1.1.11 **“Constructional Plant”** shall mean all appliances or things of whatsoever nature required for the execution, completion or maintenance of the works or temporary works (as hereinafter defined) but does not include materials or other things intended to form or forming part of the permanent work.
- 1.1.12 **“Temporary Work”** shall mean all temporary work every kind required for the execution, completion and / or maintenance of the work.
- 1.1.13 **“Site”** shall mean the lands and other places, on under in or through which the works are to be carried out and any other land or places provided by the RDSO for the purposes of the Contract.
- 1.1.14 **“Period of Maintenance”** shall mean the specified period of maintenance from the date of completion of the works as certified by the Engineer.
- 1.1.15 The term **“Test”** shall mean such test or tests as are prescribed by the Specifications to be made by the Administration or his nominee during the manufacture, installation and commissioning at site before the plant is taken over by the RDSO.
- 1.2 Singular and Plural

Words importing the singular number shall also include the plural and vice versa where the context requires.

1.3 Headings and Marginal Headings

The headings and marginal headings in these General Conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.

2.0 EXECUTION, CORRELATION AND INTENT OF CONTRACT DOCUMENTS

- 2.1 The Contract documents shall be signed in Triplicate by the RDSO and the Contractor. The Contractor documents are complementary, and what is called for by any one shall be as binding as

if called for by all. The intention of the documents is to include all labour and materials, equipment and transportation, necessary for the proper execution of the works. Materials or work not covered by or properly inferable from any heading or class of the Specifications shall not be supplied by the RDSO in the Contract unless distinctly specified in the Contract documents. Materials or works described in words which so applied have a well known technical or trade meaning shall be held to refer to such recognised standards.

- 2.1.1 If a work is transferred from the jurisdiction of one work place to another work place or to a project authority or vice versa while the Contract is in subsistence, the Contract shall be binding on the Contractor and the successor RDSO/project in the same manner and take effect in all respects as if the Contractor and the successor RDSO/Project were parties thereto from the inspection and the corresponding officer or the competent authority in the successor RDSO/Project will exercise the same powers and enjoy the same authority as conferred to the Predecessor RDSO/Project under the original contract agreement entered into.
- 2.1.2 If for administrative or other reasons the Contract is transferred to the successor RDSO, the Contract shall notwithstanding anything contained herein contrary thereto, be binding on the Contractor and the successor RDSO in the same manner and take effect in all respects as if the Contractor and the successor RDSO had been parties thereto from the date of this Contract.

3.0 LAW GOVERNING THE CONTRACT

3.1 The Contract shall be governed by the law for the time being in force in the Republic of India.

3.2 Compliance to Regulations and Bye-laws

3.2.1 The Contractor shall conform to the provision of any statute relating to the works and regulations and bye-laws of any local authority and of any water and lighting companies or undertaking with whose system the work is proposed to be connected and shall before making any variation from the drawings or the Specifications that may be necessitated by so conforming, give to the Engineer, notice specifying the variation proposed to be made and the reason for making the variation and shall not carry out such variation until he has received instructions from the Engineer in respect thereof. The Contractor shall be bound to give all notices required by statute regulation or bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

4.0 COMMUNICATIONS TO BE IN WRITING

4.1 All notices, communications, reference and complaints made by the RDSO of the Engineer or the Engineers representative or the Contractor inter so concerning the works shall be in writing and no notice, communication, reference or complaint not in writing shall be recognised.

1.0 SERVICE OF THE NOTICES ON CONTRACTORS

The Contractor shall furnish to the Engineer the name, designation and address of his authorised Agent and all complaints, notices, communications and references shall be deemed to have been duly given to the Contractor if delivered to the Contractor or his authorised agent or left at or posted to the address so given and shall be deemed to have been so given in the case of posting on day on which they would have reached such address in the ordinary course of post or on the day on which they were so delivered or left. In the case of Contract by partners, any change in the Constitution of the firm shall be forthwith notified by the Contractor to the Engineer.

1.0 OCCUPATION AND USE OF LAND

1.1 No land belonging to or in the possession of the RDSO shall be occupied by the Contractor without the permission of the RDSO. The Contractor shall not use, or allow to be used, the site for any purpose other than that of executing the works.

7.0 ASSIGNMENT OR SUB-LETTING OF CONTRACT

The Contractor shall not assign or sublet the Contract or any part thereof or allow any person to become interested therein in any manner whatsoever without the special permission in writing of the RDSO. Any breach of this condition shall entitle the RDSO to rescind the Contract under Clause 62 of these conditions and also render the Contractor liable for payment to the RDSO in respect of any loss or damage arising or ensuing from such cancellation. Provided always that execution of the details of the works by petty Contractor under the direct and personal supervision of the Contractor or his agent shall not be deemed to be sub-letting under this Clause. The permitted sub-letting of work by the Contractor shall not establish any contractual relationship between the sub-contractor and the RDSO and shall not relieve the Contractor of any responsibility under the Contract.

8.0 ASSISTANCE BY THE RDSO FOR THE STORES BE OBTAINED BY THE CONTRACTOR

Owing to difficulty in obtaining certain materials (including tool and plant) in the market, RDSO may have agreed without any liability, therefore, to Endeavour to obtain or assist the Contractor in obtaining the required quantities of such materials as may be specified in the tender. In the event of delay or failure in obtaining the required quantities of the aforesaid materials, the Contractor shall not be deemed absolved of his own responsibility and shall keep in touch with the day to day position regarding their availability and accordingly adjust the progress of the work including the employment of labour and the RDSO shall not in

any way be liable for the supply materials or for the non-supply thereof for any reason whatsoever nor for any loss or damage arising in consequence of such delay or non-supply.

9.0 RAILWAY PASSES

No free Railway passes shall be issued by the RDSO to the contractor or any of his employee/worker.

10.0 CARRIAGE OF MATERIALS

No forwarding orders shall be issued by the RDSO for the conveyance of Contractor's materials, tools and plants by Rail which may be required for use in the works and the Contractor shall pay full freight charges at public tariff rates there for.

11.0 USE OF BALLAST TRAINS

The RDSO may agree to allow the Contractor, the use of ballast or material trains under such conditions as shall be specially prescribed, provided that the Contractor shall pay for the use thereof charges calculated at public tariff rates on the marked carrying capacity of each vehicle subject to a specified minimum charge per day or part of day and provided further that the Contractor shall indemnify the RDSO against any liabilities under damages arising out of the use or misuse thereof and against any liabilities under the Workmen's Compensation Act, 1923 or any statutory amendment thereto.

12.0 REPRESENTATION ON WORKS

The Contractor shall, when he is not personally present on the site of the works, place and keep a responsible agent at the works during working hours who shall on receiving reasonable notice present himself to the Engineer and orders given by the Engineer or the Engineer's representative to the agent shall be deemed to have the same force as if they had been given to the Contractor. Before absenting himself, the Contractor shall furnish the name and address of his agent for the purpose of this Clause and failure on the part of the contractor to comply with this provision at any time will entitle the RDSO to rescind the contract under clause 62 of these conditions.

13.0 RELICS AND TREASURES

All gold, silver, oil and other minerals of any description and all precious stones, coins, treasures, relics, anti-quietist and other similar things which shall be found in or upon the site shall be the property of RDSO and the Contractor shall duly preserve the same to the satisfaction of the RDSO and shall from time to time deliver the same to such person or persons as the RDSO may appoint to receive the same.

14.0 EXCAVATED MATERIALS

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 which may be 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 RDSO provided that the Contractor may with the permission of the Engineer use the same for the purpose of the works either free of cost or pay the cost of the same at such rates as may be determined by the Engineer.

15.0 INDEMNITY BY THE CONTRACTORS

The Contract shall indemnify and save harmless the RDSO from and against all actions, suits, proceedings, losses, costs, damages, charges, claims and demands of every nature and description brought or recovered against RDSO by reasons of any act or omission of the Contractor, his agents or employees, in the execution of the works or in his guarding of the same. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to applied to the actual loss or damage sustained and whether or not any damage shall have been sustained.

16.0 EARNEST MONEY AND SECURITY DEPOSIT

16.1 The tenderer shall be required to deposit earnest money with the tender for the due performance with the stipulation to keep the offer open till such date as specified in tender, under the conditions of tender. The earnest money shall be 2% of the estimated tender value as indicated in the Tender Notice. The earnest money shall be rounded to the nearest Rs. 10.

16.2 It shall be understood that the tender documents have been sold/issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in manner not acceptable to the Engineer. If the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to the RDSO.

16.3 If the tender is accepted this earnest money mentioned in sub clause (A) above will be retained as part security for the due and faithful fulfillment of the contract in terms of clause 16 of the General Conditions of Contract. The earnest money of other tenderers, shall save as herein before provided, be returned to them, but the RDSO shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon.

- 16.4 (i) The Earnest Money shall be in cash to be deposited with D.C.P.M. Office, Charbagh, Lucknow or in any of the following forms in favor of Executive Director Finance, RDSO, without which the tender is liable to be summarily rejected
- {ii} Deposit receipts, Pay orders, Demand Drafts. These forms of Earnest Money should be either of the State Bank of India or of any of the Nationalized/Scheduled Banks.
- 16.5 Deposit receipt executed by the scheduled Banks (Other than the State Bank of India and the Nationalized Banks) approved by the Reserve Bank of India for this purpose.
- 16.6 The tenderer shall keep the offer open up to 90 days. If the tenderer fail to keep the offer open for entire validity or period or resile from the contract after acceptance of the tender, the aforesaid amount shall be liable to be forfeited to the R.D.S.O.
- 16.7 The Earnest Money deposited by the contractor with his tender will be retained by the RDSO as part of Security for the due and faithful fulfilment of the contract by the contractor. The balance to make up the security deposit, the rates for which are given below, may be deposited by the contractor in cash or may be recovered by percentage deduction from the contractor's "On account" bills. Provided also that in case of defaulting contractor the RDSO may retain any amount due for payment to the contractor on the pending "On account bills" so that the amounts so retained may not exceed 10% of the total value of the contract.
- 16.8 Un less otherwise specified in the special conditions, if any, the security deposit/rate of recovery/mode of recovery shall be as under:-
- (a) Security deposit for each work should be 5% of the contract value. The rate of recovery should be at the rate of 10% of the bill amount till the full security deposit is recovered. Security deposits will be recovered only from the running bills of the contract and no other mode of collecting SD such as SD in form of instruments like BG, FD etc. shall be accepted towards security deposits.
- (b) Security deposit shall be returned to the contractor after the physical completion of the work as certified by the competent authority. The competent authority shall normally be the authority who is competent to sign the contract. If this competent authority is of the rank lower than JA grade, than a JA grade officer (Concerned with the work) should issue the certificate. The certificate, inter-alia, should mention that the work has been completed in all respects and that the contractors have fulfilled all the contractual/obligations and that there is no due from the contractor to RDSO against the contract concerned. Before releasing the SD, an unconditional and unequivocal no claim certificate from the contractor concerned should be obtained.
- 16.9 No interest will be payable upon the earnest money and security deposit or amounts payable to the contractor under the contract, The Earnest Money deposited by the contractor with his tender will be retained by the RDSO as part of Security for the due and faithful fulfillment of the contract by the contractor. The balance to make up the security deposit, the rates for which are given below, may be deposited by the contractor in cash or may be recovered by percentage deduction from the contractor's "On account" bills. Provided also that in case of defaulting contractor the RDSO may retain any amount due for payment to the contractor on the pending "On account bills" so that the amounts so retained may not exceed 10% of the total value of the contract. Un less otherwise specified in the special conditions, if any, the security deposit/rate of recovery/mode of recovery shall be as under:-
- 16.10 Security deposit for each work should be 5% of the contract value. The rate of recovery should be at the rate of 10% of the bill amount till the full security deposit is recovered. Security deposits will be recovered only from the running bills of the contract and no other mode of collecting SD such as SD in form of instruments like BG, FD etc. shall be accepted towards security deposits.
- 16.11 INTEREST ON AMOUNTS
No interest will be payable upon the Earnest Money or the security deposit or amounts payable to the Contractor under the Contract.
- 17.0 FORCE MAJEURE CLAUSE**
- If at any time, during the continuance of this contract, the performance for whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, acts of public enemy, civil commotion, sabotage, serious loss or damage by fire, explosions, epidemics, strikes, lock out or acts of God (Here in after referred to 'events') provided, notice of the happening of any such events is given by either party to the other with in days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non performance of delay in performance, and works under the contract shall be resume as soon as practicable after such event has come to an end or ceased to exist, and decision of the Engineer as to whether the works have been so resumed or not shall be final and conclusive, PROVIDED FURTHER that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding..... days, either party may at its option terminate the contract by giving notice to the other party.
- 17A Subject to any requirement in the Contract as to completion of any portion or portions of the works before completion of the whole, the Contractor shall fully and finally complete the whole of the works comprised in the Contract (with such modifications as may be directed under conditions of this contract) by the date entered in the Contract or extended date in terms of the following clauses:
- (I) If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may

be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise and in any case not less than one month before the expiry of the date fixed for completion of the works.

- (II) If the opinion of the Engineer the progress of work has any time been delayed by any act or neglect of RDSO's employees or by other Contractor employed by the RDSO under Sub-clause (4) of Clause 20 of these conditions or in executing the work not forming part of contract but on which contractor's performance necessarily depends or by reason of proceeding taken or threatened by or dispute with adjoining or neighboring owners, or public authorities arising otherwise through the Contractors own default etc. or by the delay authorized by the Engineer pending arbitration or in consequences of the Contractor not having received in due time necessary instructions from the RDSO for which he shall have specially applied in writing to the Engineer or his authorized representatives the upon happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Engineer within 15 days of such happening but shall nevertheless make constantly his best endeavors to bring down or make good the delay and shall do all that may be reasonably required of him to the satisfaction of the Engineer to proceed with the works. The contractor may also indicate the period for which the work is likely to be delayed and shall be bound to ask for necessary extension of time. The Engineer on receipt of such request from the contractor shall consider the same and shall grant such extension of time as in his opinion is reasonable having regard to the nature and period of delay and the type and quantum of work effected thereby. No other compensation shall be payable for works so carried forward to the extended period of time, the same rates, terms and conditions of contract being applicable as if such extended period of time was originally in the original contract itself.
- (III) In the event of any failure or delay by the RDSO to hand over the Contractor possession of the land necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the RDSO due to any other clause whatsoever, then such failure or delay shall in no way affect or vitiate the Contract or alter the character thereof or entitle the contractor to damages or compensation therefore but in any such case, the RDSO may grant such extension or extensions of the completion date as may be considered reasonable.

17B EXTENSION OF TIME FOR DELAY DUE TO CONTRACTOR

The time for the execution of the work or part of the work or part of the works specified in the contract documents shall be deemed to be of the essence of the contract and the works must be completed not later than the date (s) as specified in the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in the clause 17 & 17A, the RDSO may, if satisfied that the works can be completed by the contractor within reasonable short time thereafter allow the contractor further extension of time (Performa Annexed-I) as the Engineer may decide. On such extension the RDSO will be entitled without prejudice to any other right and remedy available on that behalf to recover from the contractor as agreed damages and not by way of penalty a sum equivalent to ½ of 1% of the contract value of the works for each weeks or part of week.

For the purpose of this clause, a contract value of works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued. Provided also that the total amount of liquidated damages under this condition shall not exceed the under noted percentage value or of the total value of item or groups of items of work for which a separate distinct completion period is specified in the contract.

(i) For contract value up to Rs. 2 Lakhs- 10% of the total value of the contract.

(ii) For contract value above Rs. 2 Lakhs- 10% the 1st Rs. 2 lakh and the 5% of the balance.

Provided further that if the RDSO is not satisfied that the works can be completed by the contractor and in the event of failure on the part of the contractor to complete the work within further extension of time allowed as aforesaid, the RDSO shall be entitled without prejudice to any other right or remedy available in that behalf to appropriate the contractor's security deposits and rescind the contract under clause 62 of these conditions whether or not actual damage is caused by such default.

18.0 ILLEGAL GRATIFICATION

18.1 Any bribe, commission, gift or advantage given, promised or offered by or on behalf to the contractor or his partner, agent or servant or any one on his behalf, to any officer or employee of the RDSO or to any person on his behalf in relation to the obtaining or the execution of this or any other contract with the RDSO shall in addition to any criminal liability which he may incur subject the contractor to the rescission of the contract and all other contracts with the RDSO and to the payment of any loss or damage resulting from such decision and the RDSO shall be entitled to deduct the amounts so payable from any moneys due to the contractor (s) under this contract or any other contract with the RDSO.

18.2 The contractor shall not lend or borrow from or have or enter into any monetary dealings or transactions either directly or indirectly with any employee of the RDSO and if he shall do so the RDSO shall entitle forthwith to rescind the contract and all other contracts with the RDSO. Any question or dispute as to the Commission or any such offence or compensation payable to the RDSO under this clause shall be settled by the Director General of the RDSO in such a manner as he shall consider fit and sufficient and his decision shall be final and conclusive. In the event of rescission of the contract under this clause the contractor will not be paid any compensation what so ever except payment for the work done up to the date of rescission.

19.0 EXECUTION OF WORKS

19.1 Contractor's understanding

It is understood and agreed that the contractor has by the careful examination, satisfied himself as to the nature and location of the work. The confirmation of the ground, the character, quality and the quantity of the materials to be encountered the character of equipment and facilities needed preliminary to and during the progress of the works, the general and local conditions, the labour conditions prevailing therein and all other matters which can in any way affect the works under the contract.

19.2 Commencement of works

The contractor shall commence the works within 15 (Fifteen) days after the receipt by him of an order in writing to this effect from the Engineer and shall proceed with the same with due expedition and without delay.

19.3 Accepted programme of work

The contractor who has been awarded the work shall as soon as possible but not later than 30 days after the date of receipt of the acceptance letter in respect of contracts with initial completion period of 2 years or less or not later than 90 days for other contract have to submit the detailed programme of work indicating the time schedule of various items of works in the form of bar chart/PERT/CPM. He shall also submit the details of organization (in terms of labour & supervisors), plant & machinery that he intends to utilize (from time to time) for execution of the work within stipulated date of completion. The programme of work amended as necessary by discussions with the Engineer, shall be treated as the agreed programme of work for the purpose of this contract and the contractor shall and endeavor to fulfill this programme of work. The progress of work will be watched accordingly in the liquidated damages will be with reference to the overall completion date. Nothing stated herein shall preclude the contractor in achieving earlier completion of item or whole of the works than indicated in the programme.

19.4 Setting out of works

The contractor shall be responsible for the correct setting out of all works in relation to original points, lines and levels of reference at his cost. The contractor shall execute the work true to alignment, grade, levels and dimensions as shown in the drawing and as directed by the Engineer's representative and shall check these at frequent intervals. The contractor shall provide all facilities like labour and instruments and shall cooperate with the Engineer's representative to check all alignment, grade, levels and dimensions, if, at any time, during the progress of the works any error shall appear or arise in any part of the work, the contractor, on being required so to do by the Engineer's representative shall, as his own cost rectify such errors, to the satisfaction of the Engineer's representative. Such checking shall not absolve the contractor of his own responsibility of maintaining accuracy in the work. The contractor shall carefully protect and preserve all bench marks, sight rails, pegs and other things used in setting out the work.

20.1 Compliance to engineer's instructions-

The Engineer shall direct the order in which the several parts of the works shall be executed and the contractor shall execute without delay all orders given by the Engineer from time to time but the contractor shall not be relieved thereby from responsibility for the due performance or the works in all respects.

20.2 Alterations to be authorized

No alterations in or additions to or omissions or abandonment of any part of the works shall be deemed authorized, except under instructions from the Engineer and the contractor shall be responsible to obtain such instructions in each and every case in writing from the Engineer.

20.3 Extra works

Should works over and above those included in the contract require to be executed at the site, the contractor shall have no right to be entrusted with the execution of such works, which may be carried out by another contractor or contractors or by other means at the option of the RDSO.

20.4 Separate contracts in connection with works

The RDSO shall have the right to let other contracts in connection with the works. The contractor shall afford other contractors reasonable opportunity for the storage of their materials and the execution of their works and shall properly connect and coordinate his work with theirs. If any part or the contractor's work depends for the proper execution or results upon the work of another contractor (s) the contractor shall inspect and promptly report to the Engineer any defects in such works that render it un-suitable for such proper execution and results. The contractor's failure so to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other contractor's work after the execution of his work.

21.0 INSTRUCTIONS OF ENGINEER'S REPRESENTATIVE

Any instructions or approval given by the Engineer's representative to the Contractor in connection with the works shall bind the contractors as though it had been given by the Engineer provided always as follows.

21.1 Failure of the Engineer's Representative to disapprove any work or materials shall not prejudice the power of the Engineer thereafter to disapprove such work or materials and to order the removal or breaking up thereof.

21.2 If the Contractor shall be dissatisfied by reason of any decision of the Engineer's Representative he shall be entitled to refer the matter to the Engineer who shall thereupon confirm or vary such decision.

22.1 ADHERENCE TO SPECIFICATIONS AND DRAWINGS

The whole of the works shall be executed in perfect conformity with the specifications and drawings of the contract. If the contractor performs any work in a manner contrary to the specifications or drawings or any of them and without such reference to the Engineer he shall bear all the costs arising or ensuring there from and shall be responsible for all loss to the RDSO.

22.2 Drawings and specifications on the works

The contractor shall keep one copy of drawings and specifications at the site, in good order, and such contract documents as may be necessary, available to the Engineer or the Engineer's Representative.

22.3 Ownership of drawings and specifications

All drawings and specifications and copies thereof furnished by the RDSO to the contractor are deemed to be the property of the RDSO. They shall not be used on other works and with the exception of the signed contract set shall be returned by the contractor to RDSO on completion of work or on termination of the contract.

22.4 Compliance with contractor's request for details

The Engineer shall furnish with reasonable promptness after receipt by him of the contractor's request for the same, additional instructions by means of drawings or otherwise, necessary for the proper execution of the works or any part thereof. All such drawings and instructions shall be consistent with the contract documents and reasonably inferable therefrom.

22.5 Meaning and intent of specifications and drawings

If any ambiguity arises as to the meaning and intent of any portion of the specifications and drawings or as to execution or quality of any work or material or as to the measurements of the works, the decision of the Engineer thereon shall be final subject to the appeal (within 7 days of such decision being intimated to the contractor) to the ED/Admin. & EMS who shall have the power to correct any errors, omissions or discrepancies in the aforementioned items and whose decision in the matter in dispute or doubt shall be final and conclusive.

23.0 WORKING DURING NIGHT

The contractor shall not carry out any work between sunset and sunrise without the previous permission of the Engineer.

24.0 DAMAGE TO RDSO PROPERTY OR PRIVATE LIFE AND PROPERTY

The contractor shall be responsible for all risks to the works and for trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the RDSO or the lives, persons or property of others from whatsoever cause in connection with the works until they are taken over by the RDSO and this although all reasonable and proper precautions may have been taken by the contractor, and in case the RDSO shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of the workman's Compensation Act or any statutory amendment thereof to any person or persons sustaining damage as aforesaid by reason of any Act, or any negligence or omission on the part of the contractor the amount of any costs or charges including costs and charges in connection with legal proceedings), which the RDSO may incur in reference thereto, shall be charged to the contractor. The RDSO shall have the power and right to pay or to defend or compromise any claims of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings charging to the contractor, as aforesaid, any sum or sums of money which may be paid and any expenses whether reinstatement or otherwise which may be incurred and the property of any such payment, defence or compromise, the incurring of any such expenses shall not be called in question, by the Contractor.

25.0 SHEDS, STORE-HOUSES AND YARDS

The contractor shall at his own expenses provide himself with sheds, stores, houses and yards in such situations and in such numbers as in the opinion of the Engineer is requisite for carrying on the works and the contractor shall keep at each of such sheds, store houses and yards a sufficient quantity of materials and plant in stock as not to delay the carrying out of the works with due expedition and the Engineer and the Engineer's representative shall have free access to the said sheds, stores, houses and yards at any time for the purpose of inspecting the stock of materials and plant so kept in hand, and any materials or plant which the Engineer may object to shall not be brought upon or used in the works, but shall be forthwith removed from the sheds, stores, houses or yards by the Contractor. The contractor shall at his own expense provide and maintain suitable mortar mills, soaking vats or other equipments necessary for the execution of the works.

26.0 PROVISION OF EFFICIENT AND COMPETENT STAFF

The contractor shall place and keep on the works at all times efficient and competent staff to give the necessary directions to his workmen and to see that they execute their work in sound and proper manner and shall employ only such supervisors, workmen and labourers in or about the execution of any of these works as are careful and skilled in their various trades and callings. The contractor shall at once remove from the works any agents, permitted sub-contractor, supervisor, workmen or labour who shall be objected to by the Engineer and if and whenever required by the Engineer, he shall submit a correct return showing the names of all staff and workmen, employed by him. In the event of the Engineer being of the opinion that the contractor is not employing on the works a sufficient number of staff and workmen as is necessary for the proper completion of the works within the time prescribed, the contractor shall forthwith on receiving intimation to this effect take on the additional number of staff and labour specified by the Engineer within seven days of being so required and failure on the part of the contractor to comply with such instructions will entitle the RDSO to rescind the contract under clause 62 of these conditions.

27.1 WORKMANSHIP AND TESTING

The whole of the works and/or supply of materials specified and provided in the contract or that may be necessary to be done in order to form and complete any part thereof shall be executed in the best and most substantial workmanlike manner with materials of the best and most approved quality of their respective

kinds, agreeable to the particulars contained in or implied by the Specifications and as referred to in and represented by the drawings or in such other additional particulars, instructions and drawings as may be found requisite to be given during the carrying on of the works and to the entire satisfaction of the Engineer according to the instructions and directions which the contractor may from time to time receive from the Engineer. The materials may be subjected to tests by means of such machines, instruments and appliances as the Engineer may direct and wholly at the expenses of the contractor.

27.2 Removal of improper work and materials

The Engineer or the Engineer's representative shall be entitled to order from time to time.

- (a) The removal from the site within the time specified in the order of any materials which in his opinion are not in accordance with the specifications or drawings.
- (b) The substitution of proper and suitable materials, and
- (c) The removal and proper re-execution, notwithstanding any previous tests thereof or "on account" payments, therefore, of any work which in respect of materials or workmanship is not in his opinion in accordance with the specifications and in case of default on the part of the Contractor in carrying out such order, the RDSO shall be entitled to rescind the contract under clause 62 of these conditions.

28.0 FACILITIES FOR INSPECTION

The contractor shall afford the Engineer and the Engineer's representative every facility for entering in and upon every portion of the work at all hours for the purpose of inspection or otherwise and shall provide all labour, materials, planks, ladders, pumps, appliances and things of every kind required for the purpose and the Engineer and the Engineer's representative shall at all times have free access to every part of the works and to all places at which materials for the work are stored or being prepared.

29.0 EXAMINATION OF WORK BEFORE COVERING UP

The contractor shall give seven days notice to the Engineer or the Engineer's representative whenever any work or materials are intended to be covered up in the earth, in bodies or walls or otherwise to be placed beyond the reach of measurement in order that the work may be inspected or that correct dimensions may be taken before being so covered, placed beyond the reach of measurement in default whereof, the same shall at the option of the Engineer or the Engineer's representative be uncovered and measured at the contractor's expense or no allowance shall be made for such work or materials.

30.0 TEMPORARY WORKS

All temporary works necessary for the proper execution of the works shall be provided and maintained by the contractor and subject to the consent of the Engineer shall be removed by him at his expenses when they are no longer required and in such a manner as the Engineer shall direct. In the event of failure on the part of the contractor to remove the temporary works, the Engineer will cause to be removed and the cost as increased by supervision and other incidental charges shall be recovered from the contractor. If temporary huts are provided by the Contractor on the RDSO land for labour engaged by him for the execution of the works, the contractor shall arrange for handing over vacant possession of the said land after the work is completed and if the contractor's labour refused to vacate, and have to be ejected by the RDSO necessary expenses incurred by the RDSO in connection therewith shall be borne by the contractor.

31.1 CONTRACTOR TO SUPPLY WATER FOR WORKS

Unless otherwise provided in the contract, the contractor shall be responsible for the arrangements to obtain supply of water necessary for the works.

31.2 Water supply from RDSO system

The RDSO may supply to the contractor part or whole of the quantity of water required for the execution of works from the RDSO's existing water supply system at or near the site of works on specified terms and conditions and at such charges as shall be determined by the RDSO and payable by the contractor, provided that the contractor shall arrange, at his own expense, to effect the connections and lay additional pipelines and accessories on the site and that the contractor shall not be entitled to any compensation for interruption or failure of the water supply.

31.3 Water supply by RDSO transport

In the event of the RDSO arranging supply of water to the contractor at or near the site of works by travelling water tanks or other means, the freight and other charges incurred thereby, including demurrage charges that may be levied, shall be paid by the contractor in addition to the charges referred to in sub clause 2 of the clause provided that contractor shall not be entitled to any compensation for interruption or failure of the water supply.

31.4 (a) Contractor to arrange supply of Electric Power for works: - Unless otherwise provided in the contract, the contractor shall be responsible for arrangements to obtain supply of Electric Power for the works.

(b) Electric Supply from the RDSO system; - The RDSO may supply to the contractor part or whole of the electric power wherever available and possible, required for execution of works from the RDSO's existing electric supply systems at or near the site of works on specified terms and conditions and such charges as shall be determined by the RDSO and payable by the contractor provided the cost of arranging necessary connection to the RDSO's Electric supply systems, and laying of underground/overhead conductor circuit protection, electric power

meters, transmission structure, shall be born by the contractor and that the contractor shall not be entitled to any compensation for interruption or failure of Electric supply system.

32.0 Property in materials and plant

The materials and plant brought by the contractor upon the site or on the land occupied by the contractor in connection with the works and intended to be used for the execution thereof shall immediately, they are brought upon the site of the said land, be deemed to be the property of the RDSO. Such of them as during the progress of the works are rejected by the Engineer under clause 25 of these conditions or are declared by him not to be needed for the execution of the work or such as on the grant of the certificates of completion remain unused shall immediately on such rejection, declaration or grant cease to be deemed the property of the RDSO and the contractor may then (but not before) remove them from the site or the said land. This clause shall not in any way diminish the liability of the contractor nor shall the RDSO be in any way answerable for any loss or damage which may happen to or in respect of any such materials or plant either by the same being lost, stolen, injured or destroyed by the fire, tempest and otherwise.

33.1 TOOLS, PLANT AND MATERIALS SUPPLIED BY RDSO

The contractor shall take all reasonable care of all tools, plant and materials or other property whether of a like description or not belonging to the RDSO and committed to his charge for the purpose of the works and shall be responsible for all damage or loss caused by him, his agents, permitted sub-contractors or his workmen or others while they are in his charge. The contractor shall sign accountable receipts for tools, plants and materials made over to him by the Engineer in good order and repair, fair wear and tear expected, and shall be responsible for any failure to account for the same or any damage done thereto.

33.2 Hire of RDSO's plant

The RDSO may hire to the contractor such plant as Earth/Insulation Testers and portable engines for use during execution of the works on such terms as may be specified in the special conditions or in a separate Agreement for hire of plant.

34.1 PRECAUTION DURING PROGRESS OF WORKS

During the execution of works, unless otherwise specified the contractor shall at his own cost provide the materials for and execute all shoring, timbering and strutting works as is necessary for the stability and safety of all structures, excavations and works and shall ensure that no damage, injury or loss is caused or likely to be caused to any person or property.

34.2 Roads and water courses

Existing roads or water courses shall not be blocked, cut through, altered, diverted or obstructed in any way by the contractor, except with the permission of the Engineer. All compensation claimed for any unauthorized closure, cutting through alteration, diversion or obstruction to such roads or water courses by the contractor or his agent or his staff shall be recoverable from the contractor or by deduction from any sums which may become due to him in terms of the contract, or otherwise according to law.

34.3 Provision of access to premises

During progress of work in any street or thoroughfare, the contractor shall make adequate provision for the passage of traffic for securing safe access to all premises approached from such street or thoroughfare and for any drainage, water supply or means of lighting which may be interrupted by reason of the execution of the works and shall react and maintained at his own cost barriers, lights and other safeguards as prescribed by the Engineer, for the regulation of the traffic, and provide watchmen necessary to prevent accidents. The work shall in such cases be executed night and day if so ordered by the Engineer and with such vigor so that the traffic way be impeded for as short a time as possible.

34.4 Safety of public

The contractor shall be responsible to take all precautions to ensure the safety of the public whether on public or RDSO property & shall post such look out men as may in the opinion of the Engineer be required to comply with the regulations appertaining to the work.

35.0 USE OF EXPLOSIVES

Explosives shall not be used on the works or on the site by the contractor without the permission of the Engineer and the only in the manner and to the extent to which such permission is given. Where explosives are required for the works, they shall be stored in a special magazine to be provided by and at the cost of the Contractor in accordance with the Explosive Rules. The Contractor shall obtain the necessary license for the storage & the use of explosives and all operations in which or for which explosives are employed shall be at the sole risk and responsibility of the contractor and the contractor shall indemnify the RDSO in respect thereof.

36.1 SUSPENSION OF WORKS

The Contractor shall on the order of the Engineer suspend the progress of the works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall during such suspension properly protect and secure the work so far as is necessary in the opinion of the Engineer. If such suspension is: -

- (a) Provided for in the contract, or
- (b) Necessary for the proper execution of the works or by the reason of whether conditions or by some default on the part of the contractor, and or
- (c) Necessary for the safety of the works or any part thereof

36.2 The contractor shall not be entitled to the extra costs, if any, incurred by him during the period of suspension of the works; but in the event of any suspension ordered by the Engineer for reasons other than afore-mentioned and when each such period of suspension excess 14 days, the Contractor shall be entitled to such extension of time for completion of the works as the Engineer may considered proper having regard to the period or periods of such suspensions and to such compensation as the Engineer may consider reasonable in respect of salaries or wages paid by the contractor to his employees during the period of such suspensions.

36.3 Suspension lasting more than three months

If the progress of the woks or any part thereof is suspended on the order of the Engineer for more than three months at a time, the contractor may serve a written notice on the Engineer requiring permission within 15 days from the receipt thereof to proceed with the works or that part thereof in regard to which progress is suspended and if such permission is not granted within that time the Contractor by further written notice so served may, but is not bound to, elect to treat the suspension where it affects part only of the works as an omission of such part or where it affects the whole of the works, as an abandonment of the contract by the RDSO.

37.0 RATES FOR ITEMS OF WORKS

The rates entered in the accepted schedule of rates of the contract are intended to provide for works duly and properly completed in accordance with the general and special (if any) conditions of the contract and the specifications and drawings together with such enlargements, extensions, diminutions, reductions, alterations or additions as may be ordered in terms of Clause 42 of these conditions and without prejudice to the generality thereof and shall be deemed to include and cover superintendence and labour, supply, including full freight, of materials, stores, patterns, profiles, moulds, fittings, centering, scaffolding, shoring props, timbers, machinery, barracks, tackle, roads, pegs, posts, tools and all apparatus and plant required on the works, except such tools, plant or materials as may be specified in the contract to be supplied to the contractor by the RDSO, the erection, maintenance and removal of all temporary works and buildings, all watching, lighting, bailing, pumping and draining, all prevention of or compensation for trespass. all barriers and arrangements for the safety of the public or of employees during the execution of works, all sanitary and medical arrangements for labour camps as may be prescribed by the RDSO the setting of all work and of the construction, repair and upkeep of all centre lines, bench marks and level pegs thereon, site clearance, all fees, duties, royalties, rent and compensation to owners for surface damage or taxes and impositions payable to local authorities in respect of land, structure and all materials, supplied for the work or other duties or expenses for which the contractor may become liable or may be put to under any provision of law for the purpose of or in connection with the execution of the contract, and all such other incidental charges or contingencies as may have been specially provided for in the specifications.

38.0 DEMURRAGE AND WHARFAGE DUES

Demurrage charges calculated in accordance with the scale in force for the time being on the RDSO and incurred by the Contractor failing to load or unload any goods or materials within the time allowed by the RDSO for loading as also wharf age charges, of materials not removed in time as also charges due on consignments booked by or to him shall be paid by the contractor, failings which such charges shall be debited to the contractor's account in the hands of the RDSO and shall be deducted from any sums which may become due to him in terms of the contracts.

39.1 RATES FOR EXTRA ITEMS OF WORKS

Any item of work carried out by the Contractor on the instructions of the Engineer which is not included in the accepted schedule of rates shall be executed at the rates set forth in the "Schedule of Rates RDSO" modified by the tender percentage and where such items are not contained in the latter, at the rates agreed upon between the Engineer and the Contractor before the execution of such items of work and the contractor shall be bound to notify the Engineer at least seven days before the necessity arises for the execution of such items of work that the accepted schedule of rates does not include rate or rates for the extra work involved. The rates payable for such items shall be decided at the meeting to be held between the Engineer and the Contractor, in as short a period as possible after the need for the special item has come to the notice. In case the contractor fails to attend the meeting after being notified to do so or in the event of no settlement being arrived at the RDSO shall be entitled to execute the extra works by other means and the contractor shall have no claim for loss or damage that may result from such procedure.

39.2 Provided that if the contractor commences work or incurs any expenditure in regard thereto before the rates as determined and agreed upon as lastly hereunto fore mentioned, then and in such a case the contractor shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of determination of the rates as aforesaid according to the rates as shall be fixed by the Engineer. However, if the contractor is not satisfied with the decision of the Engineer in this respect he may appeal to the ED/Admin. & EMS within 30 days of getting the decision of the Engineer, supported by analysis of the rates claimed. The ED/Admin. & EMS decision after hearing both the parties in the matter would be final and binding on the contractor and the RDSO.

40.1 HANDING OVER OF WORKS:-

The Contractor shall be bound to hand over the works executed under the contract to the RDSO complete in all respects to the satisfaction of the Engineer. The Engineer shall determine the date on which the work is considered to have been completed in support of which his certificate shall be regarded as sufficient evidence for all purposes.

The Engineer shall determine, from time to time, the date on which any particular section of the work shall have been completed and the contractor shall be bound to observe any such determination of the Engineer.

40.2 Clearance of site on completion:

On the completion of the works the contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and works clean and in a workman like condition to the satisfaction of the Engineer. No final payment in settlement of the accounts for the work shall be paid, held to be due or shall be made to the contractor till, in addition to any other condition necessary for final payment, site clearance shall have been effected by him, and such clearance may be made by the Engineer at the expense of the Contractor in the event of his failure to comply with this provision, within seven days after receiving notice to that effect. Should it become necessary for the Engineer to have the site cleared at the expense of the Contractor, the RDSO shall not be held liable for any loss or damage to such of the Contractor's property as may be on the site and due to such removal there from, which removal may be effected by means of public sales of such material and property or in such a way as deemed fit and convenient to the Engineer.

VARIATION IN EXTENT OF CONTRACT

41.0 MODIFICATION TO CONTRACT TO BE IN WRITING

In the event of any of the provision of the contract requiring to be modified after the contract documents have been signed, the modifications shall be made in writing and signed by the RDSO and the Contractor and no work shall proceed under such modifications until this has been done. Any verbal or written arrangement abandoning, modifying, extending, reducing or supplementing the contract or any of the terms thereof shall be deemed conditional and shall not be binding on the RDSO unless and until the same is incorporated in a formal instrument and signed by the RDSO and the Contractor, and till then the RDSO shall have the right to repudiate such arrangements.

42.1 POWER OF MODIFICATION TO CONTRACT

42.1 The Engineer on behalf of the RDSO shall be entitled by order in writing to enlarge to extend, diminish or reduce the works or make any alterations in their design, character, position site quantities, dimensions or in the method of their execution or in the combination and use of materials for the execution thereof and to order any additional works to be done or any work not to be done and the contractor will not be entitled to any compensation for any increase reduction in the quantities of work but will be paid only for the actual amount of work done and for approved materials supplied against a specific order.

42.2 Variation in quantity

The procedure detailed below shall be adopted for dealing with variations in quantities during execution of works contracts:

1. Individual NS items in contracts shall be operated with variation of + or – 25% and payment would be made as per the agreement date. For this, no finance concurrence would be required.
2. In case on increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, the same shall be got executed by floating a fresh tender. If floating a fresh tender for operating that item is considered not practicable, quantity of that item may be operated in excess of 125% of the agreement quantity subject to the following conditions:
 - a) Operation of on item by more than 125% of the agreement quantity needs the approval of an officer of the rank not less than SA grade.
 - i) Quantities operated in excess of 125% but up to 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender.
 - ii) Quantities operated in excess of 140% but up to 150% of the agreement quantity of the concerned item, shall be paid at 96% of the rate awarded for that item in that particular tender.
 - iii) Variation in quantities of individual items beyond 150% will be prohibited and would be permitted only in exceptional unavoidable circumstances with the concurrence of associate finance and shall be paid at 96% of the rate awarded for that item in that particular tender.
 - b) The variation in quantities as per the above formula will apply only to the individual items of the contract and not on the overall contract value.
 - c) Execution of quantities beyond 150% of the overall agree mental value should not be permitted and, if found necessary, should be only through fresh tenders or by negotiating with existing contractor, with prior personnel concurrence of ED/Finance and approval of Director General.
3. In cases where decrease is involved during execution of contract
 - a) The contract signing authority can decrease the items up to 25% of individual item without finance concurrence.
 - b) For decrease beyond 25% for individual items or 25% of contract value, the approval of an officer not less than rank of SA grade may be taken after obtaining "No claim certificate" from the contractor and with finance concurrence, giving detailed reasons for each such decrease in the quantities.
 - c) It should be certified that the work proposed to be reduced will not be required in the same work.
4. The limit for varying quantities for minor value items shall be 100% (As against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1% of the total original agreement value.
5. No such quantity variation limit shall apply for foundation items.
6. As far as SOR items are concerned, the limit of 25% would apply to the value of SOR schedule as a whole and not on individual SOR items. However, in case of NS items, the limit of 25% would apply on the individual items irrespective of the minor of quoting the rate (Single percentage rate or individual item rate).

7. For the tenderers accepted at RDSO level, variations in the quantities will be approved by the authority in whose powers revised value of the agreement lies.
8. For tenderers accepted by Director General, variations up to 125% of the original agreement value may be accepted by Director General.
9. For tenderers accepted by Board members and Railway Minister, variations up to 110% of the original agreement value may be accepted by Director General.
10. The aspect of vitiation of tender with respect to variation in quantities should be checked and avoided. In case of vitiation of the tender (Both for increase as well as decrease of value of contract agreement), sanction of the competent authority as per single tender should be obtained.

42.3 Valuation of variations

The enlargements, extensions, diminution, reductions, alterations or additions referred to in sub-clause (2) of this clause shall be no degree affect the validity of the contract but shall be performed by the contractor as provided therein and be subject to the same conditions stipulations and obligations as if they had been originally and expressly included and provided for in the specifications and drawings and the amount to be paid therefore shall be calculated in accordance with the accepted schedule of rates. Any extra items quantities of work falling outside the purview of the provisions of the provisions of Sub-clause (2) above shall be paid for at the rates determined under clause 39 of these conditions.

CLAIMS

43.1 MONTHLY STATEMENT OF CLAIMS

The contractor shall prepare and furnish to the Engineer once in every month an account giving full and detailed particulars of all claims for any additional expenses to which the contractor may consider himself entitled and of all extra or additional works ordered by the Engineer which he has executed during the preceding month and no claims for payment for any such work will be considered which has not been included in such particulars.

43.2 Signing of “No Claim” certificate

The contractor shall not be entitled to make any claim whatsoever against the RDSO under or by virtue of or arising out of this contract nor shall the RDSO entertain or consider any such claim, if made by the contractor, after he shall have signed a “No Claim” certificate in favour of the RDSO in such form as shall be required by RDSO after the works are finally measured up. The contractor shall be debarred from the disputing the correctness of the items covered by the “No Claim” certificate or demanding a clearance to arbitration in respect thereof.

MEASUREMENTS, CERTIFICATES AND PAYMENTS

44.0 QUANTITIES IN SCHEDULE ANNEXED TO CONTRACT

The quantities set out in the accepted schedule of rates with items of work quantified are the estimated quantities of the works and they shall not be taken as the actual and correct quantities of the works to be executed by the contractor in fulfillments of his obligations under the contract.

45.0 MEASUREMENT OF WORKS

The contractor shall be paid for the works at the rates in the accepted schedule of rates and for extra works at rates determined under Clause 39 of these conditions on the measurements taken by the Engineer or the Engineer’s Representative in accordance with the rules prescribed for the purpose by RDSO. The quantities for items the unit of which in the accepted schedule of rates is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one, for items the unit of which in the accepted schedules rates is single the quantities shall be calculated to places of decimals. Such measurements will be taken of the work in progress from time to time and at such intervals as in the opinion of the Engineer shall be proper having regard to the progress of the works. The date and time on which “one account” of final measurements are to be made shall be communicated to the Contractor who shall be present at the site and shall sign the results of the measurements (which shall also be signed by the Engineer or the Engineer’s Representative) recorded in the official measurement book as an acknowledgement of his acceptance of the accuracy of the measurement. Failing the Contractor’s attendance the work may be measured up in his absence and such measurements shall not withstanding such absence be binding upon the Contractor whether or not he shall have signed the measurement book, provided always that any objection made by him to any measurement shall be duly investigated and considered in the manner set out below

- (a) It shall be open to the Contractor to take specific objection to any recorded measurement or classification on any ground within seven days of the date of such measurements. Any re-measurements taken by the Engineer or Engineer’s representative in the presence of the Contractor or in his absence after due notice has been given to him in consequence of objection made by the contractor shall be final and binding on the contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and classification of the measurement.
- (b) If an objection raised by the Contractor is found by the Engineer to be incorrect the Contractor shall be liable to pay the actual expenses incurred in measurements.

46.1 “ON ACCOUNT” PAYMENTS

The Contractor shall be entitled to be paid from time to time by way of "On Account" payments only for such works as in the opinion of the Engineer he has executed in terms of the contract. All payment due on the Engineer's or the Engineer's Representatives certificates of measurements shall be subject to any deductions which may be made under these presents and shall further be subject to unless otherwise required by Clause 16 of these conditions a retention of ten percent by way of security deposits, until the amount of security deposit it by way of retained Earnest Money and such retention shall amount to 10% of the total value of the contract provided always that the Engineer may by any certificate make any correction or modification in any previous certificate which shall have been issued by him and that the Engineer may withhold any certificate if the works or any part thereof are not being carried out to his satisfaction.

46.2 Rounding off amounts

The total amount due on is certificate shall be rounded off to the nearest Rs. i.e. sums less than 50 paise shall be omitted and sums of fifty paise and more up to Rupee one will be reckoned as a Rupees one.

46.3 On Account Payments not prejudicial to final settlement :

On account payments made to the Contractor shall be without prejudice to the final making up of the accounts (except where measurements are specifically noted in the Measurement Book as "Final Measurements" and ,as such, have been signed by the contractor) and shall in no respect be considered or used as evidence of any facts stated in or to be inferred from such accounts not of any particular quantity of work having been executed not of the manner of its execution being satisfactory.

46.4 Manner of payment

Unless otherwise specified payment to the contractor will be made by cheque but no cheque will be issued for an amount less than Rs.100/-.

47.0 MAINTENANCE OF WORKS

The Contractor shall at all times during the progress and continuance of the works and also for the period of maintenance specified in the tender form and after the date of passing of the certificate of completion by the Engineer or any other earlier date subsequent to the completion of the works that may be fixed by the Engineer be responsible for and effectually maintain and uphold in good, substantial, sound and perfect condition all and every part of works and shall make good from time to time at all times as often as the Engineer shall require any damage or defect that may during the above period arise in or be discovered or be in any way connected with the works, provided that such damage or defect is not directly caused by errors in the contract documents, act of providence or insurrection or civil route and the Contractor shall be liable for and shall pay and make good to the RDSO or other persons legally entitled thereto whenever required by the Engineer so to do all losses, damages, costs and expenses they are any of them may incur or be put or be liable to by reason or in consequence of the operations of the Contractor or of his failures in any respect.

48.1 CERTIFICATE OF COMPLETION OF WORKS

As soon as in the opinion of the Engineer the works shall have been substantially completed and shall have satisfactorily passed any final test or tests that may be prescribed the Engineer shall issue a certificate of completion in respect of the works and the period of maintenance of the works shall commence from the date of such certificate, provided that the Engineer may issue such a certificate with respect to any part of the works before the completion of the whole of the works or with respect to any substantial part of the works which has been got completed to the satisfaction of the Engineer and occupied or used by the RDSO and when any such certificate is given in respect of a part of the works such part shall be considered as completed and the period of maintenance of such part shall commence from the date of such certificate.

48.2 Contractor not absolved by completion certificate:

The certificate of completion in respect of the works referred to in sub-clause(1) of this clause shall not absolve the contractor from his liability to make good any defects imperfection shrinkages or faults which may appear during the period of maintenance specified in the tender arising in the opinion of the Engineer from materials or workmanship not in accordance with the drawings or specifications or instruments of the Engineer which defect imperfections shrinkages or faults shall upon the direction in writing of the Engineer be amended and made good by the Contractor at his own cost and in case of default on the part of contractor the Engineer may employ labour and material or appoint another Contractor to amend and make good such defects imperfections, shrinkage and faults and all expenses consequent thereon and incidental thereto shall be borne by the Contractor and shall be recoverable from any moneys due to him under the Contract.

49.0 APPROVAL ONLY BY MAINTENANCE CERTIFICATE

No certificate other than the Maintenance certificate referred to in Clause 50 of the conditions shall be deemed to constitute approval of any work or other matter in respect of which it is issued or shall be taken as an admission of the due performance of the Contract or any part thereof or of the accuracy of any claim or demand made by the Contractor or of additional varied work having been ordered by the Engineer not shall any other certificate conclude or prejudice any of the powers of the Engineer.

50.1 MAINTENANCE CERTIFICATE

The Contract shall not be considered as completed until a Maintenance Certificate shall have been signed by the Engineer stating that the works have been completed and maintained to his satisfaction. The Maintenance Certificate shall be given by the Engineer upon the expiration of the period of maintenance or a

shown thereafter as any work ordered during such period pursuant to Sub-clause (2) Clause 48 of these conditions shall have been completed to the satisfaction of the Engineer and full effect shall be given to this Clause notwithstanding the taking possession of or using the works or any part thereof by the RDSO.

50.2 Cessation of RDSO's liability

The RDSO shall not be liable to the Contractor for any matter arising of or in connection with the Contract of the execution of the works unless the Contractor shall have made a claim in writing in respect thereof before the issue of the Maintenance Certificate under this Clause.

50.3 Unfulfilled Obligations

Notwithstanding the issue of maintenance certificate the Contractor and (subject to sub-clause (2) of this clause) RDSO shall remain liable for the fulfillment of any obligation incurred under the provisions of the contract prior to the issue of the maintenance certificate which remains unperformed at the time such certificate is issued and for the purposes of determining the nature and extend of any such obligation the contract shall be deemed to remain in force between the parties thereto.

51.1 FINAL PAYMENT

On the Engineer's certificate of completion in respect of the works, an adjustment shall be made and the balance of account based on the Engineer's Representatives certified measurement of the total quantity of the work executed by the Contractor upon the date of completion and on the accepted schedule of rates and for extra works on rates determined under Clause 39 of these conditions shall be paid to the Contractor subject always to any deductions which may be made under these presents and further subject to the Contractor having delivered to the Engineer either a full account in details of all claims, he may have on RDSO in respect of the works or having delivered a "No Claim" certificate and the Engineer having after the receipt of such account given a certificate in writing that such claims are correct that the whole of the works to be done under the provision of the contracts have been completed, that they have been inspected by him since their completion and found to be in good and substantial order, that all properties, works and things removed, disturbed or injured in consequence of the works have been properly replaced and made good and all expenses and demands incurred by or made upon the RDSO for or in the respect of damage or loss by, from or in consequence of the works have been satisfied agreeably and in conformity with the Contract.

51.2 Post Payment Audit

It is an agreed term of the Contract that RDSO reserves to itself the right to carry out a post payment audit and or technical examination of the works and the final bill including all supporting vouchers abstracts etc. and to make a claim on the Contractor for the refund of any excess amount paid to him if as a result of such examination any over payment to him is discovered to have been made in respect of any work done or alleged to have been done by him under the Contract.

51.3 Repayment of Security Deposit

The total Security Deposit shall become due and shall be paid to the Contractor after the expiration of the period of maintenance specified in the tender reckoned from the date on which the Engineer shall have passed the certificate of completion comprising the whole of the works to be done under the provisions of the Contract or any other earlier date subsequent to the completion of the whole of such works that may be fixed by the RDSO in this behalf provided that all the stipulations of the Clause have been fulfilled by the Contractor and all claims and demands made against the RDSO for and in respect of damage or loss by, from or in consequence of the works have been finally satisfied, provided further that in the event of different maintenance periods having become applicable to different parts of the works pursuant to Sub-clause 1 of Clause 48 of these conditions the expression "Expiration of the period of maintenance" shall for the purpose of this Clause be deemed to mean the expiry of the latest of such periods.

51.4 Production of Vouchers etc by the Contractor

(i) For the Contract of more than one crore of rupees, the Contractor shall, whenever required, produce or to cause to be produced for examination by the Engineer any quotation, invoice, cost or other account, book of account, voucher, receipt letter memorandum, paper of writing or any copy of or extract from any such document and also furnish information and returns verified in such manner as may be required in any way relating to the execution of this Contract or relevant for verifying or ascertaining the cost of execution of this Contract (the decision of the Engineer on the question of relevancy of any document information or return being final and binding on the parties). The Contractor shall similarly produce vouchers etc. if required to prove to the Engineer, that materials supplied by him are in accordance with the Specifications laid down in the Contract.

(ii) If any portion of the work in Contract of value more than one crore of rupees be carried out by the a Sub-Contractor or any subsidiary or allied firm or company (as per Clause 7 of the General Conditions of Contract), the Engineer shall have power to secure the books of such Sub-Contract or any subsidiary or allied firm or company, through the Contractor and such books shall be open to his inspection.

(iii) The obligations imposed by sub Clause (i) and (ii) above is without prejudice to the obligations of the contractor under any statute, rules or orders binding on the Contractor.

52.0 WITH-HOLDING AND LIEN IN RESPECT OF SUMS CLAIMED

Whenever any claim or claims for payment of a sum of money arises out of or under the Contract against the Contractor RDSO shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in

part from the security if any deposited by contractor and for the purpose aforesaid the RDSO shall be entitled to withhold the said cash security deposit or the security, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts if no security has been taken from the Contractor, the RDSO shall be entitled to withhold and above lien to the extent of the such claimed amount or amounts referred to supra, from any sum or sums found payable or which at any time thereafter may become payable to the contractor under the same contract or any other with this or any other RDSO or any other department of the Central Government pending finalization or adjudication of any such claim.

It is an agreed term of the Contract that the sums of money or moneys so withheld or retained under the lien referred to above by RDSO will be kept withheld or retained as such, by RDSO till the claim arising out of or under the Contract is determined by the Arbitrator (if the contract is governed by the arbitration clause) or by the competent court as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to supra and duly notified as such to the Contractor. For the purpose of this clause where the Contractor is a partnership firm or a limited Company RDSO shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/ limited Company, as the case whether in his individual capacity or otherwise.

52.0 (a) Lien in respect of claims in other contracts

Any sum of money due and payable to the Contractor (including the Security Deposit returnable to him) under the Contract may be withheld or retained by way of lien by RDSO against any claim of this or any other RDSO or any other Department of the Central Government in respect of payment of a sum of money arising out of or under any other Contract made by the Contractor with this or any other Department of the Central Government. It is an agreed term of the Contract that the sum of money so withheld or retained under this clause by the RDSO will be kept withheld or retained as such by the RDSO till the claim arising out of or under any other Contract is either mutually settled or determined by Arbitration, if the other contract is governed by arbitration clause or by the competent court as the case may be and Contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the Contractor.

53.0 SIGNATURE ON RECEIPTS FOR AMOUNTS

Every receipt for money which may become payable or for any security which may become transferable to the Contractors under these presents shall if signed in the partnership name by any one of the partners of a Contractor's firm be a good and sufficient discharge to RDSO in respect of the moneys or security purported to be acknowledged thereby and in the event of death of any of the Contractor partners during the pendency of the Contract it is hereby expressly agreed that every receipt by any one of the serving Contractor partners shall if so signed as aforesaid be good and sufficient discharge as aforesaid provided that nothing in this clause contained shall be deemed to prejudice or effect any claim which the RDSO may hereafter have against the legal representatives of any Contractor partner so dying for or in respect of any breach of any of the conditions of the Contract provided also that nothing in this clause contained shall be deemed to prejudice or effect the respective rights or obligations of the Contractor partners and of the legal representatives of any deceased Contractor partners interest.

LABOUR

54.0 WAGES TO LABOUR

The Contractor shall be responsible to ensure compliance with the provisions of the Minimum Wages Act 1948 (hereinafter referred to as the "said act") and the rules made there under in respect of any employees directly or through petty contractors or sub-contractors employees by him on road construction or in building operations or in stone breaking or stone crushing for the purpose of carrying out this Contract.

If in compliance with the terms of the Contract, the Contractor supplied any labour to be used wholly or partially under the direct orders and control of the RDSO whether in connection with any work being executed by the Contractor or otherwise for the purpose of the RDSO such labour shall for the purpose of this Clause still be deemed to be persons employed by the Contractor. If any moneys shall as a result of any claim or application made under the said Act be directed to be paid by the RDSO such money shall be deemed to be moneys payable to the RDSO by the Contractor and on failure by the Contractor to repay the RDSO any moneys paid by it as aforesaid within seven days after the same shall have been demanded the RDSO shall be entitled to recover the same from any moneys due or accruing to the Contractor under this or any other Contract with the RDSO.

54 -A Apprentices Act

The Contractor shall be responsible to ensure compliance with the provisions of the Apprentices Act 1961 and the Rules and orders issued there – under from time to time in respect of apprentices directly or through petty contractors or sub – contractors employed by him for the purpose of carrying out the contract.

If the contractor directly or through petty contractors or sub – contractors fails to do so, his failure will be a breach of the contract and the RDSO may, in its discretion, rescind the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation of the provisions of the Act.

Note: The contractor are required to engage apprentices when the works under taken by them last for a period of One year or more and the cost of works is Rs. One lakh or more.

55.0 PROVISIONS OF PAYMENTS OF WAGES ACT

The Contractor shall comply with the provisions of the payment of Wages Act, 1936 and the rules made there under in respect of all employees directly or through petty Contractors or Sub-contractors employed by him in

the works. If in compliance with the terms of the contract the Contractor directly or through petty Contractors of Sub-contractors shall supply any labour to be used wholly or partly under the direct orders and control of the Engineer whether in connection with the works to be executed hereunder or otherwise for the purpose of the Engineer such labour shall nevertheless be deemed to compromise persons employed by the Contractor and any moneys which may be ordered to be paid by the Engineer shall be deemed to be moneys payable by the Engineer on behalf of the Contractor and the Engineer may on failure of the Contractor to repay such moneys to the RDSO deduct the same from any moneys due to the Contractor in terms of the Contract. RDSO shall be entitled to deduct from any moneys due to the Contractor (whether under this Contract or any other Contract) all moneys paid or payable by the RDSO by way of the compensation of aforesaid or for costs of expenses in connection with any claim thereto and the decision of the Engineer upon any question arising out of the effect or force of this clause shall be final and binding upon the Contractor

55(A) PROVISIONS OF CONTRACT LABOUR (REGULATION AND ABOLITION) ACT 1970.

- (i) The Contractor shall comply with the provision of the Contract Labour (Regulation and Abolition) Act 1970 and the Contract Labour (Regulation and Abolition) Central Rules 1971 as modified from time to time, wherever applicable and shall also indemnify the RDSO from and against and claims under the aforesaid Act and the Rules.
- (ii) The Contractor shall obtain a valid license under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid license until the completion of the work. Any failure to fulfill the requirement shall attract the penal provision of the Contract arising out of the resultant non-execution of the work.
- (iii) The Contractor shall pay to the labour employed by him directly or through Sub-contractors the wages as per provision of the aforesaid Act and the Rules wherever applicable. The Contractor shall not withstanding the provisions of the Contract to the contrary, cause to be paid the wages to labour indirectly engaged on the works including any engaged by Sub-contractors in connection with the said work as if the labour had been immediately employed by him.
- (iv) In respect of all labour directly or indirectly employed in the work for performance of the contractor's part of the contract, the contractor shall comply with or cause to be complied with the provisions of the aforesaid Act and Rules wherever applicable.
- (v) In every case in which, by virtue of the provisions of the aforesaid Act or the Rules, the RDSO is obliged to pay any amount of wages to a workman employed by the Contractor or his Sub-contractor in execution of the work or to incur any expenditure in providing welfare and health amenities required to be provided under the aforesaid Act and the Rules or to incur any expenditure on account of the contingent liability of the RDSO due to the Contractor's failure to fulfil his statutory obligations under the aforesaid Act or the Rules the RDSO will recover from the Contractor, the amount of wages so paid or the amount of expenditure so incurred and without prejudice to the rights of RDSO under Section 20 Sub-section (2) and Section 21 Sub-section (4) of the aforesaid Act the RDSO shall be at liberty to recover such amount or part thereof by deducting it from the security deposit and/or from any sum due by the RDSO to the Contractor whether under the Contract or otherwise. RDSO shall not be bound to contest any claim made against it under Sub-section (1) of Section 20 and Sub-section (4) of Section 21 of the aforesaid Act except on the written request of the Contractor and upon his giving to RDSO full security for all costs for which the RDSO might become liable in contesting such claim. The decision of the Railway regarding the amount actually recoverable from the Contractor as stated above shall be final and binding on the Contractor.

56.0 REPORTING OF ACCIDENTS TO LABOUR

The Contractor shall be responsible for the safety of all employees directly or through petty Contractors or Sub-contractor employed by him on the works and shall report serious accidents to any of them however and wherever occurring on the work to the Engineer or the Engineer's Representative and shall make every arrangement to tender all possible assistance.

57.0 PROVISIONS OF WORKMEN'S COMPENSATION ACT

In every case in which by virtue of the provisions of Section 12 Sub-section (1) of the Workmen Compensation Act, 1923, RDSO is obliged to pay compensation to a workman directly or through petty Contractors or Sub-Contractors employed by the Contractor in executing the work. RDSO will recover from the Contractor the amount of the compensation so paid, and without prejudice to the rights of RDSO under Section 12, Sub-section (2) of the said Act RDSO shall be at liberty to recover such amount or any part thereof by deducting it from the Security Deposit or from any sum due by RDSO to the Contractor whether under these conditions or otherwise. RDSO shall not be bound to contest any claim made against it under Section 12 Sub-section (1) of the said Act except on the written request of the Contractor and upon his giving to RDSO full security for all costs for which RDSO might become liable in consequence of contesting such claim.

57(A) Provision of Mines Act

The Contractor shall observe and perform all the provisions of the Mines Act 1952 or any statutory modifications of re- enactment thereof for the time being in force and any rules and regulation made there under in respect of all the persons directly or through petty Contractor or Sub-contractor employed by him under his Contract and shall indemnify RDSO from and against any claim under the Mines Act or the Rules and Regulation framed there under by or on behalf of any persons employed by him or otherwise.

58.0 RDSO DO NOT PROVIDE QUARTER FOR CONTRACTOR

No quarter shall normally be provided by RDSO for the accommodation of the Contractor or any of his staff employed on the work. In exceptional cases where accommodation is provided to the Contractor at RDSO discretion recoveries shall be made at such rates as may be fixed by RDSO for the full rent the buildings & equipments therein as well as charges for electronic current, water supply and conservancy.

59.1 LABOUR CAMPS

The Contractor shall at his own expense make adequate arrangement for the housing, supply of drinking water and provision of latrines, and urinals for his staff and workmen directly or through petty contractor or sub-contractors for temporary crèche (Bal Mandir) where 50 or more women are employed at a time. Suitable sites on RDSO land if available may be allotted to the contractor for the erection of labour camps, either free of charge or on such terms and conditions that may be prescribed by RDSO. All camp sites shall be maintained in clean and sanitary condition by the Contractor at his own cost.

59.2 Compliance to Rules for employment of labour:

The Contractor shall conform to all laws, bye-laws, rules and regulations for the time being in force pertaining to the employment of local or imported labour and shall take all necessary precautions to ensure and preserve the health and safety of all staff employed directly or through petty contractor or sub-contractor on the works.

59.3 Preservation of peace:

The Contractor shall take requisite precautions and use his best endeavors to prevent any riots or unlawful behaviour by or amongst his workman and others employed directly or through the petty contractors or sub-contractors on the works and for the preservation of peace and protection of the inhabitants and security of property in the neighbourhood of the works. In the event of RDSO requiring the maintenance of the special police force at or in the vicinity of the site during the tenure of work, the expenses thereof shall be borne by the Contractor and if paid by RDSO shall be recoverable from the Contractor.

59.4 Sanitary Arrangements:

The Contractor shall obey all sanitary rules and carry out all sanitary measure that may from time to time be prescribed by RDSO Medical Authority and permit inspection of all sanitary arrangements at all times by the Engineer, the Engineer's Representative or Medical staff of RDSO. Should the Contractor fail to make the adequate sanitary arrangements these will be provided by RDSO and the cost thereof recovered from Contractor.

59.5 Outbreak of Infectious Disease:

The Contractor shall remove from his camp such labour and their families as refuse protective inoculation and vaccination when called upon to do so by the Engineer the Engineer's Representative on the advice of RDSO Medical authority. Should Cholera, Plague or other infection disease break out, the Contractor shall burn the huts, beddings, cloths and other belongings of or used by the infected parties and promptly erect new huts on healthy sites as required by the Engineer, failing which within the time specified in the Engineer's requisition, the work may be done by RDSO and cost therefore, recovered from the Contractor.

59.6 Treatment of Contractor's staff in Railway Hospital:

The Contractor and his staff, other than labourers and their families requiring medical aid from RDSO Hospitals and dispensaries will be treated as private patients and charged accordingly. The Contractor's labourers and their families will be granted free treatment in RDSO Hospitals and dispensaries where no other hospitals or dispensaries are available provided the Contractor pays the cost of medicines, dressings and diet money according to the normal scale and additional charges for special examinations such as, pathological and bacteriological examinations, x-rays etc. and for surgical operations.

59.7 Medical facilities at site :

The Contractor shall provide Medical facilities at the site as may be prescribed by the Engineer on the advice of RDSO Medical Authority in relation to the strength of the Contractor's resident staff and workmen.

59.8 Use of intoxicants :

The sale of ardent spirits of other intoxicating beverages upon the work or in any of the building, encampments or tenements owned, occupied by or within the control of the Contractor or any of his employees shall be forbidden and the Contractor shall exercise his influence and authority to the almost extent to secure strict compliance with this condition.

59.9 Non-employment of female labour :

The Contractor shall see that the employment of female labour in Cantonment areas particularly in the neighborhood of soldiers barracks should be avoided as far as possible.

59.10 Restriction on the Employment of retired Engineers of Railway services within two year of their retirement:

The contractor shall not, if he is a retired government Engineer of Gazetted rank, himself engage in or employ or associate a retired government Engineer of Gazetted rank, who has not completed two years from the date of retirement, in connection with this contract in any manner whatsoever without obtaining prior permission of the president and if the contractor is found to have contravened this provision it will constitute a breach of contract and administrative will be entitled to terminate the contract at the risk and cost of the contractor and forfeit his security deposit.

60.1 NON-EMPLOYMENT OF LABOURERS BELOW THE AGE OF 15 :

The Contractor shall not employ children below the age of 15 years as labourers directly or through petty Contractors or sub- contractors for the execution of the work.

60.2 Medical Certificate of fitness for labour :

It is agreed that the Contractor shall not employ a person above 15 years and below 19 years of age for the purpose of execution of work under this Contract unless a Medical Certificate of fitness in the prescribed form granted to him by a certifying surgeon certifying that he is fit to work as an adult is obtained and kept in the custody of the Contractor or person nominated by him in this behalf and the person carrying with him, while at work, a token giving a reference to such certificate. It is further agreed that the responsibility for having the adolescent examined medically at the time of appointment or periodically till he attains the age of 19 years shall devolve entirely on the Contractor and all the expenses to be incurred on this account shall be borne by him and no fee shall be charged from the adolescent or his parent for such medical examination.

60.3 Period of validity of Medical fitness certificate :

A Certificate of fitness granted or renewed for the above said purposes shall be valid only for a period of one year at a time. The certifying surgeon shall revoke a certificate granted or renewed if in his opinion the holder of it is no longer fit for work in the capacity stated therein. Where a certifying Surgeon refuses to grant or renew a certificate or revoked a certificate, he shall, if so required by the person concerned state his reasons in writing for doing so.

60.4 Medical Re-examination of labour :

Where any official appointed in this behalf by the Ministry of Labour is of the opinion that any person employed in connection with the execution of any work under this contract in the age group of 15-19 years is without a certificate of fitness or is having a certificate of fitness, but no longer fit to work in the capacity stated in the certificate, he may serve on the Contractor, or on the person nominated by him in this regard, a notice requiring that such person shall be examined by a certifying surgeon and such person shall not if the concerned officer so directs be employed or permitted to do any work under this Contract unless he has been medically examined and certified that he has been granted a certificate of fitness or a fresh certificate of fitness as the case may be.

Explanations:

(1) Only qualified Medical Practitioners can be appointed as "Certifying Surgeon" and the term "Qualified Medical Practitioners" means a person holding a qualification granted by the Authority specified in the Schedule to the Indian Medical Degrees Act 1916 (VII of 1916) or in the Schedules to the Indian Medical Council Act 1933 (XXVII of 1933).

(2) The certifying Surgeon may be a Medical Officer in the service of state or Municipal Corporation.

DETERMINATION OF CONTRACT:

61.1 Right of RDSO to determine Contract:

The RDSO shall be entitled to determine and terminate the Contract at any time should, in RDSO's opinion, the cessation of work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rates specified in the Contract. Notice in writing from the Railway of such determination and the reason therefore shall be conclusive evidence thereof.

61.2 Payment on determination of Contract:

Should the Contract be determined under Sub-clause (1) of this Clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, RDSO shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer. The RDSO's decision on the necessity propriety of such expenditure shall be final and conclusive.

61.3 The Contractor shall have no claim to any payment of compensation or otherwise however on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of the Contract.

62.1 Determination of contract owing to default of contractor:

If the Contractor should ...

- (i) Become bankrupt or insolvent or
- (ii) Make an arrangement with or assignment on favour of his creditors, or agree to carry out the contract under a Committee of inspection of his creditors or ;
- (iii) Being a Company or Corporation, go into liquidation (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) or

- (iv) have an execution levied on his goods or property on the work, or
- (v) assign the Contract or any part thereof otherwise than as provided in Clause 7 of these conditions or
- (vi) abandon that contract or
- (vii) persistently disregard the instructions of the Engineer or contravene any provision of the Contract or
- (viii) fail to adhere to the agreed program of work by a margin of 10% or the stipulated period or
- (ix) fail to remove materials from the site or to pull down and replace work after receiving from the Engineer notice to the effect that the said materials or works have been condemned or rejected under Clause 25 & 27 of these conditions or
- (x) fail to take steps to employ competent or additional staff and labour as required under Clause 26 of these conditions or
- (xi) fail to afford the Engineer or Engineer's representative proper facilities for inspecting the works or any part thereof as required under Clause 28 of these conditions or
- (xii) promise, offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant or any officer or employee of the RDSO or to any person on his or on their behalf in relation to the execution of this or any other contract with the RDSO.
- (xiii) (A) At any time after the tender relating to the contract has been signed and submitted by the Contractor, being a partnership firm admit as one of its partner or employee under it or being an incorporated company elect or nominate or allow to act as one of its directors or employee under it in any capacity whatsoever any retired engineer of the Gazetted rank of his retirement, whether in executive or administrative capacity or whether holding any pension-able post or not, in the Engineering Department of any of the RDSO for the time being owned and administered by the President of India before the expiry of two years from the date of retirement from the said service of such Engineer or Officer has obtained permission from the President of India or any Officer duly authorised by him in this behalf to become a partner or a Director or to take employment under the Contractor, as the case may be or

(B) Fail to give at the time of submitting the said Tender:-

- (a) The correct information to the date of retirement of such retired Engineer or retired Officer from the said service, or as to whether any such retired Engineer or retired Officer was under the employment of the Contractor at the time of submitting the said tender, or
- (b) The correct information as to such officers or officers obtaining permission to take employment under the contractor or
- (c) being a partnership firm, correct information as to whether any of its partners was such a retired Engineer or a retired Officer or
- (d) being an incorporated company, correct information as to whether any of its Directors was such a retired Engineer or a retired Officer, or
- (e) being such a retired Engineer or retired Officer suppress and not disclosed at the time of submitting the said tender the fact of his being such a retired Engineer or a retired Officer or make at the time of submitting the said tender a wrong statement in relation to his obtaining permission to take the Contract or if the Contractor be a partnership firm or as incorporated company to be a partner of Director or such firm or company as the case may be or to seek employment under the Contractor

Then and in any of the said clause, the Engineer on behalf of RDSO may serve the Contractor with a notice in writing to that effect and if the Contractor does not within seven days after the delivery to him of such notice proceed to make good his defaults in so far as the same is capable of being made good and carry on the work or comply with such directions as aforesaid to the entire satisfaction of the Engineer, RDSO shall be entitled after giving 48 hours notice in writing under the hand of the Engineer to rescind the Contract as a whole or in part or parts (as may be specified in such notice) and adopt either or both of the following courses.

- (i) To carry out the whole of part or the work from which the contractor has been removed by the employment of the required labour and material, the costs of which shall include lead, lift freight, supervision and all incidental charges
 - (ii) To measure up the whole of part of the work from which the contractor has been removed and to get it completed by another contractor, the manner and method in which such work is completed shall be in the entire discretion of the Engineer whose decision shall be final:
- And in both the cases (i) & (ii) mentioned above, the RDSO shall be entitled (i) to forfeit the whole or such portion of the security deposit as it may consider fit, and (ii) to recover from the contractor the cost of carrying out the work in excess of the sum which would have been payable according to the certificate of the Engineer to the contractor if the work had been carried out by the contractor under the terms of contract, such certificate being final and binding upon the contractor, provided, however, that such recovery shall be made only when the cost incurred in excess is more than the security deposit proposed to be forfeited and shall be limited to the amount by which the cost incurred in excess exceeds the security deposit proposed to be forfeited. The amount thus to be forfeited or recovered may be deducted from any moneys then due or which at any time thereafter may become to the contractor by the RDSO under this or any other contract or otherwise.

Provided always that in any case in which any of powers conferred upon the RDSO by Sub clause 1 of clause 62 hereof shall have become exercisable and the same shall not be exercised, the non exercise thereof shall not constitute a waiver of any of the conditions thereof and such powers shall not withstanding be exercisable in the event of any future case of default by the contractor for which his liability for past and future shall remain unaffected.

62.2 Right of RDSO after rescission of Contract owing to default of Contractor- In the event of any or several of the courses, referred to in Sub-clause (1) of this Clause being adopted.

- (a) The Contractor shall have no claim to compensation for any loss sustained him by reason of his having purchased or procured any material or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the Contract and Contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under the Contract, unless and until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.
- (b) The Engineer or the Engineer's representative shall be entitled to take possession of any materials, tools, implements, machinery and buildings on the works or on the property on which these are being or ought to have been executed, and to retain and employ the same in the further execution of the works or any part thereof until the completion of the works without the contractor being entitled to any compensation for the use of employment thereof or for wear and tear or destruction thereof.
- (c) The Engineer shall as soon as may be practicable after removal of the Contractor fix and determine ex-parte or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) had at the time of rescission of the contract been reasonably earned by or would be reasonably accrue to the contractor in respect of the work than actually done by him under the contract and what was the value of any un used or partially used material, any constructional plant and the temporary work upon the site.
- (d) The RDSO shall not be liable to pay to the contractor any money on account of the contract until the expiration of the period of maintenance and thereafter until the cost of completion and maintenance, and damages for delay in completion (if any) and all other expenses incurred by the RDSO have been ascertained and the amount thereof certified by the Engineer. The shall than entitled to receive only sum or sums (if any) as the Engineer may certify would have been due to him upon due completion by him after deducting the said amount, but if such amount shall exceed the sum which would have been payable to the contractor, then the contractor shall upon demand pay to the RDSO the amount of such excess and it shall be deemed a debt due by the contractor to the RDSO and shall be recoverable accordingly.

63.0 MATTERS FINALLY DETERMINED BY RDSO

All disputes and differences of any kind whatsoever arising out of or in connection with the Contract, whether during progress of the work or after its completion and whether before or after the determination of the Contract, shall be referred by the Contractor to the Director General and the Director General shall within 120 days after receipt of the contractor's representation make and notify decisions on all matters referred to by the Contractor in writing provided that matters for which provision has been made in Clauses 8, 18.0, 22(5), 39.0, 43(2), 45(a), 55.0, 55-A (5), 57, 57A, 61(1), 61(2) & 62(1) to (xiii) (b) of the General Conditions of Contract or in any clause of the Special Conditions of the Contract shall be deemed as "expected matters" (**matters not arbitrable**) and decisions of the RDSO authority, thereon shall be final and binding on the Contractor, provided further that "excepted matters" shall stand specifically excluded from the purview of the arbitration clause.

64.1 (i) DEMAND FOR ARBITRATION

In the event of any dispute or differences between the parties hereto as to the construction or operation of this Contract or the respective rights and liabilities of the Parties on any matter, in question, dispute or difference on any account, or as to the withholding by RDSO of any certificate to which the Contractor may claim to be entitled to, or if RDSO fails to make a decision within 120 days, the contractor, 120 days but within 180 days of his presenting his final claim on disputed matters shall demand in writing that the dispute or difference be referred to Arbitration.

64.1(ii) The demand for Arbitration shall specify the matters which are in question or subject of the dispute or difference as also the amount of claim item wise. Only such dispute(s) or difference(s) in respect of which the demand has been made, together with counter claims or set off given by the RDSO, shall be referred to Arbitration and other matters shall not be included in the reference.

64.1 (ii) (a) The Arbitration proceeding shall be assumed to have commenced from the day, a written and valid demand for Arbitration is received by the RDSO.

64.1 (ii) (b) The contractor shall submit his claim stating the facts supporting the claim along with relevant documents and the relief or remedy sought against each claim within a period of 30 days from the date of appointment of the arbitral tribunal.

64.1 (ii) (c) The RDSO shall submit its defence statement and counter claim(s), if any, within a period of 60 days of receipt of copy of claim from tribunal thereafter unless otherwise extension has been granted by tribunal.

64.1 (iii) No new claim shall be added during proceeding by either party. However, a party may amend or supplement the original, claim or defence thereof during the course of Arbitration proceeding subject to acceptance by tribunal having due regard to the delay in making it.

64.1 (iv) If the Contractor(s) do/does not prefer his/their specific and final claim in writing within a period of 90 days of receiving the intimation from the RDSO that the final bill is ready for payment, he/they will be deemed to have waived his/their claim(s) and RDSO shall be discharged and released of off liabilities under the Contract in respect of these claims.

64.2 Obligation during pendency of Arbitration

Work under the Contract shall, unless otherwise directed by the Engineer, continue during the Arbitration proceedings, and no payment due or payable by RDSO shall be withheld on account of such proceedings, provided, however, it shall be open for Arbitral tribunal to consider and decide whether or not such work should continue during arbitration proceedings.

64(3) (a)

(i) – In cases where the total value of all claims in question added together does not exceed Rs. 10 lakhs, the arbitral tribunal shall consist of a sole arbitrator who shall be gazetted officer of RDSO not below JA grade nominated by the Director General. The sole arbitrator shall be appointed within 60 days from the day when a written and valid demand for arbitration is received by Director General.

64(3) (a)

(ii) - In cases not covered by clause 64 (3) (a) (i), the arbitral tribunal shall consist of a panel of three gazetted officers of RDSO not below JA grade or two RDSO gazetted officers not below JA grade and a retired RDSO officer, retired not below the rank of SAG officer, as the arbitrators. For this purpose the RDSO will send a panel of more than three names of gazetted RDSO officers of one or more departments, of the RDSO which may also include the name (s) of retired RDSO officer (s) empanelled to work as RDSO arbitrator to the contractor within 60 days from the day when a written and valid demand for arbitration is received by the Director General. Contractor will be asked to suggest to Director General up to two names out of panel for appointment as contractor's nominee within 30 days from the date of dispatch of the request by RDSO. The Director General shall appoint at least one out of them as the contractor's nominee and will also simultaneously appoint the balance number of arbitrators either from the panel or from outside the panel, duly indicating the presiding arbitrator from amongst the three arbitrators so appointed. Director General shall complete this exercise of appointing the arbitral tribunal within 30 days from the receipt of the names of contractor's nominees. While nominating the arbitrators it will be necessary to ensure that one of them is from the account department. An officer of selection grade of the accounts department shall be considered of equal status to the officers in SA grade of other departments of the RDSO for the purpose of appointment of arbitrators.

64(3) (a)

(iii) - If one or more of the arbitrators appointed as above refuses to act as arbitrator, withdraws from his office as arbitrator, or vacates his/their office/offices or is/are unable or unwilling to perform his functions as arbitrator for any reason what so ever or dies or in the opinion of the Director General fails to act without un due delay, the Director General shall appoint new arbitrator/arbitrators to act in his/their place in the same manner in which the earlier arbitrator/arbitrators had been appointed. Such reconstituted tribunal may, at its discretion proceed with the reference from the stage at which it was left by the previous arbitrator (s).

64(3) (a)

(iv) - The arbitral tribunal shall have power to call for such evidence by way of affidavits or otherwise as the arbitral tribunal shall think proper and it shall be the duty of the parties here to do or cause to be done all such things as may be necessary to enable the arbitral tribunal to make the award without any delay.

64(3) (a)

(v) - while appointing arbitrator (s) under sub-clause (i) (ii) & (iii) above, due care shall be taken that he / they is/are not the one/those who had an opportunity to deal with the matters to which the contract relates or who in the course of his/their duties as railway servants (s) expressed views on all or any of the matters under dispute or differences. The proceedings of the arbitral tribunal or the award made by such tribunal will, however, not be invalid merely for the reason that one or more arbitrator had in the course of his service, opportunity to deal with the matters to which the contract relates or who in the course of his/their duties expressed views on all or any of the matters under dispute.

64(3) (b)

(i) - The arbitral award shall state item wise, the sum and reasons upon which it is based.

64(3) (b)

(ii) - A party may apply for corrections of any computational errors, any typographical or clerical errors or any other error of similar nature occurring in the award and interpretation of a specific point of award to tribunal within 30 days of receipt of the award.

64(3) (b)

(iii) – A party may apply to tribunal within 30 days of receipt of award to make an additional award as to claims presented in the arbitral proceedings but omitted from the arbitral award.

64.4 In case of the tribunal comprising of three members any ruling or award shall be made by a majority of members of tribunal. In the absence of such a majority the views of the presiding arbitrator shall prevail.

64.5 Where the arbitral award is for the payment of money no interest shall be payable on whole or any part of the money for any period till the date on which the award is made.

64.6 The cost of arbitration shall be borne by the respective parties. The cost shall interlia include fee of the arbitrator (s) as per the rates fixed by the RDSO Administration from time to time.

64.7 Subject to the provisions of the aforesaid arbitration and conciliation act 1996 and the rules there under and any statutory modification there of shall apply to the arbitration proceeding under this clause.

Asstt. Design Engineer

SECTION – III

SPECIAL CONDITIONS OF THE CONTRACT

SECTION - III

SPECIAL CONDITIONS OF THE CONTRACT

1.0 INTRODUCTION

1.1 On behalf of the President of India, Exe. Dir./Admin. & EMS/Asstt. Design Engineer hereinafter referred to as RDSO invites tender from established, experienced and reliable Manufacturers, Contractors for execution of electrical works as detailed in Part-II and advertised in notice inviting tender in RDSO.

The Contract emerging out of this tender shall be referred to as "Works Contract" and the Contractor who is awarded the construction Contract shall be referred to "Work Contractor".

1.2 The several documents forming the Tender are to be taken as mutually complementary to one another. Detailed drawings shall be followed in preference to small-scale drawings and figured dimensions in preference to scaled dimensions.

1.3 The tender shall be governed by General Conditions of Contract, preamble and General Instructions to Tenderers and Special Conditions of Contract. Wherever there is discordance between any of these documents, various provisions shall have overriding priority in the following.

- i. Preamble and General Instructions to Tenderers – Sect. I
- ii. General Conditions of Contract. – Sect. II
- iii. Special Conditions of Contract. – Sect. III
- iv. Technical Specifications. – Sect. IV

1.4 If there are varying or conflicting provisions in the documents forming part of the Contract, Exe. Dir. / Admin. & EMS shall be deciding authority with regard to the intentions of the provisions and decision shall be final and binding on the Contractor.

2.0 SCOPE OF WORK

2.1 The works to be governed by this Contract shall cover designing, manufacturing, supplying, commissioning, transportation till destination safe custody at site, insurance, erection, testing and commissioning of the works as per the Work Schedule duly supported with Specification in Part-II of this Tender.

2.2 The works to be undertaken by the Contractor shall inter-alia include the following.

2.2.1 Detailed design of equipment including installation, testing of such equipment contained in the Work Schedule duly supported by Part-II of Technical Specification.

2.2.2 Complete manufacture including installation testing of the said equipment.

2.2.3 Providing Engineering Drawings, Technical data, operation manuals, catalogues, spare parts list, etc. or on said equipment as erected at site.

2.2.4 Packing and Transportation of said equipment from the manufacturer's factory to the work site in RDSO.

2.2.5 Receipt including unpacking of the said equipment at the site storage, preservation and conservation at site of Work in RDSO.

2.2.6 Insurance of complete work governed by the Contract including the said equipment from the time of dispatch from the manufacturer's factory till the issue of Acceptance Certificate.

2.2.7 Up-packing, checking for damage/shortage, cleaning and erection.

2.2.8 Commissioning Tests.

2.2.9 Guarantee obligations.

3.0 LOCAL CONDITIONS

3.1 It will be imperative on each Tender to fully acquaint himself with all the local conditions and factors which would have any effect on the performance of the Contract and cost of the stores. The RDSO shall not entertain

any request for clarifications from the Tenderer regarding such local conditions. No request for the change of price or time schedule of completion of work on account of any local condition or factor shall be entertained after the offer is accepted by RDSO.

3.1.1 The intending tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender papers are adequate and all inclusive, for the completion of works to the entire satisfaction of the RDSO.

3.2 In the event of the tenderer desiring to have a field survey before furnishing his quotations, he may apply to RDSO for permission in this regard. Such permission will be given in writing by the RDSO but all the expenses in this regard will be borne by the tenderers.

3.3 The intending tenderer is advised to study the tender papers carefully, any submission of a bid by the tenderers shall be deemed to have been done after a careful study and examination of these documents with full understanding of the implication thereof. These conditions and specifications shall be deemed to have been accepted unless otherwise, specifically commented upon by the Tenderer in his offer. Failure to adhere to anyone of all these instructions may render his offer liable to be ignored without any reference.

3.4 Should a tenderer find discrepancies in, or omission from the drawing or any of the tender papers or if he has any doubt as to their meaning, he should at once notify the RDSO who may send a written clarification to all tenderers.

4.0 COMPLIANCE

- 4.1 Offers should be fully in accordance with the drawings and specifications. Details of variations from the drawing and specifications, if any should be clearly indicated and in such an event, a certificate from the user must be furnished to the effect that the product offered performs the requisite for functions satisfactorily. The names of such users should also be indicated.
- 4.2 Tender should give details of works executed and name of the customers along with their performance certificate.
- 4.3 The tenderer should indicate clause by clause that either his offer complies in every respect with the requirements of each clause and sub-clause otherwise, precisely how they differ from the requirements of the tender.
 - 4.3.1 Should the tenderer wish to depart from the provision of the specifications and drawings on account of manufacturing practices or any reason he should clearly draw attention in his offer to the proposed point of deviation and submit complete information with justification, drawings and specifications to explain the related merits of his proposal vis-à-vis the stipulations laid down in tender documents for appreciation and understanding of RDSO. In the absence of any such deviation it will be deemed that the tenderer is fully satisfied with the intents of specifications and drawings and shall comply with the statutory provisions laid in the tender documents for appreciation and understanding of RDSO. In the absence of any such deviation it will be deemed that the tenderer is fully satisfied with the statutory provisions laid in the tender documents. The statement of deviation, if any should be given in the shape of perform enclosed at Annexure-IV.

5.0 INTEGRATION WITH EXISTING WORKS

- 5.1 The tenderer should keep in mind, visit the location of works, take due note and given proper consideration of integrating the new works (sometimes on replacement account) with the existing system.
- 5.2 The provision of equipment in all electrical installations has to be so sequenced and coordinated that due to erection, installation and commissioning of new equipment included in the scope of work of this tender, no disruption at all, is caused to the functioning of the existing system.
- 5.3 A sequenced schedule of installation, erection and commissioning of equipment should be drawn by the tenderer after visiting the site. It should be based on pragmatic assessment of quantum of work and time schedule required to complete the work. The scheme should be submitted along with the offer as Annexure entitled "Integration Scheme".
- 5.4 Since electrical work requires shut downs invariably, therefore, the tenderer should keep due allowance in drawing the "Integration Scheme" so that the completion of work is not delayed beyond the stipulated period of completion.
- 5.5 The rates for different items of work should be quoted while keeping these aspects in view.

6.0 ELECTRIC SUPPLY

- 6.1 The contractor shall make his own arrangements for electricity required by him for the purpose of execution of the contract. If possible, RDSO at its own discretion may arrange electricity rates. Such arrangements will be made only at fixed point from where the Contractor shall arrange drawing power to the requisite location.
- 6.2 However, RDSO shall arrange the required power supply for testing and commissioning of the works completed by the contractor.

7.0 SCHEME OF WORK AND PROGRESS REPORT

- 7.1 The Contractor shall within 15 (fifteen) days of the date of award of the Contract submit a BAR/PERT CHART and scheme for the execution of key phases of the work, such as, design, procurement, manufacturing, transportation, field erection, trial operation and performance guarantee. The Contractor shall indicate in the form of notes of the assumptions and the basis adopted for the preparation of this BAR/PERT CHART.
- 7.2 The Contractor shall submit a monthly Progress Report detailing the actual progress made in all activities as compared to the above BAR/PERT CHART. The monthly Progress Report shall indicate the reasons for the variations, if any, between the schedule quantities and actual progress, the action proposed and corrective measures required wherever necessary.

8.0 COORDINATION WITH OTHER AGENCIES

- 8.1 The Contractor shall co-ordinate with other agencies like RDSO consultancy contractor if any, and other contractors say Civil Engineering Contractors in the area and work in close liaison with them.
- 8.2 The Electrical Contractor will have to carry out his works in close co-ordination with Civil Engg. Contractors at all stage and avoid holding up of construction work/additional work especially in making arrangements for fixing cable conduit electrical equipment etc. Wherever Electrical Contractor has to make a chase in the wall or cut the wall, roof etc. for fixing Electrical equipment he can cut the wall, permission of Engineer at site and make good the disturbance neatly to the satisfaction of RDSO's Engineer at site without any extra cost.

9.0 CONTRACTOR TO HAVE VALID LICENCE

- 9.1 The work shall be carried out only by the Contractor having valid license issued by the State Government for carrying out the installation work of the voltage classes involved under direct supervision of the persons holding valid certificates of competency for the same voltage classes issued or recognized by the State Govt. The Tenderer should furnish with his tender the particulars of the license held by him. The successful tender shall furnish the names and particulars of certificates of competency of the supervisors and workmen to be engaged for carrying of this work.

9.2 The Inspecting Officer (s) for his Contract shall be nominated by RDSO as indicated in the technical Specification.

10.0 INSPECTION

10.1 The works shall be accepted after inspection by RDSO particularly for the following aspects :

10.1.1 Setting out of electrical equipment.

10.1.2 Approval of quality of works.

10.1.3 Erection, testing and commissioning as per the approved drawings and the Indian Standard Codes of practice.

10.1.4 Safety works to conform to Indian Electricity Rules. These aspects shall be checked during periodical inspections. Any defects, deficiencies noticed in the construction works, will be recorded in the site Order Book so that the Contractor acts upon it without loss of time.

10.2 The cost of the Inspection will be on RDSO's account subject to any other provisions contained hereunder or elsewhere in contract. One week's notice must be given by the Contractor to the Inspecting Officer to take up the inspection.

10.3 The Contractor shall provide without any cost to RDSO all materials, equipment, machine plant, tools, labour and maintenance of every kind which the RDSO Inspecting Officer may consider necessary for any test and examination to be made at the contractor's or the sub-contractor's premises and/or at site.

10.4 All the equipment and materials shall be of best quality and will be tested/inspected by the Engineer or Engineer's representative at the manufacturer's premise/site of work and approved before they are installed/used in the execution of the works, covered in the Contract. If the Contractor uses any equipment's materials without the prior approval of RDSO these are liable to be rejected.

10.5 The decision of the Inspecting Officer with regard to the acceptance or rejection of the equipment/work shall be final and binding on the Contractor.

10.6 Inspection and rejection:

All works connected with and inclusive of installation and erection under this Contract shall be done in accordance with the standard established method of installation and erection of electrical equipment and shall comply with relevant Indian Electricity Rules, ISI code Specifications and Standards. The work shall also be strictly in accordance with the instructions/recommendations of the manufacturers. The equipment shall be leveled carefully before being fixed final in position.

All the fragile and sensitive equipment shall be protected adequately and handled carefully during installation and erection.

11.0 CONSEQUENCE OF REJECTION

11.1 On the equipment/assemblies being rejected by the Inspecting Officer of RDSO at destination, the Contractor shall replace such rejected equipment/assemblies of the work forthwith but in any event not later than a period of 8 (eight) weeks in the case of minor equipment and 16 (sixteen) weeks in the case of major equipment from the date of rejection. The Contractor shall bear all the cost of such replacement including freight etc. but without being entitled to any extra time on this account. The decision as to whether the equipment is to be classified as minor or major for the purpose of this clause shall be that of the Engineer and is not questionable.

12.0 COMMISSIONING TESTS

12.1 As soon as the installations are ready for commissioning/ energization, the Contractor shall arrange for all tests/inspections as required by the relevant ISS and/or IE Rules and advise the RDSO. RDSO shall depute their Inspecting Officer for witnessing the tests and to carry out inspection independently and also jointly with other concerned agencies wherever necessary and only after the installation passes the required tests and inspection, it should be commissioned/energized with the approval of Chief Elect. Inspector or his authorised representative.

11.0 WARRANTY / GUARANTY

11.1 The Contractor shall guarantee that all the equipment and works executed under this contract shall be free from all defects and faults in material, design, workmanship and manufacture and shall be of acceptable standards for the contracted work and in full conformity with the technical specifications, drawings and other contract stipulations.

11.2 This warranty clause will not apply to defects arising from designs furnished or specified by RDSO and for which Contractor has disclaimed responsibility in writing within 3 (three) months from the date of the letter of acceptance of tender.

11.3 The Contractor is not absolved for the responsibility of the successful functioning of the work carried out by him for which designs are indicated by RDSO in the tender documents. In case the designs are apprehended to be inadequate for achieving designed conditions, the tenderer should indicate the same specifically at the time of submission of offer or before giving sufficient time to RDSO for taking corrective action.

Once the designs are accepted by the Tenderer, the guarantee shall be complete and extended to all materials and equipment covered in the work.

- 11.4 This guarantee shall survive not only till the acceptance of the work but shall expire 12 (twelve) months from the date of acceptance of the completed work by RDSO except otherwise defined in special condition of the work or in respect of defects notified to the Contractor before the expiry of the guarantee period. Any approval or acceptance by RDSO at any stage of the work contracted shall not be in any way absolutely the contractor's liability under this guarantee.
- 11.5 The Contractor's liability in respect of any complaint, defect, replacement or repairs are attributable which arise from faulty workmanship or design or material in the manufacture of the equipment/stores, and/or negligence in any manner and also in the event of failure of the equipment to perform as intended.
- 11.6 The Contractor shall if required, replace, repair, execute and/or install the goods or such portion thereof as is rejected by RDSO free of cost at site or at the option of RDSO the value thereof and such other expenditure and damage as may arise by reason of the breach of the condition therein specified within 14 days from the date of advice.
- 11.7 All replacement and repairs that RDSO shall call upon the Contractor to deliver or perform under this warranty shall be delivered and performed by the Contractor within 14 days promptly and satisfactorily. In cases where such replacement, repair, execution and/or installation takes place during the period the provision of this guarantee clause shall apply to that portion to replace or renew until the expiry of 12 (twelve) months from the date of such replacement, repair, execution and/or installation. This extended period shall hereinafter be referred to as "extended guarantee period."
- 11.8 If any defect is not remedied satisfactorily within the above mentioned 14 days, RDSO may proceed to do the work at Contractor's risk and cost also without prejudice to any other rights of the contractor under the Contract.
- 11.9 If the Contractor so desires, the replaced parts can be taken over by him or his representative for disposal as he deems fit within a period of 14 days from the date of replacements of goods/parts. After the expiry of this period no claim whatsoever shall lie on RDSO.
- 11.10 RDSO may, at its discretion recover the ground rent for the goods/parts which have been rejected during the guarantee period for the specified period of 14 days, if the rejected materials are not taken over within that period by the Contractor or his representative.
- 11.11 The guarantee herein contained shall not apply to any material which have been repaired or altered by RDSO or on its behalf in any case without the consent of the Contractor so as to affect its strength, performance and reliability or to any defects to any part due to misuse negligence or accident and to items of normal wear and tear to be specifically mentioned by the Contractor in his offer and go accepted by RDSO. The decision of RDSO in regard to Contractor's liability and the amount, if any, payable under this guarantee shall be final and conclusive.
- 11.12 Tender papers issued to Tenderer should be signed by them and submitted along with the offer with their covering letter.

12.0 REJECTION OF TENDERS WITHOUT EARNEST MONEY

- 12.1 Tenders un-accompanied with the Earnest Money will be summarily rejected. Exemption is not permitted in any circumstances.

13.0 FILLING OF TENDER DOCUMENTS

- 13.1 The tender documents should be filled neatly and rates should be in words and figures. The total amount should be clearly mentioned in figures and words without any cutting overwriting/corrections in attached schedule.

14.0 PREFERENCE TO PUBLIC SECTOR UNDER TAKING

- 14.1 In case the overall value of the Tender by a Public Sector Undertaking of the State or Centre Government is up to 10% higher than the lowest tender of Private Tenderer, RDSO reserves the right to give preference to the Tender of such Public Sector Undertaking ignoring the lower Tenderers.

15.0 INDIRECT TAXATION

- 15.1 In the event of any new indirect taxation being imposed after the date of opening of Tender and of being of such a nature that the Contractor has to bear additional cost of material directly, on account of such additional taxation the Purchaser shall reimburse the Contractor for such additional costs on receiving satisfactory proof that such taxation was legally leviable and that the Contractor has actually incurred the additional costs.

16.0 FORCE MAJURE

- 16.1 If, at any time, during the continuance of this Contract, the performance in whole or in part by either party, if any obligation under this Contract shall be prevented or delayed by reason of any war hospitality acts of the public enemy, civil commotion, sabotage fires, floods explosions, earthquakes, quarantine restrictions, strikes, lockouts

any statute, statutory rules, regulations, order or requisitions issued by any Government Department or Competent Authority or acts of God (hereinafter referred to as "Event") then provided notice of the happening of any such event is given by either party to the other within twenty one days from the date of occurrence thereof neither party shall either party have any claim for damages against the other in respect of such non-performance or delay in performance and obligations under the Contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist provided further that if the performance in

whole or part of any obligation under this Contract is prevented or delayed by reason of any such event beyond a period as mutually agreed to by the purchaser and the Contractor after any event or 60 days in the absence of such an agreement whichever is more. Either party may at its option terminated under this clause, the Purchaser may at the time of such termination take over from the Contractor, at prices as provided for in the Contract all erected equipment or equipments under erection as also all or any portion of unused, undamaged and acceptable equipment whether storage or in the course of manufacturing.

17.0 AGREEMENT

- 17.1 The successful Tenderer shall within 7 (seven) days after having been called upon by notice to do so be bound to execute an agreement based on accepted rates and conditions and lodge the same with Purchaser together with the conditions of Contract, Specification and Schedule of Prices referred to therein duly completed.

18.0 CONTRACTOR'S DRAWINGS

- 18.1 Before execution of the work the Contractor shall submit to the Purchaser for approval. Six copies of all detailed drawings, which are necessary to ensure correct erection and satisfactory performance as detailed in Tender Papers.

18.2 Expense on contractors drawings etc.

Any calculations, designs, drawings, schedules, information, date, progress, charts etc. required by the Department's Engineers in connection with the Contract, shall be furnished by the Contractor at his own expenses.

19.0 RAILWAY STORES

- 19.1 If any material which the Contractor has to arrange for himself supplied by the Purchaser either at the contractor's request in order to prevent any possible delay in the execution of the work likely to occurred due to contractor's inability to make adequate arrangements for supply thereof or otherwise, recovery will be made from Contractor 's bill at the book rate or the last purchase rate, whichever is higher plus 5% on account of initial freight and 2% on account of incidental charges together with supervision charge @ 12-1/2% on the total cost inclusive of material, freight & incidental charges. Transportation from RDSO Stores to Contractor's Store/site of work shall be borne by the Contractor.

NOTE: If the Contractor runs short of materials and such materials are available in the Department's stock, the material may be supplied by the Department on load to the contractor who will return these on receipt of his stipulated supplies.

20.0 SUB-CONTRACTORS:

- (a) The Contractor may sublet a part of the works under this Contract and enter into Contract with supplies for supply of materials.
- (b) The name of all Sub-Contractors proposed to be employed on execution of works or any part thereof including manufacture of components & fittings shall be submitted by the Contractor to the Purchaser & got approved by him before the Contractor enters into an agreement with the Sub-Contractor for the purpose.
- (c) The Contractor shall, however, arrange for effective supervision of Sub-Contractor's work & remain solely responsible for material supplied for works carried out on his behalf by the Sub-Contractor.

DEFAULT AND DELAY :

- 20.1 The Contractor shall execute the work with due diligence and expedition keeping to the approved time schedule. Should he refuse or neglect to comply with any reasonable orders given to him in writing by the Engineer's representative in C/W the work of contrivance the provision of the Contract or the progress of work lags persistently behind the time schedule due to his neglect, the Purchaser shall be at liberty to give 7 (seven) days notice in writing to the Contractor requiring him to make good the neglect or contravention complained or should the Contractor fail to comply with the requisition made in the notice within 7 (seven) days from the receipt thereof, it shall be lawful for the Engineer to take the work wholly or in part out of the Contractor's hands without any further reference & get the work on any part thereof, as the case may be completed by other agencies at expense of the Contractor without prejudice to any other right or remedy of the Purchaser.

20.2 Loss sustained due to default and delay :

In the event of any loss to the Purchaser on account of execution and/or completion of the work any parts thereof by agencies other than the Contractor, in terms of the Clause 3, the Contractor shall be liable to reimburse the loss to the Engineer or Department without prejudice to any other right and remedies of the Purchaser, and the reimbursement in full or in part as the case shall be made at the option of the Engineer or Department, from out of all or any of the following sources viz.

- (i) Any amount due and payable to the Contractor by the Purchaser on any account whatsoever.
- (ii) The Contractor's Security Deposit with the Purchaser as far as available and
- (iii) Any other assets whatsoever belonging to Contractor.

21.0 CONTRACTOR RESPONSIBILITY FOR DISCREPANCY :

- (a) All designs and drawings submitted by the Contractor shall be based on a thorough study and shall be such that the Contractor is satisfied about their suitability. The Engineer or department approval will be based on these considerations. Notwithstanding approval communicated by the Engineer or department during the

progress of the Contractor for designs and drawings. Prototype samples of material after inspection of materials after erection and adjustments to installations the ultimate responsibility for correct designs and execution of work shall rest with the Contractor.

- (b) The Contractor shall be responsible for and shall bear and pay the costs for any alteration of works arising from any discrepancies, errors or omissions in the designs and drawings supplied by him, whether such designs and drawings have been approved by the Engineer or department or not.

22.0 WORK BY OTHER AGENCIES :

- 22.1 Any other works undertaken at the same time by the Purchaser or RDSO direct or through some other agency at the same site where the Contractor is carrying out his work will not entitle the Contractor to prefer any claim, regarding any delays or hindrance he may have to face on this account. The Contractor shall comply with any instructions which maybe given to him by the Engineer or department in order to permit simultaneous execution of his own works and of these undertaken by other Contractors or the RDSO without being entitled on this account to any extra charge.

23.0 ACCESS TO WORK SITE :

- (a) Access to the site for the purpose of this Contract shall be afforded to the Contractor by the Purchaser at all reasonable times. In the execution of the work, no person other than the Contractor or his duly appointed representative or approved Sub-Contractor and bonafide workman shall have access to site. Access to the site of work at all times shall be allowed by Contractor to officials or approved representative of the Engineer or department or to RDSO staff for purpose of maintenance.
- (b) The Purchaser or his authorised representative shall have the right to refuse admission to the work site of any person employed by the Contractor whom the Engineer or department or his Engineer may consider undesirable.
- (c) The Engineer or his representative shall be at liberty to object to the presence of any representative or other person employed by the Contractor in or about the works. On the ground of mis-conduct, incompetence or negligence, the Contractor on receipt of notice of such objection in writing, shall forthwith remove the person so objected to and provide in his place another competent person and shall not allow such person to enter the site of work subsequently. The Engineer or department will not be liable to pay any cost or damage on this account.

24.0 INSURANCE :

- (a) The Contractor shall take out & keep in force a policy or policies of insurance against all liabilities of the Contractor or the Purchaser at common law or under any status in respect of accidents to person who shall be employed by the Contractor in or about the site of the Contractor's office for the purpose of carrying out the works in the site. The Contractor shall also take out and keeps in force a policy or policies of insurance against all recognized risks to their offices and depots. Such insurance shall in all respects be to the approval of the Engineer or Department and if he so requires in his name.

27.2 INSURANCE OF MATERIALS AND INSTALLATIONS :

- (a) The Contractor shall take out & keep in face a policy or policies or insurance for all materials in storage, under erection and/or erected until such materials are provisionally hand over to the Engineer or department. For this purpose the materials shall be deemed to have been provisionally handed over when provisional acceptance certificate is issued as per Clause 29.1.
- (b) The Contractor shall not be liable for losses or damages to equipment erected in the course of erection or in stores at the Contractor's depot in consequence of mutiny or other similar causes over which the Contractor has not control and which cannot be insured, such losses of damages shall, it required by the Purchaser, be made good by the Contractor at the cost of the Engineer or department.
- (c) The Contractor should, however, insure the materials brought to site against risks in consequence or war & invasion as required under the emergency risks (goods) Insurance Act, 1962 from time to time. The amount of such insurance premium paid by the Contractor will be reimbursed to him by the Purchaser on submission of Bills in proof of payment of such insurance premium.

NOTE : The insurance premium under the Emergency risks (Goods) Insurance Act 1962, are reimbursable to the Contractor only for the premium paid by him and not for any premium paid by any of his Sub-Contractor. The Contractor shall have out all insurance covers in connection with the Contract with the Life Insurance Corporation of India only. The Contractor's liability to meet 3rd party claims of the type outlines above, will be applicable only in case where accidents have been caused by bad design, workmanship material or negligence on the part of the Contractor & further the liability of the Contractor will be limited to Rs----- as per rule for any one accident. . The Contractor shall be responsible for all repairs & rectification of damage to the plant erected or under affection due to accidents of any other cause until the plant is provisionally handed over to the Purchaser.

28.0 PENALTY AFOR DELAY IN COMPLETION:

- (a) If the contracts fails to execute & complete the work within time specified in the agreement or within the period of extension granted under the sub para 2.36(B) except in so far that the delay is on the purchaser's account, the Contractor shall accept reduction in the total amount payable to him by the purchaser at the rate of ½% per week of the Contract value for the actual delay occasioned & until the work shall have been completed under the Contract and such reduction shall be accepted by the Purchaser in full satisfaction of the Contractor's liability arising from delay only. The Engineer shall at his sole dicrerition, specify a time limit within----- unfinished portion of the work shall -----

- b) **Extension of times:** If aforesaid shall have arisen from any cause which the Purchaser may admit as being a reasonable ground for extension of time, the purchaser shall allow such additional time as he may in the absolute discretion consider to be reasonably justified by the circumstance of the case
- (c) Tests as required under the Specification shall be carried out by the Contractor in the presence of the Engineer or his representative as soon as possible after commissioning. Any other additional test which the Engineer may be prescribed for testing the satisfactory operation of the plants shall be carried out by the Contractor at his own expense. Necessary electrical power required in C/W the test will be supplied free of any charges by the Engineer. The Contractor shall submit six copies of the test results to the Engineer for acceptance. The Contractor shall also submit six copies of the Manufacturer's test certificates for equipment, such as, Motor, cable etc.
- (d) Should the result of the test not be satisfactory, an extension of the one month will be granted to the Contractor to make good the defects and deficiencies pointed out by the Purchaser. A fresh test will then be carried out after the Contractor has attended to the defects and deficiencies. If these do not yield satisfactory results, the Purchaser may proceed at the Contractor's expense by all means as deemed expedient to have installation made satisfactory until they comply with the Specification approved drawings and design.
- (e) In such a case or in case of delay in completion the work under this Contract within the time limit the Purchaser reserve the right to deem if some portions of the plant are not completely effected, the Purchaser will give to the Contractor for this purpose seven days previous notice. The Contractor shall then taken at his own expense all necessary steps to complete the work in accordance with the provision of the Contract. In case it becomes impossible to proceed with the above mentioned taking over tests, for reason other than for which the Contractor is responsible, the "provisional acceptance certificate" shall be issued at or within a mutually agreed reasonable period not exceeding six months after completion of the work.

29.0 DEFECTIVE EQUIPMENT TO BE REPLACED :

29.1 Notwithstanding the issue of a provisional acceptance certificate & partial or full use of any equipment if the complete plant or any portion thereof, before it is finally take over at the end of the guarantee period, found to be or to have become defective in course of usage by the RDSO due to faulty material, design or workmanship of otherwise to fulfill the requirement of the Contract and its purpose, the Purchaser shall normally give the Contractor prompt notice setting the particulars of such defects or failure and the Contractor shall for the with made the defects good or modify or replace the equipment as may be directed by the Purchaser's Engineer at the own cost in all respect to make it comply satisfactory with the said notice upon him or should time not permit of service of the said notice upon him or should time notice upon him or should time not permit of service if such notice the Engineer may repair or reject final replace the whole or part of such defective equipment, as the case may be, at the cost of the Contractor. The Contractor's full liability under this clause shall be satisfied by the payment to the Engineer of the extra total cost any of such replacement delivered and erected as provided for in the original Contract, such defective equipment within a reasonable time, the Contractor's liability under this clause shall be satisfied by the repayment by the Contractor of all moneys paid by the Purchaser to him in respect of such rejected equipment. Rejected/defective material shall be returned to the Contractor to the extent possible.

30.0 FINAL ACCEPTANCE :

- (a) The final acceptance of the entire work shall take effect from the date of expiration of the period of guarantee as defined in Para 13.0 provided the installations provisionally accepted are still in perfect working order.
- (b) If on the other hand the installations are not in the perfect working order at the end of the guarantee period the Purchaser may either extend the period of guarantee until necessary works are carried out by the Contractor, or carry out these works or have them carried out on behalf of the Contractor and at his expense. A certificate of final acceptance shall then be issued by the Engineer who will terminate the Contractor.

31.0 IDENTIFICATION OF CONTRACTOR'S STAFF/LABOUR

The Contractor whose offer accepted shall obtain necessary permission/approval in writing for his complete establishment to be engaged for the work from ASC/RPF through nominated Sr. Supervisor In charge of the work in terms of Director/Civil Note No. DC/Misc./Security dated 02-09-1994.

- 31.1 Any outsider, unknown and unidentified person of doubtful appearance shall not be allowed to enter in the premises. Any of the Contractors' staff found involved in illegal activities or misbehaving with the officials or pilfering the Government material etc. will be viewed seriously and Contractor shall have to expel such staff from the job and will be required to make up the loss sustained either in cash or material as per decision of RDSO Authorities, Executive Director/Admin. & EMS, RDSO, Lucknow will be the final authority in such case.

Asstt. Design Engineer/EMS

SECTION – IV

TECHNICAL SPECIFICATION

Government of India: Ministry of Railways,
Research Designs and Standards organisation
Manak Nagar, Lucknow - 226011

SPECIFICATION No. EMS/62/88 (II) REV.

1. General

This specification covers supply laying and connection etc. of LT underground cable of all sizes at RDSO complex. The work shall be done strictly as per IE rules.

2. Trench for laying of underground cable

The trench shall be excavated as per size having width of 375 mm (0.375 m) and depth of 1000 mm (1 meter).

3. Laying of cable

- (a) Before laying of cable a 50 mm thick sand layer is to be laid/made in the trench, then the cable should be laid in the trench and protected with 'A' grade bricks at three sides of the cable in reverse U shape filling with sand around the cable between the bricks.
- (b) After laying the cable, the trench should be filled up with released earth up to the earth surface and cable route should be indicated with cable route indicators to be provided as per IE Rules. A provision of five - meters dia cable ring at each ends shall be provided.
- (c) The Assistant Design Engineer (EMS) will give route of the cable, RDSO, Lucknow or his authorised representative.
- (d) GI/Hume pipe of suitable size to protect the cable as per IE Rules (separately for each cables) on any road / wall crossings shall be provided by the contractor.
- (e) If the cable is required to run on the wall, it shall be laid properly with the help of suitable size of clamps made on MS flat base of MS angle and nut, bolts etc. with protection to the cable.

4. Connections

Connections shall be done through suitable size of aluminium lugs and MS box at both ends of the cable.

- Note:** - 1. It shall be the responsibility of the contractor for safe working of their labours.
2. The contractor shall measure the actual length of the required cable before executing the work.

Government of India : Ministry of Railways
Research, Designs & Standards Organization
Manak Nagar, Lucknow-226 011.

Specification No. EMS/111/Rev/2012 dated 05.10.2012

VRF/VRV-Main AC Units

Supply of Air-cooled 100% Inverter Compressor Based Variable Refrigerant Flow (VRF)/ Variable Refrigerant Volume (VRV) Modular type Air-conditioning system with Eco-friendly R410A refrigerant suitable for 380-415 V AC, 3 Ph, 50 Hz power supply of following makes only.

- I) "O" General
- II) Carrier
- III) Hitachi
- IV) Mitsubishi Heavy Industries.
- V) TOSHIBA

- All outdoor units should be with variable speed compressors only for power saving, based on Inverter technology. Fixed speed compressor will not be acceptable.

Supply of above units along with vacuumising & charging of refrigerant, including supply of refrigerant gas, and all other ancillary items, canvass connection, drain connection up to nearest drain point, Fixing of supply and return Al powder coated grills/diffuser (as specified), Installation, testing & commissioning, Rigging, air balancing, along with copper piping with insulation and Electrical work between indoor & outdoor units as required as per site.

The 100% inverter VRF/VRV modular type AC units shall consist of the following:

- Shall include primary source of refrigerant for cooling and heating and consist of multiple indoor units and outdoor unit with variable speed scroll compressors as specified. Indoor unit consists of air-handling fan, evaporator, motor, filter valves etc and outdoor unit consists of compressor, fan with motor & condenser coil.
- The AC should be capable of working at above 45 deg 'C' ambient temperature.
- Set temp. range from 18 deg 'C' to 30 deg 'C'

AIR DISTRIBUTION SYSTEM:

1.0 GENERAL:

Supply, fabrication, installation and testing of all GI sheet metal ducts & supply, installation, testing and balancing of all grilles, and diffusers, in accordance with these specifications and the general arrangement shown on the drawings. Duct work shall mean all ducts, casings, dampers, access doors, joints, vanes, stiffeners, hangers and supports etc. All ducts shall be fabricated from galvanized steel sheets of the following thickness as indicated in schedule of quantities & as per IS standards with latest edition.

2.0 RECTANGULAR DUCT:

Dimensions of Ducts Gauge G.I/ Aluminium

Upto 600	24 /22
601 to 750	24 /22
751 to1000	22/ 20
1001 to1500	22 /20
1501 to2250	20 /16

2.2 Sheet metal ducts shall be fabricated out of galvanized steel sheets conforming to IS standards. Sheets used shall be produced by Hot dip process and galvanizing shall be Class VIII- Minimum Average Coating 120 gm/sq.m as per IS standards.

3.0 HANGERS FOR DUCT:

Duct Size (mm)	Spacing (M)	Size of MS angle (mm x mm)	Size of rod dia (mm)
Upto 750	2.5	40 x 3	10

751 to 1500	2.0	40 x 3	12
1501 to 2250	2.0	50 x 3	15
2251 to above	2.0	50 x 3	15

4.0 FABRICATION:

All ducts shall be fabricated and installed in workman like manner, 2.1 generally conforming to IS .

a) Ducts so identified on the drawings shall be acoustically lined with thermal insulation as described in the section 'Insulation' and as indicated in schedule of quantities. Duct dimensions shown on drawings are overall sheet metal dimensions inclusive of the acoustic lining, where required and indicated in schedule of quantities.

b) Ducts shall be straight and smooth on the inside with neatly finished joints. All joints shall be made airtight.

c) Changes in dimensions and shape of ducts shall be gradual. Curved elbows, unless otherwise indicated, shall have a center line radius equal to one and a half times the width of the duct. Air turns vanes shall be installed in all bends & elbows, arranged to permit the air to make the turn without appreciable turbulence. Suitable vanes shall be provided in duct collar to have uniform/ proper air distribution.

d) Ducts shall be fabricated as per details shown on drawings. All ducts shall be rigid and shall be adequately supported and braced where required with standing seams, tees, or angles of sample size to keep the ducts true to shape and to prevent bulking, vibration or breathing.

e) All sheet metal connections, partitions and plenums required to confine the flow of air to and through 20 gauge GI gauge, thoroughly stiffened with 25mm x 25mm x 3mm angle iron braces and fitted with all necessary doors as required to give access to all parts of the apparatus. Access Doors shall be not less than 45cm x 45cm in size. VCDs shall be provided to balance air quantity in each branch.

5.0 SPLITTERS AND DAMPERS:

All dampers shall be opposed blade type dampers of robust construction and tight fitting. They shall be made of G.S. sheet minimum 20 gauge thick and shall have brass bushes. The design, method of handling, and control shall be suitable for the location and service required. Dampers shall be provided with suitable links, levers and quadrants as required for their proper operation control or setting devices shall be made robust, easily operatable and accessible through suitable access doors in the ducts. Every damper shall have an indicating device clearly showing the damper position at all times. Handles and knobs provided with extended arms to account for insulation thickness. Dampers shall be placed in ducts and at every branch supply or return air duct connection, whether or not indicated on the drawings, for the proper volume control and balancing of the system.

6.0 SUPPLY AND RETURN AIR GRILLES:

Supply and return air grilles shall be extruded aluminium powder coated construction with individually adjustable bars as shown on drawings and indicated in schedule of quantities. Supply air grilles shall be generally double deflection type, with removable key operated volume control dampers. Return air grilles shall be generally double deflection type similar to supply air grilles but without dampers. All supply and return air grilles behind wooden grilles shall be single deflection type with one way bars only, the supply air grilles being provided with removable key operated volume control dampers. Aluminium supply and return grilles shall be powder coated.

7.0 SUPPLY AND RETURN AIR DIFFUSERS:

The supply air diffuser shall be provided with removable key operative volume control dampers. Aluminium supply and return air diffusers shall be powder coated.

The material thickness of grills, diffuser, damper shall be as follows:

Diffuser	Aluminium
a) Frame	18 gauge.
b) Louvers	18 gauge.

Grills :

- | | |
|------------|-----------|
| a) Frame | 18 gauge. |
| b) Louvers | 24 gauge. |

V.C. Damper :

- | | | |
|-----------|----------|-----------|
| | MS | Aluminium |
| a) Frame | 20 gauge | 18 gauge. |
| b) Louver | 26 gauge | 24 gauge. |

THERMAL/ACOUSTIC INSULATION:

GENERAL:

Scope of this specification comprises of supplying, installing, testing and commissioning of insulation on duct, and duct lining.

1.0 DUCT INSULATION:

External thermal insulation on ducts, 9 mm thick closed cell elastomeric nitrile rubber tubing class 'O' secured with approved adhesive complete as per specifications and as required for supply duct. (for in-door applications) using shalikote primer and hot bitumen.

2.0 ACOUSTIC LINING OF AHU ROOM AND LINING OF DUCTS:

Acoustic lining of duct as per requirement, 12 mm thick.

GENERAL:

1. All electrical works should comply with Indian Electricity Act 2003 and Indian Electricity Rules 1956.
2. All minor items viz. hardware items, foundation bolts, termination lugs for electrical connections etc. as required and necessary for proper working of the equipment shall be deemed to have been included in the tender, whether such items are specifically mentioned in the tender documents or not.
3. Civil work/MS frame work for indoor and outdoor units related to VRV/ VRF equipments, all cuttings should be properly finished as existing surrounding. The installation of outdoor unit on the terrace of building should be checked up structurally & their mounting should be structurally safe. of the of outdoor unit to ensured in such a way that after installation.
 - a) Cutting of walls and floors/ceiling.
 - b) Making holes.
 - c) Sleeves.
 - d) Foundation.
4. The outdoor units shall have both cooling & heat pump mode, consisting of one /multiple outdoor unit with single circuit of refrigerant piping. However, all outdoor units should be with multiple inverter scroll compressors only. Each indoor unit should have capability to cool or heat as per seasonal weather changes.
5. The layout of refrigerant piping is to be designed in such a way so that it should not disturb the aesthetic of the building/room, inadvertent damage in the route of pipe should not occur in future & optimum length of pipe line for efficient air conditioning. After completion of the work four set of 'as erected/commissioned drawing' of activities listed above shall be submitted.

1.0 OUTDOOR UNIT

- i. For testing and evaluation consideration, JIS B8616 or equivalent standard shall be applicable.
- ii. The outdoor unit shall be factory assembled, weather proof casing (Material of construction of casing shall be vendor's standard design), constructed from heavy gauge GI sheets steel panels and coated with baked enamel finish. The outdoor unit shall be completely factory wired, tested with all necessary controls & filled with first charge of refrigerant before delivering at site.
- iii. The inverter technology based VRV/VRF equipment should be capable so that refrigerant piping between indoor units and outdoor unit shall be Extendable upto 150m with maximum height difference between outdoor & indoor unit of 50m & level

difference between two indoor unit maximum upto 15m.

The minimum acceptable value of Coefficient of Performance (COP) of the offered system, in conformance with JIS B8616 or equivalent, shall be not less than 3.5-4.1 at 50 % rated load with 35 deg C outdoor and 19 deg C wet bulb conditions depending on the capacity of outdoor units (as mentioned in BOQ) as per OEM standard catalogue.

- iv. The outdoor unit shall be factory tested and filled with first charge of refrigerant R-410A before delivering at site.
- v. It should also be provided with duty cycling for inverter compressors capable of changing the rotating speed of compressor by inverter controller to follow variation in cooling & heating loads & switching starting sequence for better stability and prolonging equipment life.
- vi. The outdoor unit shall be suitable for mix match connection of all types of indoor units.
- vii. It should be provided with duty cycling for switching the starting sequence of multiple outdoor units.
- viii. The outdoor unit shall be modular in design and should be allowed for side by side installation.
- ix. The outdoor units should have anti corrosion paint free plate for easy mounting of unit.
- x. The machine must have a sub cool feature to use coil surface more effectively thru proper circuit/bridge so that it prevents the flushing of refrigerant from long piping due to this effect thereby achieving energy savings.
- xi. The outdoor unit should be fitted with low noise level and should not be more than 67 db (A) at normal operation when measured at 1.5m distance from ground level.
- xii. The outdoor unit should be fitted with low noise aero spiral design fan with aero fitting grill for spiral discharge airflow to reduce pressure loss and should be fixed with DC fan motor for better efficiency.
- xiii. The outdoor units are connected to multiple indoor units of various types as such the combined operating loads of indoor units may touch 120 to 125% of the nominal capacity. The outdoor unit shall be able to perform at the combined loads demands as indicated above.
- xiv. Multiple outdoor units are also acceptable to meet out the load requirements as per tender schedule.
- xv. In case of trouble occurs in an indoor unit(s), the continuous operation of system should be possible.
- xvi. The unit shall be designed in such a way that cleaning of drain Pan should be easy & inspection/replacement of compressor should be easy.
- xvii. The condensing unit shall be designed to operate safely when connected to multiple fan coil units.

2.0 Compressor

- i. The compressor in inverter based system shall be highly efficient. The system should response efficiently in accordance to the variation in cooling or heating load requirement.
- ii. The inverter shall preferably be IGBT type for efficient and quiet operation.
- iii. All outdoor units shall have multiple steps of capacity control to meet load fluctuation and indoor unit individual control. All parts of compressor shall be sufficiently lubricated stock. Forced lubrication may also be employed.
- iv. Oil heater shall be provided in the compressor casing or as per manufacturer standard equipments.

3.0 Oil Recovery system

Unit shall be equipped with an oil recovery system to ensure stable operation with long refrigeration piping lengths.

The system must be provided with oil balancing circuit to avoid poor lubrication.

4.0 Refrigerant Circuit

The refrigerant circuit shall include liquid and gas shut-off vales and a solenoid valves at condenser end.

The equipment must have inbuilt refrigerant stabilization control for proper refrigerant

distribution.

All necessary safety devices shall be provided to ensure the safe operation of the system.

5.0 Heat Exchanger

The heat exchanger shall be constructed with copper tubes mechanically bonded to aluminium fins to form a cross fin coil.

The aluminium fins shall be covered by anti-corrosion resin film.

The unit should be with bye-pass/e-pass heat exchanger to optimize the path of heat exchanger and for better efficiency of condenser.

The unit shall be provided with necessary number of direct driven low noise level propeller type fans arranged for vertical discharge. Each fan shall have a safety guard.

6.0 Safety Devices

All necessary safety devices shall be provided to ensure safe operation of the system.

Following safety devices shall be part of outdoor unit, high pressure switch, fuse, fan drive overload protector, fusible plug, crankcase heater over load relay, overload protection for inverter.

The outdoor roof mounted units shall be provided in such a fashion that these do not affect the overall aesthetics and ambience of the building. If required these units shall be

suitably camouflaged to give good aesthetic look. These provisions, however, shall be discussed, if required, at a later date and the prices for the same shall be worked out separately as extra item.

Noise levels for outdoor units shall not be more than 67 db (measured at a point 1 metre in front of the unit at a height of 1.5 meters).

7.0 Indoor Units

All indoor units shall have, in general, noise levels less than 46 db.

- i) Each Unit shall have electronic control valve to control refrigerant flow rate respond to load variation of the room.
- ii) The fan shall be dual suction, aerodynamically designed turbo, multi blade type, statically & dynamically balanced to ensure low noise and vibration free operation of the system. The fan shall be direct driven type, mounted directly on motor shaft having support from housing.
- iii) The cooling coil shall be made out of seamless copper tubes and have continuous aluminium fins. The fins shall be spaced by collars forming an integral part. The tubes shall be staggered in the direction of airflow. The tubes shall be hydraulically/mechanically expanded for minimum thermal contact resistance with fins. Each coil shall be factory tested at 21 kg/sq.m air pressure under water.
- iv) Indoor Unit shall have cleanable type filter fixed to an integrally moulded/ moulded plastic frame. The filter shall be slide in and neatly insertable type. It shall be possible to clean the filters either with compressed air or water.
- v) Each unit shall have computerized PID control for maintaining designed room temperature. Each unit shall be provided with microprocessor thermostat for cooling and heating.
- vi) Each ductable unit shall have with corded remote controller and each cassette type indoor unit shall be with corded/cordless remote controller as standard features. The remote controller shall memorize the latest malfunction code for easy maintenance. The controller shall have self-diagnostic features for each and quick maintenance and service. The controller shall be able to change fan speed and angle of swing flap (for cassette type unit) individually as per requirement.

a) Ductable Type Indoor Unit

The unit shall be Ductable type. The unit shall include pre-filter, fan section and DX-coil section. The housing of the unit shall be powder coated/heat treated galvanized steel. The unit shall have high static fan for ductable arrangement and it should also have suitable arrangement for drain water.

8.0 Y-Joint / Ref net separation

Supply & installation of the Y-Joint / ref-net separation refrigeration pipe joints and headers in the appropriate orientation to enable correct distribution of refrigerant. The Distribution Joints should be factory insulated with pre-formed sections of Expanded Polystyrene/ Equivalent.

9.0 Refrigerant Piping

- i. Refrigerant piping for the air-conditioning system shall be upto 19.1 mm dia of soft seamless copper tubes & for above 19.1 mm dia the pipe material shall be of hard seamless copper tubes with pipes material being hard drawn copper pipe. Forged copper fittings shall be used for the refrigerant piping. The refrigerant piping arrangements shall be in accordance with good engineering practices as applicable to the air-conditioning industry, and shall include charging connections, suction line insulation and all other items normally forming part of proper refrigerant circuits except y joint/ separation tubes.
- ii. Before jointing any copper pipe or fittings, its internals shall be thoroughly cleaned by passing a clean cloth via wire or cable through its entire length. The piping shall be continuously kept clean of dirt etc. while constructing the joints. Subsequently it shall be thoroughly blown out using nitrogen gas.
- iii. After completion of installation of the refrigerant piping, the refrigerant piping system shall be pressure tested using nitrogen gas at a suitable pressure as specified by OEM (Original Equipment Manufacturer). Pressure shall be maintained in the system for 48 hours. The system shall then be evacuated to a vacuum of not less than 700 mm Hg and held for 24 hours.
- iv. The supplier of air-conditioning system shall choose sizes as designed and erect proper interconnections of the complete refrigerant circuit. The thickness of copper piping shall not be less than 18 SWG for pipes upto 19.1mm and 16 SWG for larger dia.
- v. The suction line pipe size and the liquid line pipe sizes shall be selected according to the manufacturer's specified diameter. All refrigerant pipes shall be properly supported and anchored to the building/structure using steel hangers, fasteners, brackets and supports which shall be fixed to the building/structure by means of inserts or expansion shields or anchor fasteners of adequate size and number to support the load imposed thereon.
- vi. The refrigerant piping should be laid in such a way that it should not distort the interior of the room, wherever the refrigerant pipe has to be laid across the room, it should be laid in a concealed manner under the false ceiling. All major civil work such as painting/plastering/wall opening/ civil pedestal for outdoor units and false ceiling will be carried out by the department itself, minor civil engineering work like to facilitate the installation will be carried out by the firm.
- vii. To protect Nitrile rubber insulation of outdoor installed copper piping from degradation due to ultra violet rays and atmospheric condition, it shall be covered with polyshield coating of at least two coats of resin and hardner (poly bond make or equivalent). Fibreglass tape shall be helically wound with adequate overlap & coated with two coats of resin with hardener to give smooth & plain finish.
- viii. Entire liquid and suction refrigerant pipe lines including all fittings, valves and strainer bodies etc. shall be insulated with 19mm/ 13mm thick electrometric nitrile rubber as specified in BOQ.

Ducts must be having, transverse beading at every 300 mm, to provide additional strength to the structure.

Each Transverse Joint will be at 4 ft. spacing.

10.0 Acoustic Lining

- i. Where called for ducts shall be insulated on the inside for acoustical noise attenuation.
- ii. The insulation material shall be resin bonded fibreglass crown 150/25 mm thick bolted on the inside of ducts.
- iii. The fibre-glass shall be faced with 26 gauge perforated aluminium on the inside (air side)
- iv. The Aluminium covered insulation shall be bolted to the sheet metal duct with 6mm dia G.I. bolts and nuts.

- v. Bituminized tar felt washers 4 mm thick shall be used with the nuts and bolts to ensure a rattle free fit. Where necessary the inside comers of the insulation should be stiffly held in position by suitable braces.

11.0 AIR GRILL

- (a) Factory manufactured extruded aluminium powder coated air grills shall be provided with individually adjustable air distribution patterns, air distribution grid for straightening the air flow through the collar and register and removable key operated volume control dampers and as per site requirement.
- (b) All air outlets & intakes should be of sheet steel connections/aluminium connection as the case may be in accordance with schedule of works.
- (c) Square or rectangular side outlets/intakes should have a flanged with outside edge returned or covered 5 mm to 7 mm and fitted with a suitable flexible gasket. Supply air register should have fixed front louvers parallel to the longer dimension. The outer frame 18 SWG all extruded section. The louvers should be of not less than 24 SWG Aluminium louvers may be spaced 18 mm.
- (d) Square and rectangular ceiling outlets and intakes should have a flange flush with the ceiling in to which it is fitted or be anti-smudge type. The outlets should comprise outer should with duct collar and removable diffusing assembly. The outer should not be less than 24 SWG steel.
- (e) Circular ceiling outlets and intakes should have anti-smudge outlet cones as required. Anti smudge stones should have the ceiling adjacent to the air outlet. The metal sheets used for construction should not be less than 18 SWG steel sheets.

General Specification for Internal Wiring

1. This Specification covers concealed wiring, partly in recess (on the walls) and partly on surface (in the roof) in rigid PVC conduit for electrification of the buildings in RDSO at Manak Nagar, Lucknow. Electrification of the building covers light, fan, exhaust fans, all types of plug points, call bell circuit wiring and other associated works as per the building layout drawing attached with the documents.
2. The wiring shall be carried out in rigid PVC conduit partly in recess and partly on surface on one of this as per the site requirements. The wiring shall be carried out to strictly in accordance with IS:732 (latest edition). Separate PVC pipes shall be used for different phases i.e. wires of two phases may not be kept in one pipe.
3. All the pipes for circuits will run in the corridor wall and enter in the respective rooms from the suitable locations.
4. After the award of work, the contractor shall produce samples of all the materials to be used as incorporated in the work schedule for approval.
5. After completion of the work, contractor shall submit a completion certificate in details and plans in triplicate to the ADE/EMS/RDSO or his authorised representative for final inspection and taking over the installation with the results obtained in respect of the following items :
 - (I) Insulation resistance test.
 - (II) Polarity tests of the respective accessories.
 - (III) Earth continuity test.
 - (IV) Earth electrode resistance test.
6. The contractor shall be solely responsible for setting out the work site for the correctness of the positions, levels, dimensions and alignment.
7. The contractor shall arrange their own tools and plants necessary for the proper execution and completion for the work within the specified time.
8. The contractor shall provide at his own cost to protect the material in use in work in progress and in the stores provided by the department for the work at site.
9. The contractor shall pay the entire royalties and license fee. They shall defend all suits or claims for infringement to any rights and shall have to identify the purchaser from loss on account thereof.
10. As soon as practicable but not later than one week after the acceptance of their tender, the contractor shall be required to submit a program showing the order of procedure and method in which they proposed to carry out the work to the ADE/EMS or his authorised representative for approval. However, submission to any approval by the ADE/EMS of such program shall not be relieved the contractor of any of their duties and responsibilities under the contract.
11. The contractor shall be fully responsible for rectification of all the defects and compensation of loss till the entire work is completed and taken over from them.
12. Surface of wooden boards shall be of one piece only up to 200mm x 250mm and not more than two pieces for higher sizes and no cracking will be allowed.
13. All the material used for the work shall conform to relevant IS/BIS and shall be of one of the makes as indicated in the list of preferred make attached with the schedule.
14. (i) Seasoned and well polished wooden boards duly provided with anti-termite paints shall consist of a box made of wooden planks not less than 10 mm thick or MS Switch Box as per site requirement for switch boards and the top covers shall be provided with 3 mm thick pneumatic laminated sheet covers (egg white). There shall be clear distance of 30 mm between the front and back planks in the board.
 - (II) All the switch boards shall conform to IS:3731 in all respects. The boards shall be suitable for surface/recess mounting on the wall to provide flush type accessories
 - (III) The top cover arrangement shall be suitable for screwing as well as by means of hinges or as required.
 - (IV) the boards shall be securely fixed to the walls by means of rag bolts and shall be provided with a hook and eye arrangement and earthing studs.
 - (V) The incoming and outgoing wires inside the board shall be bunched separately and properly. For looping of wires, a connector shall be provided suitably.
15. Earth pit with electrodes shall be prepared and executed strictly in accordance with RDSO's Drawing No.EMS/SK/071 IS:3043.
16. The contractor shall have executed the work in coordination with civil contractor and if the civil work remains incomplete, the contractor shall have to apply for extension of time accordingly. In case of recess wiring and holes for fans/fittings etc. the contractor shall arrange to finish the wall (for the wiring portion) matching with the existing wall.
17. All the test results shall be submitted to the ADE/EMS duly signed by the In charge of the work and contractor's representative.
18. The work shall be completed within the specified period as indicated in the agreement.

Asstt. Design Engineer/EMS
RDSO, Lucknow-226011

Signatures with seal
of the Contractor.

SECTION – V

WORK SCHEDULE

Government Of India: Ministry of Railways
Research Designs & Standards Organisation
Manak Nagar, Lucknow- 226011
Electrical Maintenance Section

WORK SCHEDULE

Name of Work: Air-conditioning work in Traction Installation Directorate .

Estimated Cost:: Rs. 37,83,000.00

Earnest money: Rs. 75,660.00

S. No.	Description of Work	Apr. Qty.	unit	Rate (Rs.)	Amount
A: SUB HEAED -I {Supply/Installation }					
1	Supply, Installation, Testing & commissioning of Air-cooled 100 % INVERTER Compressor based VARIABLE REFRIGERANT FLOW (VRF) Modular type Air-cond. System with R410A Refrigerant suitable for 380 – 415 V,3PH , 50 Hz. The unit shall consist of multiple indoor units, external condensing units and other accessories as given below, Complete as per site requirement A) 4-Way, Ceiling mounted multiflow Cassette type indoor units each complete with coil, decorative panel, pre-filter, condensate lift pump etc with nominal capacities shall be as follows: i) 1.6 TR/2.0 HP ii) 3.2 TR/4.0 HP B) Outdoor condensing units equipped with highly efficient 100% inverter compressors with low noise condenser fan with DC motor, auto check function for connection error, auto address setting ,with nominal capacities as mentioned below : i) 16 HP OUTDOOR UNIT ii) 12 HP OUTDOOR UNIT iii) 10 HP OUTDOOR UNIT C) Provision of coarded type Remote controllers for the operation of IDU's. D) Provision of fittings such as Y- Type Refrigerant joints as required as per layout drawings & Standard.	12 11 2 2 1 23 1			
2	Supply, Installation, Testing & commissioning of Interconnecting copper refrigerant piping closed cell elastomeric nitrile rubber tubular insulation between each set of indoor & outdoor units as per specifications, all piping inside the room shall be properly supported with MS hanger & clamps, with nitrile insulation of 13mm Upto 25mm & 19mm on above sizes:- i) 6.35 mm ii) 9.52 mm iii) 12.7 mm iv) 15.88 mm v) 19.5 mm vi) 25.4 mm vii) 28.58mm Complete as per site requirement.	70 70 80 80 45 45 60			
3	Pressure testing, charging of refrigerant gas , trial run & commissioning of above mentioned AC system complete as required at site.	01	Job		

Signature of Tenderer
With Seal

ADE / EMS

S. No.	Description of Work	Apr. Qty.	unit	Rate (Rs.)	Amount
4	Supply, Installation, Testing & commissioning of MS base frame / platform duly epoxy painted for outdoor units. (For Outdoor units weather protective paint to be provided) l) ODU 's – Floor Mounted Table Top Type Complete as per site requirement	4	Nos.		
5	Supply, Installation, Testing & commissioning of PVC drain piping for indoor units complete with necessary elbow, tees, reducers etc. duly insulated with 6 mm thick closed cell elastomeric nitrile rubber tubing as per following size: i) 32 mm ii) 40 mm complete in all respect.	45 70	Rmt Rmt		
6	Supply, Installation, Testing & commissioning of control cum transmission wiring of 3 core x 2.5 sqmm copper suitable between indoor and outdoor and indoor units, complete as required.	430	Rmt		
7	Supply, laying, Installation, Testing & commissioning of 10 sq. mm. 4 core copper Power cabling from panel to AC units & its sequencing, complete as required.	70	m		
8	Supply, Installation, Testing & commissioning of indoor wiring for distribution box to MCB with 3 core x 2.5 sqmm copper cable, complete as required.	90	Rmt		
B: SUB HEAED -II {Power Supply }					
1	Laying, installation, testing & commissioning of following size of LT XLPE armoured Al. conductor cable, PVC sheathed PVC insulated cables as per site requirement complete in all respect conforming to RDSO specification No. EMS/62/88 (Rev.) - 185 Sq.mm 3 ½ core (Cable shall be supplied by the department)	75	m		
2	Supply, Installation, Testing & commissioning of 4 pole MCB Enclosure (cut-out) in sheet steel enclosure including 4 pole 100 A, 300 mA, RCCB, complete in all respect and earthing as required.	19	Nos.		
3	Supply Installation Testing & Commissioning of SPMCBDB double door, sixteen way (4+12) on suitable angle iron frame, or concealed (as per site requirement) comprising as under including connection & end termination complete as required: - One incoming of 100 A double pole isolator. - One RCCB 100 A double pole.300 mA - Nine outgoing of (6 – 32) A SPMCB.	4	Nos.		
4	Supply, laying and connection of 2x 8 SWG GI wire from Earth electrode to proposed LT Panel / DB's etc.	50	m		

Signature of Tenderer
With Seal

ADE / EMS

ELECTRICAL MAINTENANCE SECTION

List of required makes:

S No	ITEM	MAKE
1.	Switch fuse unit	Standard Electricals Ltd./ GEC (Areava T&D) India Ltd./Larsen & Toubro Ltd./ Schneider Electric India P. Ltd./ Siemens Ltd /Control & Switchgear Co. Pvt. Ltd. /Havells Industries/Kenbar & Co., GE India Industrial (P) Ltd., HPL India Ltd., Super Engineering Works, ABB Ltd.
2.	MCCBs	Schneider Electric India Pvt. Ltd./Havell's/Andrew Yule Co Ltd /Areava T&D India Ltd./ Larsen & Toubro Ltd./Control & Switchgear Ltd./Standard Electrical Ltd., Indo Asian Fuse gear Ltd., Siemens Ltd., GE India Industrial (P) Ltd., JSL Industries Ltd., Legrand, ABB Ltd.
3.	Indications lamp for LT panel operated on low voltage through transformer	Any repute make
4.	Current transformer	Any repute make
5.	Measuring Instruments Ampere Meter, Voltmeter MDI, KWH etc)	Automatic Electric Ltd., Havells, CRABTREE India Ltd., MECO Instruments Ltd., Motwani Mfg..Co. Pvt. Ltd., L&T, National Instruments, National Instruments Ltd., Secure Meters Ltd., Indo Tech.
6.	L.T. Cables	The National Insulated Cable Co, Grand lay Electricals (India), Finolex Cables Ltd., Cable Corporation of India Ltd., The Indian Cable Co. Ltd., Ashian Cables Corporation Ltd., Oriental Power Cables Ltd., Fort Gloster Industries Ltd., Universal Cables Ltd., Glaxy Power Cables Ltd., Victor Cables Cables Ltd., Tara Cables Industries, Deco Industries, Vijay Cables Industrial, Sun Home Cable Industries, Maxwell Power Industries, Peekay Industries, Cab Cond. (India), Ajanta Electric Industries, Insucon Cables & Cond. (P) Ltd., Uniflex Cables Ltd., Apolo Electric Industries, Sh Sai Nath Fibres (P) Ltd., Chanda Cables, Goyolene Fibres (India) P. Ltd., Shree Nakoda Cables, Preetam Electric Co., Unisef Cable Industries, Somex (India), Skytone Electrical (India) Ltd., Weldon Cables Pvt. Ltd., Delton Cables Ltd., Suraj Cables., KEI Industries Ltd., Havell's, Mid Lite Electricals Pvt. Ltd., Standard Electricals Ltd., ECKO Cables Pvt. Ltd., Ashoka Industries, Gaurav Cables Pvt. Ltd., Mayur Electricals Industries Pvt. Ltd.
7.	Aluminium bus bar	Any repute make
8.	Air circuit breakers	JSL Industries Ltd., Mysore Electrical Industries Ltd., GEC (Areava T&D) India Ltd. / Siemens India Ltd. / English Electric Co. of India Ltd./Schneider Electric India Pvt. Ltd./Control & Switch Gear Pvt. Ltd., Bienco Lawrie Ltd., Havell's India Ltd., ABB Ltd.
9.	MCB	Legrand /Standard Electricals/Indo Asian Fuse Gear Ltd./Havells/L&T/ C&S/Schneider Electric India Ltd./ GE India Industrial (P) Ltd./ABB Ltd.,
10.	11 KV (E) XLPE HT Cables	NICCO Corpn. Ltd. ,Havell's, Fort Gloster Industries Ltd., Industrial Cables India Ltd., Cable Corporation of India Ltd., Universal Cable Ltd., Asian Cables & Industries Ltd., Poly Cab wire (P) Ltd, KEI Industries Ltd.

11.	Power / Distribution Transformer	Crompton Greeves Ltd., GEC (Areva T&D) India Ltd., Kirloskar Electric Co. Ltd., Andrewyule & Co. , Bharat Bijali Limited, EMCO Electricals Pvt. Ltd., Indo Tech Transformers Ltd., PN Engineering Co., Kanohar Electricals Ltd. , Mirja Pur Electrical Industries Ltd., Siemens Ltd.
12.	HT VCB	Schneider Elctric india Ltd., Areva T&D India Ltd., Asea Brown Boveri, Jyoti Ltd., ECE Industries Ltd., Kirloskar Electric Co. Ltd., Bioco Lawrie Ltd.. GE India Industrial (P) Ltd.
13.	PVC rigid conduit pipes.	Deplast/AKG/Seiko/Cap/Kinjal
14.	-do- (accessories)	-do-
15.	PVC wire copper	Seiko/Sky Tone/ Anchor/Havells/ Paragon/L&T.
16.	Screws	Steel/Brass
17.	GI pipe (B – Class)	QST/YST/TATA/Jindle
18.	Light fittings	ECE/Philips/Bajaj/Crompton/Wipro/GE Industrial Pvt. Ltd., Snap/ Havell's/Lord Krishna Electronic Industries/Indo Ashian Fuse Gear Ltd./Industrial Kalinga.,
19.	Electronic regulator for ceiling fan	Anchor
20.	Switches/socket/holders, Ceiling rose,	Anchor/SSK/Legrand/Havell's

NOTE : The make of all materials, if not specified, should be as per in the latest approved list for general power supply items as given above. However, if needed other superior/reputed makes can also be approved by the competent authority. If make of above material is not in approved list, these material should be as per approval of competent authority.

**Signature of Tenderer
with date and seal**

ADE/EMS

GENERAL INSTRUCTIONS TO SCHEDULE OF WORK

1. All the rates should invariably be quoted in net i.e. including all taxes and duties.
2. All the quantities are approximate and subject to vary as actual.
3. All the material/equipment used & installation/wiring shall conform to relevant ISI/BIS specification and as per specified colour codes i.e. Red/Yellow/Blue for phase/live wire, black for neutral & green for earthing.
4. The scope of work can be varied/alterd depending upon the site situations/requirements.
5. The successful Tenderer should submit the circuit wiring diagram/layout (3 copies), for wiring/cabling before execution of work to avoid any complication in work and measurements.
6. PVC insulated Copper conductor, single core, of green colour for earthing shall be used.
7. After completion of the work, Tenderer shall ensure that electric supply lines, wires fittings etc. which are on consumer's premises are in safe condition and in all respect fit for supplying energy.
8. Tenderer should quote the rates for supply and installation separately.
9. Electrical Wiring and Installation shall conform to IS: 732(Pt. II III) latest Revision.
10. The installation shall be carried out in conforming with the requirement of the Indian Electricity Act. 2003 as amended up to date and the Indian Electricity Rules – 1956 framed there under and also the relevant regulation of the Electric Supply Authority concerned.
11. Works should be carried out strictly in accordance with quantity mentioned in the Work Schedule. Locations of switch boards/points indicated in the drawing are tentative and may change/alter as per site requirements.
12. The tenderers are advised to quote rates even for NIL quantities to meet future requirements if any.
13. Earth circuits shall be drawn with separate earth and neutral from the distribution board for each circuit. There should be no looping/ tapping from one circuit to another circuit.
14. Each earth wire shall be connected to the main earth strip/bus individually and not to be twisted.
15. Use of independent earth and neutral for each AC's geysers, heavy load etc. right from the main distribution board. No other load should be connected on these circuits.
16. Piano type marking switch sockets wooden boards of good quality and 3 mm thick phenolic laminated sheet on the top of the board etc. shall be used.
17. All the existing tube lights and fans shall be connected if required.
18. Flexible wires used for connection of lights / fans / exhaust fan / DTLF / STLF / bulkhead / Lights etc. shall not be less than one meter.
19. Where ever the Electrical cable passes through the wall / ceiling roof shall be provided with production of porcelain sleeve / PVC Electrical grade pipe / steel conduit.
20. Cable link on wall surface shall be carried out by providing and fixing of wooden cleats of teak wood along-with steel clamps to hold the cable on grouted bolts of suitable size in wall
21. All the released materials shall be deposited as per the directives of site in-charge/concerned Section Engineer.
22. Max. Three Nos. of combination boards shall be on one ckt.
23. Call Bell point including call bell C/Rose to C/Rose near the sitting arrangement of the officer / staff.
24. Power and L & F ckt. Wiring should be laid / provided separately in independent conduits of adequate sizes to have distinction in between.
25. The conduit sizes shall be adequate to accommodate minimum two single core PVC conductors for future requirements
26. Making good of damages shall include plastering of all patches, conduit ducts and finishing of the outer surface with matching colour Distemper on account of re-wiring.
27. Measurement of circuit wiring will be accounted from outside DB/ board to outside board only but loop circuit wiring will not be accounted.
28. MCB's should be used 'B' or 'C' type as per site requirement.

ADE/EMS

**Signature of Tenderer
with date and seal**

SECTION – VI

ANNEXURES

PROFORMA OF BANK GUARANTEE

(for Security Deposit)

1. In consideration of the President of India (hereinafter called the Government) having agreed to exempt _____ (hereinafter called the said Contractor from the demand, under the terms and conditions of an Agreement No. _____ made between _____ and _____ Ministry of Railway _____ as per Tender Specification)hereinafter called the said Agreement), or Security Deposit or the due fulfillment of the said Contractor(s) of the terms and conditions contained in the said agreement on production of Bank Guarantee _____ for Rs. _____ We Bank _____ (hereinafter referred to as the Bank) do hereby undertake to pay the Government an amount not exceeding Rs. _____

against any loss or damage caused to or suffered by the Government by reasons of any breach by the said Contractor (s) or any of the terms or conditions contained in the said Agreement.

2. We _____ Bank _____ do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Government by reasons of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement or by reason of the Contractors failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____.
3. We further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and it shall continue to be enforceable till all the dues of the Government under or by virtue of said Agreement have been fully paid and its claim satisfied or discharged or till _____ certified that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor (so and accordingly discharged the guarantee. Unless a demand of claim under this guarantee is made on us in writing on or before the _____ We shall be discharged from all liability under the guarantee thereafter.
- 3(a) Notwithstanding anything to the contrary contained herein the liability of the Bank under this guarantee will remain in force and effect until such time as this guarantee is discharged in writing by the Government. Until claim shall be valid under this guarantee unless noticed in writing thereof is given by the Government within two months from the date aforesaid
- 3(b) Provided always that we _____ Bank unconditionally undertake to renew this guarantee or to extend the period of guarantee from year to year within two months before the expiry of the period of the extended period of the guarantee, as the case may be, on being called upon to do so by the Government. If the guarantee is not renewed or the period extended on demand, we _____ Bank shall pay the Government the full amount of the Guarantee on demand and without demur.
4. We _____ Bank further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder the vary any of the terms and conditions of the said agreement or to extend time of performance of the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reasons of any such variation or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the Government or any indulgence by the Government to the said Contractor or by any such matter or thing whatsoever which undertake law relating to sureties would but this provisions have effect or so relieving us from our liability.
5. We _____ Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Government in writing. The guarantee will not be revoked by any change in the Constitution of the Bank or the surety.
6. Notwithstanding any thing contained herein before this guarantee is restricted to Rs. _____. Our guarantee shall remain in force till _____ unless a claim is made on us or before that date, all your rights under the said guarantee shall be forfeited and we shall be released and discharged from all liability thereunder.

Dated : _____

Attested by Public Notary

(Stamp)

Seal of the Bank with Signature of
The Agent/Manager

ANNEXURE-II

S. No.	Name of work	Tender No./ Enquiry No.	Nature of work	Contract ed value (Rs.)	Period of completi on	Name1 of Department

SIGNATURE OF THE TENDERERS

Statement of Deviations

- 1.0 The following are the particulars of deviations from the requirements of the Preamble and General Instructions to Tenderer, General and Special Conditions of the Contract, prices and Payments (Part-I).
- | | | | |
|-----|---|-----------|--------------------------------------|
| 1.1 | <u>Preamble and General Instructions to Tenderers (Section-I)</u>
Clause | Deviation | Remarks
(including justification) |
| 1.2 | <u>General Conditions of Contract (Section-II)</u>
Clause | Deviation | Remarks
(including justification) |
| 1.3 | <u>Special Conditions of Contract (Section-III)</u>
Clause | Deviation | Remarks
(including justification) |
| 1.4 | <u>Prices and Payment (Section-VI)</u>
Clause | Deviation | Remarks
(including justification) |
- 2.0 The following are the particulars of deviations from the requirements of the Technical Specification (Part-II)
- | | | | |
|-----|--|-----------|--------------------------------------|
| 2.1 | <u>Separate statement for each Specification</u>
Clause | Deviation | Remarks
(including justification) |
|-----|--|-----------|--------------------------------------|

NOTE: Where there is no deviation, the statement should be returned duly signed with endorsement including No Deviation.

C H E C K L I S T

- 1.0 The Tenderer should indicate clearly against item included in this Check List.
- 1.1 Have you :
- 1.1.1 purchased the Tender documents ? Yes/No
 - 1.1.2 furnished rates against the quantities in the Prescribed Proforma as per Schedule of Work ? Yes/No
 - 1.1.3 submitted the Earnest Money Deposit/Bid Bond ? Yes/No
 - 1.1.3 Furnished the details of previous experience for installation of
1.1.4 Similar kind (Annexure-III) ? Yes/No
 - 1.1.5 submitted the statement of deviation (Annexure) ? Yes/No
 - 1.1.6 quoted for accessories and essential spares ? Yes/No.
 - 1.1.7 furnished your ITCC (Income Tax Clearance Certificate) ? Yes/No
 - 1.1.8 quoted period of completion correctly ? Yes/No
 - 1.1.9 kept your offer valid for 90 days ? Yes/No
 - 1.1.10 visited the site and have studied the methodology to be adopted for
for completion of the work ? Yes/No
 - 1.1.11 submitted the integration scheme (Annexure) ? Yes/No
 - 1.1.12 submitted the Bar Chart/PERT CHART (Annexure) ? Yes/No
 - 1.1.13 submitted scheme of completion of work (Annexure) ? Yes/No

TENDERER'S SCHEME OF WORK

1. Submission of design and drawings by the Contractor.
2. Approval of designs and drawings by the Railways.
3. Order of material.
4. Receipt of material.
5. Erection of equipment Phase-I.
6. Erection of equipment Phase-II
7. Erection of equipment Phase-III
8. Testing and commissioning
9. Acceptance by Railways.
10. Handing over to maintenance Organisation.

Notes	1	2	3	4	5
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OCTROI/EXCISE DUTY

1. "The price to be quoted by the Tenderers should take into account the credit availed on inputs under the MODVAT scheme introduced w.e.f 1st March, 1986. The Tenderers should be a declaration that any set offs in respect of duties on inputs as admissible under law is being totally unconditionally passed on to the Engineer in the price quoted by him."
2. The following Clause may be added to the schedule :-

"Wee hereby declare that in quoting the above price, we have taken into account the entire credit on inputs available under the MODVAT scheme introduced w.e.f. 1-3-1986."

"We further agreed to pass on such additional duties as set offs as may become available in future in respect of all the inputs used in the manufacture on the final product of the date of the supply under the MODVAT scheme by way of reduction of prices and advise the purchaser accordingly".
3. We certify that no additional duty set offs on the goods supplied by us have accorded under the MODVAT scheme in force on the date of supply after we submitted out quotations and submitted the present bill".
4. In the event of MODVAT credit being extended by the Government of India to more items that already covered, the firm should advise the Purchaser about the additional benefits accorded, through a letter containing the following certificates or any variation thereof as may be considered necessary by Individual Railway Administration.

"We hereby declare that we can avail additional duty set offs as per latest MODVAT scheme in force now and we hereby give a reduction of _____ per unit and agree to revise the price indicated in the order. The current E.D. of _____% payable on the reduced price. Therefore, we request you to amend the order accordingly.
5. Octroi duty exemption certificates :

In respect of road deliveries where the Municipal/Local Certificate, the Ocroi Duty should be borne by the Seller.

Details of the staff working under contractor

Sl No.	Name	Designation	Educational Qualifications	Experience
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Name of the Manufacturers, price of Manufacturers & Inspection of Materials

Item No.	Description of item	Name & Addl. of Manufacturer	Place of Manufacture	Place of Inspection
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ELECTRONIC CLEARING SERVICE CREDIT CLEARING
(MODEL MANEATE FORM)
(INVESTOR/Customer option to Receive PAYMENTS THROUGH CREDIT CLEARING
MECHANISM)
(Scheme name – The periodicity of payment)

1. INVESTOR CUSTOMER'S NAME:

2. PARTICULARS OF BANK:

A. BANK NAME:

B. BRANCH NAME:

Address:

Telephone, Cell No.

C. 9 DIGIT CODE NUMBER OF THE
BANK & BRANCH

(Appearing on the MICR Cheque
Issuing branch)

D. ACCOUNT TYPE

(SB Account/Current Account or
Cash Credit with code 10/11/13)

E. ACCOUNT No.

(As appearing on the cheque)

F. RIGS/FSC Code:

G. PAN No.

(In lieu of the bank certificate to be issued as under, please attach a blank cancelled cheque or photocopy of a cheque or front page of your saving bank passbook issued by your bank for verification of the above particulars)

3. DATE OF RECEIPT

I hereby declare that the particulars as above are correct and complete. If the transaction is delayed or not collected at all for Reason of incomplete or incomplete information, I would not hold the user institution responsible. I have read the option invitation letter and agree to discharge responsibility expected of me as a participant under the scheme.

Date

Signature of Investor
Customer

Certificate that the particulars furnished above are correct as per our records.

Stamp & signature of the
authorized officer of the Bank