COAL HANDLING PLANT PACKAGE PROJECT

PAKRI BARWADIH COAL MINING PROJECT

TERMS & CONDITIONS
(Suppliers)

CONTENTS

<table>
<thead>
<tr>
<th>SI.No</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Instructions to Tenderers (Suppliers)</td>
</tr>
<tr>
<td></td>
<td>Check List (Annexure-2)</td>
</tr>
<tr>
<td></td>
<td>Attachment-6</td>
</tr>
<tr>
<td></td>
<td>Attachment-6A (Suppliers)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Additional Conditions of Purchase Order</td>
</tr>
<tr>
<td></td>
<td>Conciliation &amp; Arbitration Clause</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>General Conditions of Contract</td>
</tr>
<tr>
<td></td>
<td>(Section-IV) of NTPC</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Special Conditions of Contract</td>
</tr>
<tr>
<td></td>
<td>(Section-V) of NTPC</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Erection Conditions of Contract</td>
</tr>
<tr>
<td></td>
<td>(Section-VI) of NTPC</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Terms &amp; Procedures of Payment</td>
</tr>
<tr>
<td></td>
<td>and other conditions</td>
</tr>
<tr>
<td></td>
<td>(Appendix-1 to 8) of NTPC</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>EPI’s Formats of ‘EMD’, ‘Advance’, ‘Security</td>
</tr>
<tr>
<td></td>
<td>Deposit cum Performance’ Bank</td>
</tr>
<tr>
<td></td>
<td>Guarantees and Formats of Indemnity</td>
</tr>
<tr>
<td></td>
<td>Bonds</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
INSTRUCTIONS TO TENDERERS (ITT)
(Suppliers)

1. Sealed tenders are invited by Engineering Projects (India) Limited, New Delhi as per details given below.

The tender is for ‘Pre-Award Tie-Up’ for the items of supply as described in the tender enquiry letter for the ‘Pakri Barwadih Coal Mining Project, Coal Handling Plant’ at District HazariBagh, Jharkhand.

2. Tenders shall be submitted on or before 4 PM on the last date of receipt of tender as given in EPI’s Tender Enquiry letter. Extension of the due date if any, shall be placed on EPI’s website (Tender & Notices) and no separate information shall be given to individual tenderers. Tenderers are advised to visit EPI’s website regularly for this purpose. The tender shall be submitted in sealed envelope at the following address by Registered Post or through messenger:

   The General Manager (Contracts)
   Engineering Projects (India) Limited
   Core-3, Scope Complex,
   7, Institutional Area,
   Lodhi Road, New Delhi-110 003
   Fax No. 011-24363426
   E-mail: lcp@engineeringprojects.com
   Phone No. 24361666 Extn: 2114
           24321607

3. MODE OF SUBMISSION

The tender is to be submitted in two separate sealed Envelopes marked as under:

ENVELOPE-1: -

This Envelope shall contain the following documents all in TWO HARD COPIES {of sl.(ii) to sl. (viii) } duly signed and stamped on each page.

i) Earnest Money Deposit.

ii) Attachment 6 and 6A regarding deviations as per proforma given in ITT.

iii) Pre-Qualification Documents as per Annexure-1, Check List duly filled up as per Annexure – 2 and Credentials as per clause 27.0 of ITT.
iv) Volume-I (ITT and Additional Conditions of Purchase Order of EPI, General Conditions of Contract (Section IV), Special Conditions of Contract (Section V), Erection Conditions of Contract (Section-VI), Terms and Procedure of payment and other conditions (Appendix 1 to 8) of NTPC Tender documents etc.


vi) Volume-II (Specifications, Drawings, etc.).

vii) Copy of power of attorney / partnership deed, duly attested by Notary Public authorizing the person who signs the tender.

viii) Any other information as required to be submitted along-with the tender.

Though some of the Tender Documents have been provided to the tenderers in SOFT COPY, however the tenderers shall take print of the same and submit all the documents in HARD COPY duly signed and stamped in TWO Sets.

This envelope shall be marked as:

ENVELOPE-1 “TECHNO-COMMERCIAL BID” FOR------------------------ (Name of work as mentioned in “Notice Inviting Tender”)

Package No. : __________________________________________

DUE ON : __________________________________________

FROM : (Name of the Contractor)

ENVELOPE – 2: -

This ENVELOPE shall contain only the Volume-III giving prices in the Format of ‘Price Schedule’ furnished with the tender enquiry comprising the PRICE-BID.

This envelope shall be marked as:

ENVELOPE-2: ‘PRICE-BID’ FOR------------------------------------------ (Name of Work as mentioned in “Notice Inviting Tender”)

Package No. : __________________________________________

DUE ON : __________________________________________

FROM : (Name of the Contractor)

Both the envelopes / packets shall be individually sealed and kept in an outer envelope marked as:

TENDER FOR------------------------------------------ (Name of Work as mentioned in “Notice Inviting Tender”)

Package No. : __________________________________________

DUE ON : __________________________________________

FROM : (Name of the Contractor)
The outer envelope shall be duly sealed and shall be delivered at place of submission of tender by the date and time fixed for receipt of tender. The tenders received after the date and time of tender receipt shall not be considered and shall be returned to the tenderer unopened. EPI shall not be responsible for any postal or other delays, whatsoever and tenderer should take care to ensure the submission of tender at place of receipt of tender by due date and time fixed for tender receipt. All the envelopes shall be addressed to the authority who has invited the tender as mentioned above.

4. First the Envelope-1 of the tenderer shall be opened. Tenderers who deposit the required Earnest Money and whose Techno-Commercial Bid along with PQ Documents (PQ as per Annexure-1, Check List as per Annexure-2 of ITT and credentials as per clause-27 of ITT) are found suitable shall be considered for the opening of their Price Bid and Envelope-2 of such tenderers shall only be opened. The tenders of all such parties, who are not found suitable, shall not be considered and their earnest money deposit will be returned. The decision of EPI in this regard shall be final & binding on the party.

5. The tenderers should quote their item rates in words as well as in figures in the prescribed format of ‘Price Schedule’ only. In absence of which the Bids may not be considered and are likely to be rejected. The amount of each item should be worked out and requisite totals and page totals given.

All corrections/cuttings should be signed by the tenderer. Each page of the tender should be signed by the tenderer. In the event of discrepancy between rate in figures and words the rate quoted in words shall be treated as correct. In case there is discrepancy between rate and amount worked out the rate quoted shall be taken as correct and not the amount.

6. Price shall be entered against each item in Bill of Quantities where quantities or LS (lump-sum) has been mentioned. The cost of item against which the tenderer has failed to enter a rate or price shall be deemed to be covered by rates and prices of other items in the Bill of Quantities and no payment shall be made for the quantities executed for items against which rate has not been quoted by the tenderer. No rate is to be quoted against items for which no quantity is given. However, the tenderer has to quote rate against "LS" items.

7. EPI reserves the right to postpone the tender submission date and issue required amendment, if any. There will be no public tender opening. However, selected tenderers may be called for discussions/clarifications after the tenders have been scrutinized.

8. Earnest Money Deposit of amount as mentioned in enquiry letter is required to be submitted alongwith the tender and shall be in the form of Demand Draft payable at Delhi in favour of EPI Limited from any Nationalized / Scheduled Bank OR in the form of Bank Guarantee from any Nationalized / Scheduled Bank in enclosed format of EPI. The EMD Bank Guarantee shall be valid for a minimum period of 180 (One Hundred Eighty) days from the last date of submission of Tender.

EMD must be submitted in 1st envelope super scribed as “Techno-Commercial”. The tenderer must not keep Earnest Money with Price Bid in the 2nd envelope.
9. EMD deposited shall be returned to the unsuccessful tenderer within 7 days after opening of price Bid by EPI for the Package.

10. The Tenderers shall fill up the ‘Check List’ attached at Annexure-2 of this ITT and submit in the ‘First Envelope’

11. EPI shall enter into ‘Pre-Award Tie-Up’ with the successful tenderer. In the event of EPI being awarded the project by the Client, the EMD of the selected tenderer with whom EPI has entered into ‘Pre-Award Tie-Up’ shall be converted as part of the Contract Performance Security or returned on their furnishing Contract Performance Security Guarantee etc. as per terms of contract and on unconditional acceptance of the order issued to the selected tenderer by EPI. In case EPI is unsuccessful in securing the award of the said project from the Employer, EMD of all tenderers shall be returned.

12. Tenders must be duly signed with date and sealed. An attested copy of power of attorney/affidavit/Board Resolution executed as under shall accompany the ‘Tender Documents’.

   a) In case of Sole Proprietorship, an affidavit of Sole Proprietorship and if the tender is signed by any other person Power of Attorney by the Sole Proprietor in favour of signatory.

   b) In case of Partnership, if document is not signed by all the partners, Power of Attorney in favour of the Partner/person signing the documents authorizing him to sign the documents. The person signing the documents should also have a specific authority to refer disputes with the partnership firm to arbitration.

   c) In case of Company, copy of the Board Resolution authorizing the signatory to sign on behalf of the Company.

13. The tenderer shall furnish the name (s) and designation of relative (s) if any, employed by EPI.

14. Tenders with following discrepancies are liable for rejection :-

   a) Tender with over-written or erased rates or rates not written in both figures and words.

   b) Tender that is incomplete, ambiguous, and not accompanied by the documents asked for or submitted without/inadequate EMD.

   c) Tender received after specified date/time whether due to postal or other delays.

   d) Tender in respect of which canvassing in any form is resorted to by the tenderer.

   e) If the tenderer deliberately gives wrong information in his tender or resorts to unfair methods in creating circumstances for the acceptance of his tender, EPI reserves the right to reject such tender at any stage.
15. **Deviations**:

15.1. No deviation shall be allowed from the Technical Specifications stipulated in the ‘Tender Documents’ and tenders containing deviations in ‘Technical Specifications’ shall be rejected. If any Deviation in commercial conditions is inescapable, the same must be specified in a separate ‘Deviation Sheet’ in the format “Attachment-6” enclosed with ITT and kept in first envelope along with techno-commercial bid. The Bidder shall also provide the additional price, if any, for withdrawal of the deviations.

Bidders may further note that except for commercial deviations listed in Attachment-6, the bid shall be deemed to comply with all the requirement of the bidding documents and the bidders shall be required to comply with all terms, conditions and specifications of Bidding Documents and without any extra cost to the EPI irrespective of any mention to the contrary, any where else in the bid, failing which the Bid Security of the Bidder may be forfeited.

At the time of Award of Contract, if so desired by the EPI, the bidder shall withdraw these deviations listed in Attachment –6 at the cost of withdrawal stated by him in his bid. In case the Bidder does not withdraw the deviations proposed by him, if any, at the cost of withdrawal stated in the bid, his bid will be rejected and Bid Security forfeited.

15.2. **Certificate Regarding Acceptance of Important Conditions (Attachment-6A)**

No deviation, whatsoever, is permitted to the provision of the Bidding Documents listed in Attachment 6A (enclosed with ITT). The Bidders are advised that while making their Bid Proposals and quoting prices, these conditions may appropriately be taken into consideration.

Bidders are required to furnish a certificate indicating their compliance to the provisions relating to the clauses listed in Attachment-6A. Attachment- 6A, duly signed and stamped by the bidder, is to be furnished in first envelope containing Techno-commercial Bid. Any bid not accompanied by such certificate shall be rejected.

16. EPI reserves the right to split the work. Even after opening of tenders EPI may enter into agreement with more than one party or may enter into agreement for part of the total work included in the tender. In such an event, the tenderer shall not be allowed to revise upward their quoted rates.

17. The tender shall remain open for acceptance for a period of 180 days from the due date for receiving the tender by EPI. If any tenderer withdraws his tender before the said period or makes any modifications in the terms and conditions of the tender which are not acceptable, EPI without prejudice to any other right or remedy shall be at liberty to forfeit the Earnest Money deposited.
18. These ‘Instructions to Tenderers’ shall form part of the ‘Tender documents’.

19. In the event of award of work, the successful tenderer must furnish Contract Performance Security /all Guarantees as specified in ‘Tender Documents’ within the time specified failing which the Earnest Money Deposit will be forfeited.

20. Submission of a tender by the tenderer implies that he has read the complete Tender documents and has made himself aware of the scope, terms & condition and specifications of the supply/work to be done and of conditions at which stores, tools, plant etc. will be issued to him by EPI, if any, local conditions and political situations and other factors having bearing on the execution of the works. No claim of tenderer whatsoever, within the purview of this clause, shall be entertained at any stage of the project.

21. The tenderer must carefully inspect and examine the site and its surrounding and completely satisfy himself before submitting tender as to the nature of the ground, form and the nature of the site, overground or underground utilities or services which may hinder the progress, means of access to the site, the accommodation he may require and in general shall himself obtain all necessary information to risks, contingencies and other circumstances which may influence or effect the tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and also of the conditions and specifications.

22. EPI takes no responsibility for tenders lost/delayed in postal transit and therefore, tenderers should lodge their tenders sufficiently in advance.

23. EPI reserves the right to reject any or all tenders or annul this process at any stage without assigning any reasons thereof and EPI does not bind itself to accept the lowest tender. The tenderer shall have no claim on EPI on this account whatsoever.

24. In case the tender cannot be submitted by any tenderer for any reasons the complete set of ‘Tender Documents’ in full shall be returned promptly but not later than the due date to the address mentioned above for submitting the tender failing which the defaulting tenderer may not be considered for issue of future enquiries by EPI.

25. The sub-contract shall be governed by the Indian Laws for the time being in force.

26. Jurisdiction: All disputes shall be subject to the exclusive Jurisdiction of Delhi Courts alone.

27. Tenderer shall submit the following documents along with their tenders in the first envelope (Techno-Commercial Bid)

   a) List of works executed during the last 5 years indicating name of the client, value, date of start and completion.

   b) List of works under execution indicating name of the client, value, date of start and completion.

   c) Details of similar works executed.
d) Audited balance sheets and profit and loss accounts for the last 3 years.

e) Copy of latest income-tax returns filed.

f) Details of manpower available.

g) Details of equipments, tools and plant available.

h) Credentials and completion certificates.

i) Registration Certificate/Memorandum of Association/Partnership Deed.

j) Copy of Provident Fund Number allotted by PF authorities.

k) Copy of letters of registration with various clients /authorities

l) Solvency certificate from Bank.

m) Sales Tax Clearance Certificate.

n) Any other document as stipulated above and in “Tender Documents’
CHECK LIST FOR EVALUATION & SELECTION OF SUPPLIERS/VENDORS

1. NAME
2. ADDRESS
3. CONTACT PERSON
4. PROPRIETOR
5. A) PHONE
   B) FAX
6. ITEMS/PRODUCT
7. MANUFACTURER
   DISTRIBUTOR
   DEALER
   STOCKIST
8. FACILITIES AVAILABLE:
   A) TESTING FACILITIES IN HOUSE THROUGH EXT.AGENCY
      I) FOR INCOMING MATERIALS
      II) FOR IN PROCESS
      III) FOR FINAL PRODUCT
   B) CAN ISSUE TEST CERTIFICATE YES NO
   C) DETAILS OF MANUFACTURING FACILITIES
   D) PRODUCTS BEING MANUFACTURED (PRODUCT CATALOGUES)
9. ANNUAL TURNOVER
10. WHETHER ISO 9000 CERTIFIED OR NOT
11. WHETHER IS : CERTIFIED OR NOT
12. REF. LIST OF IMPORTANT CUSTOMERS DURING LAST FIVE YEARS
13. ABILITY TO GIVE AFTER SALES SERVICE

14. SAMPLE SENT OR NOT

TO
IN-CHARGE, MMD
EPI

SIGNATURE OF VENDORS
SUB-SUPPLIER
NAME
DESIGNATION
DATE

FOR USE IN EPI
DATA HAS BEEN COLLECTED OVER PHONE/ VERBALLY

SIGNATURE OF PERSON COLLECTING DATA

EVALUATION & REVIEW

YES
NO

REVIEWED THE DETAILS OF VENDOR
PRODUCT IS SUITABLE
IF YES BASIS
SAMPLE CHECKED
SPECIFICATION CHECKED
SUPPLIERS DETAILS REVIEWED
ENJOYS GOODWILL/REPUTATION
TESTING FACILITIES ADEQUATE ENQUIRIES FROM CUSTOMERS OF SUB SUPPLIERS
PAST PERFORMANCE WITH EPI

APPROVED
SIGNATURE
REVIEWED
SIGNATURE
COAL HANDLING PLANT PACKAGE FOR PAKRI
BARAWADIH COAL MINING PROJECT (Deviations)
(PACKAGE NO.---------------------------------)

Bidder's Name and Address
To
General Manager (contracts)
Engineering Projects (India) Ltd.
Core-3, Scope Complex,
Lodhi Road, New Delhi -110003

Dear Sirs,

The following are the deviations and variations from and exceptions to the terms, conditions and specification of the bidding documents for above Package of Coal Handling Plant Package for Pakri Barwadih Coal Mining Project. These deviations and variations are exhaustive. We are furnishing below the cost of withdrawal for the deviations and variations stated in this Attachment-6. We shall withdraw the deviations proposed by us in this Attachment-6 at the cost of withdrawal indicated herein, failing which our bid may be rejected and bid security forfeited. We confirm that except for these deviations and variations, the entire work shall be performed as per your specifications and conditions of bidding documents. Further, we agree that any conditions, variations, deviations if any, found in the proposal documents other than those stated in this Attachment-6, save those pertaining to any rebates offered, shall not be given effect to:

<table>
<thead>
<tr>
<th>Section/Part!</th>
<th>Clause No.</th>
<th>Page No.</th>
<th>Statement of Deviations/Variations</th>
<th>Cost of withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>A. COMMERCIAL DEVIATIONS :</td>
<td></td>
</tr>
</tbody>
</table>

Date  
(Signature) ...........................................

Place
(Printed Name) ...........................................

(Designation) ...........................................

(Seal) ...................................................

Note: Continuations sheets of like size and format may be used as per Bidder's requirements and shall be annexed to this Attachment.
**COAL HANDLING PLANT PACKAGE**  
FOR PAKRI BARAWADIH COAL MINING PROJECT

**(CERTIFICATE REGARDING ACCEPTANCE OF IMPORTANT CONDITIONS)**

(Suppliers)  
(To be submitted in separate sealed envelope along with Bid)

Bidder’s Name & Address  
To,
General Manager (contracts)  
Engineering Projects (India) Ltd.  
Core-3, Scope Complex,  
Lodhi Road, New Delhi -110003

Sub : Coal Handling Plant Package for Pakri Barawadih Coal Mining Project.

PACKAGE NO. -------------------------------

1.0 With reference to our Bid Proposal No......................................dated ...................for the above mentioned Package number of the Coal Handling Plant Package for Pakri Barawadih Coal Mining Project, we hereby confirm that we have read the provisions of the following clauses of GCC, corresponding clauses of SCC and Additional Conditions of EPI as given in EPI’s tender enquiry and further confirm that not withstanding anything stated elsewhere to the contrary, the stipulation of these clauses are acceptable to us and we have not taken any deviation to these clauses:

<table>
<thead>
<tr>
<th>Description</th>
<th>GCC, Section-IV</th>
<th>SCC, Section-V</th>
<th>Additional Conditions of Purchase Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Governing Laws</td>
<td>Clause 5</td>
<td>-</td>
<td>Clause 20</td>
</tr>
<tr>
<td>(b) Settlement of Disputes</td>
<td>Clause 6</td>
<td>Clause 3</td>
<td>Clause 19</td>
</tr>
<tr>
<td>(c) Performance Security</td>
<td>Clause 13.3</td>
<td>Clause 6</td>
<td>Clause 6</td>
</tr>
<tr>
<td>(d) Taxes and Duties</td>
<td>Clause 14</td>
<td>Clause 7</td>
<td>Clause 7</td>
</tr>
<tr>
<td>(e) Completion time Guarantee</td>
<td>Clause 26</td>
<td>Clause 9</td>
<td>Clause 17</td>
</tr>
<tr>
<td>(f) Firm Prices</td>
<td>-</td>
<td>-</td>
<td>Clause 8</td>
</tr>
<tr>
<td>(g) Functional Guarantees</td>
<td>Clause 28</td>
<td>Clause 10</td>
<td>Clause 10</td>
</tr>
<tr>
<td>(h) Patent Indemnity</td>
<td>Clause 29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Limitation of Liability</td>
<td>Clause 30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.0 We further confirm that any deviation to the above clauses found anywhere in our Bid Proposal, implicit or explicit, shall stand unconditionally withdrawn, without any cost implication whatsoever to EPI, failing which the bid security may be forfeited.

Date : ........................................... 

Place :  ...........................................

(Signature) ...........................................

(Name) ..............................................

(Designation) .................................

(Seal) ..............................................

Note : The above certificate is to be submitted in first envelope of ‘Techno-Commercial Bid’. In the absence of this certificate the bid shall be liable for rejection.
1. Intent:

These Additional Conditions of Purchase Order shall be read in conjunction with General Conditions of Contract (GCC) (Section-IV), Special Conditions of Contract (SCC) (Section-V), Erection Conditions of Contract (ECC) (Section-VI), Terms and Procedures of Payment and other Conditions (Appendix -1 to 8) and other documents listed below of the bidding documents of M/s. NATIONAL THERMAL POWER CORPORATION (hereinafter referred to as ‘NTPC’ or the ‘Employer’). These Additional Conditions of Purchase Order shall supercede the Bidding Documents of Employer wherever they are at variance.

2. Scope of Supply:

Scope of Supply includes design, manufacture, testing, inspection, supply, delivery to the site as per the Terms and Conditions, Technical Specifications, Drawings if any and the Format of Price Schedule.

3. Delivery:

The entire Supplies shall be delivered as per agreed delivery schedule from the date of LOI/Purchase Order at EPI/Employer/Sub-Contractor’s stores at work site. The address of the stores at work site shall be given in Purchase Order. The basic consideration and the essence of the Order shall be strict adherence to the time schedule.

4. Tender documents:

4.1 Following documents shall form the complete set of tender documents :-

Volume-1 :-

4.1.1 Instructions to Tenderers with Attachment 6 & 6A.

4.1.2 Additional Conditions of Purchase Order.

4.1.3 General Conditions of Contract (Section-IV), Special Conditions of Contract (Section-V), Erection Conditions of Contract and Terms and Procedures of Payment and other Conditions (Appendix -1 to 8) of the Tender Documents of NTPC
4.1.4 Format for “EMD”, “Advance” and “Security Deposit cum Performance Bank Guarantees” and Format of Indemnity Bond.

**Volume-2 :-**

4.1.4 Technical Specifications

4.1.5 Drawings, if any

**Volume-3 :-**

4.1.6 Format of Price Schedule ( Price Bid )

4.2 Notwithstanding sub-division of the document into separate sections and volumes, every part shall be deemed to be supplementary of every other part and shall be read with and into the contract so far as it may be practicable to do so. The application of the Clauses of the Conditions of Contract of the bidding documents of the Employer regarding Supply and Erection shall be limited to Supply component only for Suppliers.

4.3 The specifications, designs, drawings, instructions, terms and conditions given in the tender documents of client as listed above shall apply on the tenderer Mutatis Mutandis. Wherever the reference is made of Employer in the tender documents, the same shall be read as EPI / Employer. Similarly, wherever the reference is made of Contractor, it shall be read as Sub-Contractor/Supplier.

5. **Price:**

5.1 The Bidders shall quote their firm prices in the Format of Price Schedule only.

5.2 Bidder shall quote ex-works/ex-factory/ex-showroom (referred to as 'Ex-works') price inclusive of Packing & Forwarding, Excise Duty/Custom Duty, VAT,CST, Entry Tax, Octroi, etc. as applicable, and transportation charges separately, for F.O.R. destination site delivery of all the items indicated in the Format of Price Schedule.

5.3 Marine Cargo Insurance policy shall be taken by the Supplier as per Insurance requirements given in Appendix-3 of the NTPC Documents listed above. Bidders shall include the cost of Marine Cargo Insurance in their Bid price.

5.4 Bidders shall include the cost of type tests and other tests, to be carried out in line with the Technical Specifications, in the bid price of respective equipment and no separate charges for any test and service tax on the same shall be payable to the supplier.

6. **Contract Performance Security:**

6.1 The successful bidder shall be required to furnish to EPI a Contract Performance Security for the value of Ten percent (10%) of total Purchase Order Price as per conditions stipulated in Clause No. 13.3 of GCC (Section-IV) of NTPC documents, which shall be kept valid till 90 (ninety) days beyond the actual date of successful completion of Defect Liability Period. The EMD Bank Guarantee shall be kept valid by the successful bidder till the Contract Performance Security is accepted.
6.2 The Contract Performance Security shall be furnished within Ten (10) days from the date of LOI/Order in the form of a Bank Guarantee in favour of Engineering Projects (India) Limited, New Delhi in EPI’s format of Security Deposit cum Performance B.G. from a Nationalized / Scheduled Bank valid until 90 days from the date of expiry of the Defect Liability Period.

7. Taxes and Duties:

7.1 All Customs Duties, Excise Duties, Sales Taxes, VAT, WCT, TOT, Service Tax and all other Taxes, Duties, Cess, Royalties, other Statutory Levies etc. shall be included in the bid price (Ex-Works Price). Octroi/Entry tax if applicable shall also be included in the bid price.

7.2 The Employer will issue the requisite Sales Tax Declaration forms in order to get the benefit of any concession in the rates of sales tax as per clause no.14 of the GCC (Section –IV) of the NTPC documents. The supplier in turn shall issue the relevant Sales Tax Declaration Forms (E-1 and E-2 etc.) to EPI. However, if due to any reason the Supplier is unable to get/claim benefit under this clause or any other clauses contained in the Employer’s documents due to any reasons whatsoever, EPI shall not be liable to pay to the Supplier anything extra beyond his quoted rates.

8. Firm Prices :

There shall be no Price Adjustment/ variation. The prices quoted by the tenderers shall remain firm and fixed till the final acceptance and completion of the Defect Liability period of the Project. The provisions given elsewhere in NTPC documents regarding Price Adjustment shall not be applicable.

9. Payment Terms:

9.1 Payment terms shall be as per the “Terms & Procedures of Payment” given in Appendix-1 of the tender documents of NTPC.

9.2 All Payments including Advance payments shall be released to the Supplier within seven days of receiving the corresponding payment by EPI from NTPC after deducting all recoveries.

9.3 All Bank Guarantees towards Advance, Performance Security etc. shall be furnished in favour of Engineering Projects (India) Ltd., New Delhi in EPI’s format of Bank Guarantees from a Nationalised/ Scheduled Bank.

9.4 The Supplier shall have no claim on EPI in case the payments are delayed by the Employer due to any reason whatsoever.

10. The Supplier shall give Guarantee/Warranty for the equipment/materials supplied by him as per Tender Conditions of NTPC.
11. The successful bidder shall obtain approval of his make, Guaranteed Technical Parameters (GTP) and Drawings of Equipment from NTPC through EPI prior to Manufacture/Supply. The placement of order on the Supplier is subject to approval from the Employer, in case of non-approval by the Employer due to any reasons whatsoever, the Supplier shall have no claim on EPI.

12. The bidders shall submit quality plans and programmes which shall set out, during the various stages of manufacture and installation, the quality practices and procedures followed by the bidders quality control organization, the relevant document/standard used, acceptance level, inspection document raised etc. Such quality plans of the successful bidder shall be discussed and finalized in consultation with NTPC and EPI and shall form part of the order.

13. EPI reserves the right to vary the quantity of ordered materials to any extent as per requirement.

14. The details of the Consignee shall be communicated in the order. The terms and conditions of NTPC’s documents shall be applicable in this regard.

15. EPI is an ISO 9001 and ISO 14001 certified company. For the process being outsourced, Supplier/Sub-Contractor would associate with EPI in exercising control over the process to ensure conformity of the product/services with the requirement. The bidders are required to see the ISO Quality, Environment procedures etc. kept in the office of EPI. The Supplier/Sub-Contractor shall associate with EPI in implementing and maintaining the established procedures of EPI.

16. Competent personnel shall be deployed by Supplier/Sub-contractor for jobs requiring special skills.

17. In case the delivery of the ordered supplies is delayed beyond the stipulated delivery period, EPI shall recover as Liquidated Damages from the Supplier a sum equivalent to one percent (1%) of the order value for every week of delay or part thereof limited to an aggregate of Ten percent (10%) of the order value.

18. In the event of slackness, delay, bad-workmanship and any other default on part of the supplier, EPI shall cancel the order and carry out the same at the risk and cost of the Supplier.

19. Settlement of Disputes :-

19.1 Both the parties shall make efforts to settle disputes amicably. Only if amicable settlement is not possible, the same shall be referred to the sole arbitration of the Chairman & Managing Director of EPI or the person appointed by the CMD, EPI and the decision of the arbitrator shall be final and binding on both the parties. Arbitration will be according to “Conciliation & Arbitration” clause which is enclosed at Annexure–A.

19.2 There shall be no provision for Adjudicator unless it is specifically agreed by both the parties.

19.3 The Venue of Arbitration proceedings shall be in Delhi.
20. The contract shall be governed by the Indian Laws for the time being in force and the Courts in Delhi alone shall have the exclusive jurisdiction to entertain and decide any matter arising out of the agreement/contract.
CONCILIATION & ARBITRATION CLAUSE

Before resorting to arbitration as per the clause given below, the parties if they so agree may explore the possibility of conciliation as per the provisions of Part-III of the Arbitration and Conciliation Act. 1996. When such conciliation has failed, the parties shall adopt the following procedure for arbitration:

i) Except where otherwise provided for in the contract, any disputes and differences relating to the meaning of the specifications, design, drawings and instructions and as to the quality of workmanship or materials used in the supplies/works or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, or these conditions, or otherwise concerning the order or the execution or failure to execute the same whether arising during the currency of the order or after the completion or abandonment thereof shall be referred to the Sole Arbitration of the Chairman and Managing Director (CMD) of Engineering Projects (India) Limited (EPI), or any other person discharging the functions of CMD of EPI and if CMD or such person discharging the functions of CMD of EPI is unable to act, to the sole Arbitration of some other person appointed by CMD of EPI or such other person discharging the functions of CMD of EPI. There will be no objection if the arbitrator so appointed is an employee of Engineering Projects (I) Ltd. However, such an employee shall not have directly dealt with the said Contract or the order there under on behalf of EPI. Such Arbitrator shall be appointed within 30 days of the receipt of letter of invocation of arbitration duly satisfying the requirements of this clause.

ii) If the arbitrator so appointed resigns or is unable or unwilling to act due to any reason whatsoever, or dies, the Chairman & Managing Director aforesaid or in his absence the person discharging the duties of the CMD of EPI may appoint a new arbitrator in accordance with these terms and conditions of the contract, to act in his place and the new arbitrator so appointed may proceed from the stage at which it was left by his predecessor.

iii) It is a term of the contract that the party invoking the arbitration shall specify the dispute / differences or questions to be referred to the Arbitrator under this clause together with the amounts claimed in respect of each dispute.

iv) The Arbitrator may proceed with the arbitration ex-parte, if either party, in spite of a notice from the arbitrator, fails to take part in the proceedings.

v) The execution of the order shall continue during the arbitration proceedings.

vi) Unless otherwise agreed, the venue of arbitration proceedings shall be at the venue given in the tender/contract documents.

vii) The award of the Arbitrator shall be final, conclusive and binding on both the parties.
viii) Subject to the aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modifications or re-enactment thereof and the Rules made there under and for the time being in force shall apply to the arbitration proceedings and Arbitrator shall publish his Award accordingly.

NOTE

NOTWITHSTANDING ANYTHING CONTAINED HEREINABOVE, THIS CLAUSE SHALL NOT BE APPLICABLE WHERE THE DISPUTE IS BETWEEN EPI AND ANOTHER CENTRAL PUBLIC SECTOR ENTERPRISE OR GOVT. OF INDIA DEPARTMENT, FOR WHICH A SEPARATE ARBITRATION CLAUSE IS PROVIDED VIDE CLAUSE NO. 76.2 GIVEN BELOW:

76.2 ARBITRATION BETWEEN CENTRAL PUBLIC SECTOR ENTERPRISES INTER SE / GOVERNMENT OF INDIA DEPARTMENTS/ MINISTRIES

i) In the event of any dispute or difference relating to the interpretation and application of the provisions of the contract, such dispute or difference shall be referred by either party to the arbitration as per the instructions (Office Memorandums / Circulars) issued by Govt. of India from time to time with regard to arbitration between one Government Department and another, one Government Department and a Public Sector Enterprise and Public Sector Enterprise inter se.

ii) Subject to any amendment that may be carried out by the Government of India from to time, the procedure to be followed in the arbitration shall be as is contained in D.O. No. DPE/4(10)/2001-PMA-GL-I dated 22.01.2004 of Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India or any modification issued in this regard.
FORMAT OF BANK GURANTEE IN LIEU OF EARNEST MONEY DEPOSIT

In consideration of Chairman & managing Director, Engineering Projects (India) Limited, (A Govt. of India Enterprise), Core-3, Scope Complex, Lodhi Road, New Delhi Pin-110003. (hereinafter called the EPI) having agreed to accept bank Guarantee of Rs ................. in lieu of EARNEST MONEY DEPOSIT from ................................................................. (hereinafter called the Supplier/ Contractor/ Sub-Contractor, which expression shall include its heirs, successors and assignees) in respect of the tender for .................................................................

We, ........................................ bank having its registered/head office at ................................... (hereinafter referred to as the Bank) do hereby agree and undertake to pay to EPI without demur or protest an amount not exceeding Rs............................ on demand by EPI.

We the above said Bank further agree and undertake to pay the said amount of Rs............................ without any demur on demand within 48 hours. Any demand made on the Bank by EPI shall be conclusive as regards the amount due and payable by the Bank under this guarantee.

We the above said Bank further agree that the guarantee herein contained shall be in full force and in effect until ................................................................. date ..............................

Unless a demand or claim under this guarantee is made on us in writing on or before ................................................................. date .............................., we shall be discharged from all liabilities under this guarantee thereafter.

We, the above said Bank, further agree that EPI shall have full liberty, without our consent and without affecting in any manner our obligation to verify, modify or delete any of the conditions.

We, the above said Bank, lastly undertake not to revoke this guarantee during its currency except with the prior consent of EPI in writing.

Dated……………………this day of……………200.

For and on behalf of the Bank

NOTE: on a Non-Judicial stamp paper of Rs. 100/- (Rupees One hundred only)
The Chairman & Managing Director  
(A Govt. of India Enterprise),  
Engineering Projects (India) Ltd.  
Core-3, SCOPE Complex  
7, Institutional Area, Lodhi road  
New Delhi – 110 003  

Dear Sir,  

In consideration of the Chairman & Managing Director, Engineering Projects (India) Ltd. (A Govt. of India Enterprise), Core-3, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi – 110 003 (hereinafter called ‘EPI’ which expression shall unless repugnant to the subject or context includes its successors and assigns) having agreed under the terms and conditions of Supply Contract/Contract/Sub-Contract no. ___________________________ dated ______________ made between M/s ___________________________ (hereinafter referred to as the said Supplier/Contractor/Sub-Contractor) which expression shall unless repugnant to the subject or context includes its successors and assigns) and EPI in connection with ___________________________ (hereinafter called ‘The said Supply Contract/Contract/Sub-Contract) to accept a Deed Security Deposit-cum-Performance Bank Guarantee as herein provided for ___________________________ lieu of:

a) The Security Deposit to be made by the said Supplier/Contractor/Sub-Contractor for the due fulfillment by the said Supplier/Contractor/Sub-Contractor of the terms and conditions contained in the said Supply Contract/Contract/Sub-contract, and

b) Fulfillment of the conditions of the said Supply Contract /Contract/Sub-Contract by furnishing a security for the performance of the works and/or equipment/materials supplied in accordance with conditions of the said Supply Contract/ Contract/ Sub-Contract.

1. We ___________________________ (hereinafter referred to as “the said bank which expression shall unless repugnant to the subject or context includes its successors and assigns) and having our registered office at ___________________________ do hereby unconditionally and irrevocably undertake and agree to indemnify and keep indemnified EPI from time to time to the extent of (___________________________) Only against any loss, damages, costs, charges and expenses caused to or suffered by or that may be caused or suffered by EP I by reason of any breach or breaches by the said Supplier/Contractor/Sub-Contractor of any of the terms and conditions contained in the said Supply Contract/Contract/Sub-Contract and or any amount becoming due for non-performance and /or penalty as assessed by EPI and top unconditionally pay the amount claimed by EPI on demand and without demur and protest.
2. We the said Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Supply Contract/Contract/Sub-Contract and till all the dues of EPI under the said Supply Contract/Contract/Sub-Contract or by virtue of any of the terms and conditions governing the said Supply Contract/Contract/Sub-Contract have been fully paid and its claims satisfied or discharged and till EPI certifies that the terms and conditions of the said Supply Contract/Contract/Sub-Contract have been fully and properly carried out by the said Supplier/Contractor/Sub-Contractor and accordingly discharge this guarantee subject, however, that EPI shall have no claim under this guarantee after 6 months from the date of expiry of the guarantee unless a notice of the claim under this guarantee has been served on the Bank before the expiry of the said period of 6 months.

3. EPI shall have the fullest liberty without affecting in any way the liability of the said Bank under this Guarantee or indemnity from time to time to vary any of the terms and conditions of the said Supply Contract/Contract/Sub-Contract to extend time of performance of the said Supply Contract/Contract/Sub-Contract or to postpone for any time and from time to time any power’s exercisable by it against the said Supplier/Contractor/Sub-Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said Supply Contract/Contract/Sub-Contract or securities available to EPI and the said Bank shall not be released from its liability under these presents by any exercise by EPI of the liberty with reference to the matters aforesaid or by reason of time being given to the said Supplier/Contractor/Sub-Contractor of any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of so releasing the said Bank from its such liability.

4. We, the said Bank, further agree that EPI shall be the sole judge of and as to whether the said Supplier/Contractor/Sub-Contractor has committed any breach or breaches of any of the terms and conditions of the said Supply Contract/Contract/Sub-Contract and the extent of loss, damage, cost, charges and expenses caused to or suffered by or that may be caused to or suffered by EPI on account thereof and the decision of EPI that the said Supplier/Contractor/Sub-Contractor has committed such breach or breaches and as to the amount or amounts of loss, damages, costs, charges and expenses caused to or suffered by EPI from time to time shall be final and binding on the Bank.

5. This guarantee shall be a continuing guarantee and shall remain valid and irrevocable for all claims of EPI and liabilities of the said Supplier/Contractor/Sub-Contractor arising up to and until mid night of ________________________, subject the claim period as mentioned in para ____________.

6. This guarantee shall be in addition to any other guarantee or security whatsoever that EPI may now or at any time anywise may have in relation to the said Supplier/Contractor/Sub-Contractor obligation/liabilities under and/or in connection with the said Supply Contract/Contract/Sub-Contract and EPI shall have full authority to take recourse to or enforce this guarantee in preference to any other guarantee or security which EPI may have or obtain and there shall be no forbearance on the part of EPI IN ENFORCING OR REQUIRING ENFORCEMENT OF ANY OTHER SECURITY AND shall not have the effect of releasing the said Bank from its full liability hereunder:

7. EPI shall be at liberty without reference to the said Bank and without effecting the full liability of the said Bank hereunder to take any other security in respect of the said supplier’s/Contractor’s/sub-contractor’s obligations and/or liabilities under or in connection with the said Supply Contract/Contract/Sub-Contract.

8. This guarantee shall not be determined or affected by the liquidation or winding up, dissolution, or change of constitution or insolvency of the said Supplier/Contractor/Sub-Contractor,
but shall in all respects and for all purposes be binding and operative until payment of all moneys paid to EPI in terms thereof.

9. The said Bank hereby waives all rights at any time inconsistent with the terms of this guarantee and the obligations of the said Bank in terms hereof shall not be anywise affected or suspended by reasons of any dispute or disputes having been raised by the said Supplier/Contractor/Sub-Contractor (whether or not pending before any arbitrator, tribunal or court) of any denial or liability by the said Supplier/Contractor/Sub-Contractor stopping or preventing or purporting to stop or prevent any payment by the said Bank to EPI in terms hereof. The amount stated in any notice of demand addressed by EPI to the Guarantor Bank as liable to be paid to EPI by the Supplier/Contractor/Sub-Contractor on account of any losses or damages or costs, charges and/or expenses shall as between the said bank and EPI be conclusive evidence of the amount so liable to be paid to EPI or suffered or incurred by EPI as the case may be and payable by the said Bank to EPI in terms hereof. We, the said Bank further undertake that we shall pay forthwith the amount stated in the notice of demand to EPI without demur and protest.

10. We, the said bank undertake not to revoke this guarantee during its currency except with the consent of EPI in writing and agree that any change in the constitution of the said Supplier/Contractor/Sub-Contractor or the said Bank shall not discharge our liabilities hereunder.

11. It shall not be necessary for EPI to proceed against the said Supplier/Contractor/Sub-Contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding any security which EPI may have obtained or obtain from the Supplier/Contractor/Sub-Contractor shall at the time when proceedings are taken against the said Bank hereunder be outstanding or unrealized.

12. Our liability under this guarantee shall be restricted to ____________________ and this guarantee shall remain in force until midnight of ________________ unless a claim to enforce this guarantee is filed with us within six months from ________________. (which is date of expiry of this guarantee), we shall be discharged from all liabilities under this guarantee thereafter.

DATED  ---------------------------- THIS day of -----------------------200…

FOR AND ON BEHALF OF BANK
To

The Chairman & Managing Director,
Engineering Projects (India) Ltd.,
(A Govt. of India Enterprise),
Core-3, Scope Complex,
7, Institutional Area,
Lodhi Road,
New Delhi—110 003.

Dear Sir,

1. In consideration of the Chairman & Managing Director, Engineering Projects (India Limited), (A Govt. of India Enterprise), Core-3, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi—110 003 (hereinafter called 'EPI' which expression shall includes its successors and assigns) having agreed under the terms and conditions of Supply Contract/ Contract/ Sub-Contract No.……………………………dated…(hereinafter referred to as the said Supply Contract/ Contract/ Sub-Contract) made between EPI and……………………….hereinafter called the Supplier/ Contractor/ Sub-Contractor) which expression shall include its successors and assigns to make at the request of the Supplier/ Contractor/ Sub-Contractor a lump sum advance of Rs…………..for utilising it only for the purposes of the said Supply Contract/ Contract/ Sub-Contract on his furnishing a guarantee acceptable to EPI.

2. We, the... Bank (hereinafter referred to as 'the said Bank) a Company under the Companies Act 1956 and having our registered office at…………. do hereby guarantee the recovery of the said advance and interest thereon as provided according to the terms and conditions of the said Supply Contract/ Contract/ Sub-Contract. If the Supplier/ Contractor/ Sub-Contractor fails to utilise the said advance for the purposes of the said Supply Contract/ Contract/ Sub-Contract and/or the said advance together with interest thereon as aforesaid is not fully recovered by EPI, we.…………………………..Bank hereby unconditionally and irrevocably undertake to pay the EPI on demand and without demur or protest to the extent of the said sum of Rs………………any claim made by EPI on us against non-utilisation / misutilisation of the said advance and/or by reason of EPI not being able to recover in full the sum of Rs……………….. with interest as aforesaid.

3. We Bank further agree that EPI shall be the sole judge of and as to whether the said Supplier/ Contractor/ Sub-Contractor has utilised or not utilised the said advance or any part thereof for the purposes of the said Supply Contract/ Contract/ Sub-Contract and/or as to whether the advance or any part thereof with interest has been recovered or not and the finding of the EPI in this regard- shall be final and binding on us.

4. We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Supply Contract/
Contract/ Sub-Contract and till the said advance with interest has been fully recovered and its claims satisfied or discharged and till EPI certifies that the said advance with interest has been fully recovered from the Supplier/ Contractor/ Sub-Contractor.

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

6. The Bank hereby waives all rights at any time inconsistent with the terms of this guarantee/ Undertaking and the obligations of the Bank in terms hereof shall not be anywise affected or suspended by reasons of any dispute or disputes having been raised by the Supplier/ Contractor/ Sub-Contractor (whether or not pending before any arbitrator, Tribunal or court) or any denial or liability by the Supplier/ Contractor/ Sub-Contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to EPI in terms hereof.

7. The amount stated in any notice of demand addressed by EPI to Bank as liable to be paid to EPI by the Supplier/ Contractor/ Sub-Contractor, shall be conclusive evidence of the amount so liable to be paid to EPI by the Bank.

8. This guarantee/ undertaking shall be in addition to any other guarantee or security whatsoever that EPI may now or any time anywise may have in relation to the Supplier’s/ Contractor’s/ Sub-Contractor’s obligations of liabilities under and/or in connection with the said Supply Contract/ Contract/ Sub-Contract, and EPI shall have full authority to take recourse to or enforce this security in preference to any other guarantee or security which EPI may have or obtain and there shall be no forbearance on the part of EPI in enforcing or requiring enforcement of any other security and shall not have the effect of releasing the Bank from its full liability hereunder.

9. It shall not be necessary for EPI to proceed against the said Supplier/ Contractor/ Sub-Contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding any security which EPI may have obtained or obtain from the Supplier/ Contractor/ Sub-Contractor, shall at the time when proceedings are taken against the said Bank hereunder be outstanding or unrealised.

10. We, the said Bank further undertake that we shall pay forthwith the amount stated in the notice of demand without demur and protest notwithstanding any dispute/difference pending between the parties before the arbitrator Tribunal or Court and/or dispute is being referred to arbitrator.

11. We, the said Bank undertake not to revoke this Guarantee during its currency except with the consent of EPI in writing and agree that any change in the Constitution of the said Supplier/ Contractor/ Sub-Contractor or the said Bank shall not discharge our liability hereunder.

12. This guarantee/ undertaking shall be a continuing guarantee/ undertaking and shall remain valid and irrevocable for all claims of EPI and liabilities of the Supplier/ Contractor/ Sub-Contractor arising up to and until midnight of……….

13. Notwithstanding anything contained herein above, our liability under this guarantee shall be restricted to Rs…………… (Rs……………………………….) and this guarantee shall remain in full force till……………… unless a claim is made on us within 3 months from the date of
expiry of this guarantee i.e. before all the claims under this guarantee shall be forfeited and we shall be relieved of and discharged from our liabilities hereunder.

Dated ...............................................day of ........................................ 200

For and on behalf of Bank
11. FORM OF INDEMNITY BOND (2 Nos.)
11 a. FORM OF INDEMNITY BOND TO BE EXECUTED BY
THE CONTRACTOR FOR THE EQUIPMENT HANDED OVER
BY THE EMPLOYER FOR PERFORMANCE OF ITS
CONTRACT (Entire Equipment Consignment in one lot)

(On non-Judicial stamp paper of appropriate value)

INDEMNITY BOND

THIS INDEMNITY BOND is made this ........................................................... day of........................................ by (Contractor's Name) a Company registered under the Companies Act, 1956/Partnership firm/Proprietary concern having its Registered Office at ........................................ (hereinafter called as 'Contractor' or "Obligor" which expression shall include its successors and permitted assigns) in favour of........................................ (Name of Employer) a Company incorporated under the Companies Act, 1956 having its Registered Office at ........................................ and its project at........................................ (hereinafter called"........................................") (Abbreviated name of the Employer)’ which expression shall include its successors and assigns):

WHEREAS .......................@....................... has awarded to the Contractor a Contract for .................................. vide its Notification of Award/Contract No ............... dated ...................................... and its Amendment No........................................ and Amendment No................................. (applicable when amendments have been issued) (hereinafter called the Contract") in terms of which...............@...............is required to hand over various Equipments to the Contractor for execution of the Contract.

And WHEREAS by virtue of Clause No...........................of the said Contract, the Contractor is required to execute an Indemnity Bond in favour of ...............@...............for the Equipments handed over to it by...............@...............for the purpose of performance of the Contract/Erection portion of the contract (hereinafter called the "Equipments")

AND THEREFORE, This Indemnity Bond witnesseth as follows:

1. That in consideration of various Equipments as mentioned in the Contract, valued at (Currency and amount in figures)........................................ (Currency and amount in words) ........................................ handover to the Contractor for the purpose of performance of the Contract, the Contractor hereby undertakes to indemnify and shall keep...............@...............indemnified, for the full value of the Equipments. The Contractor hereby acknowledges actual receipt of the Equipment etc. as per despatch title documents handed over to the Contractor as detailed in the Schedule appended hereto. The Contractor shall hold such Equipment etc. in trust as a "Trustee" for and on behalf of...............@...............@ Fill in abbreviated name of Employer
2. That the Contractor is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the Equipment at ..........@ ...... project site against all risks whatsoever till the Equipments are duly used/erected in accordance with the terms of the Contract and the plant/package duly erected and commissioned in accordance with the terms of the Contract is taken over by ..........@.................. The Contractor undertakes to keep ..........@......... harmless against any loss or damage that may be caused to the Equipments.

3. The Contractor undertakes that the Equipments shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the equipment shall be utilised for any other work of purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for an intents and purpose including legal/penal consequences.

4. That ..........@...............is and shall remain the exclusive owner of the equipments free from all encumbrances, charges or liens of any kind, whatsoever. The Equipments shall at all times be open to inspection and checking by the Project Manager or other employees/agents authorised by him in this regard. Further, .............................................@...................... shall always be free at all times to take possession of the Equipments in whatever form the Equipments may be, if in its opinion, the equipments are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of .................................................................@ ..................to return the Equipments without any demur or reservation.

5. That this Indemnity Bond is irrevocable. If at any time any loss or damage occurs to the Equipments or the same or any part thereof is mis-utilised in any manner whatsoever, then the Contractor hereby agrees that the decision of the Project Manager of......@........as to assessment of loss or damage to the Equipment shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and/or damaged Equipments at its own cost and/or shall pay the amount of loss to.................@...........without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to.................................@.................................................. against the Contractor under the Contract and under this Indemnity Bond.

6. NOW THE CONDITION of this Bond is that if the Contractor shall duly and punctually comply with the terms and conditions of this Bond to the satisfaction of...........@ ...., THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

@ Fill in abbreviated name of Employer
IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorised representative under the common seal of the Company, the day, month and year first above mentioned.

SCHEDULE

<table>
<thead>
<tr>
<th>Particulars of the Equipments handed over</th>
<th>Quantity</th>
<th>Particulars of Despatch title Documents</th>
<th>Value of the Equipments</th>
<th>Signature of Attorney In token of receipt</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR/GR/ Bill of lading No. &amp; Date</td>
<td>Carrier</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For and on behalf of
..................................................
(Contractor's Name)

WITNESS

1. 1. Signature ..................................  
    2. Name ........................................  
    3. Address ......................................  

2. 1. Signature ...............................  
    2. Name ........................................  
    3. Address ......................................

* Indemnity Bond are to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the Power of Attorney issued under common seal of the company with authority to execute Indemnity Bond, (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to Indemnity Bond.
11 b. FORM OF INDEMNITY BOND TO BE EXECUTED
BY THE CONTRACTOR FOR THE EQUIPMENT HANDED
OVER BY THE EMPLOYER FOR PERFORMANCE OF ITS
CONTRACT (Equipment handed over in installments)
(On non-Judicial stamp paper of appropriate value)

INDEMNITY BOND

THIS INDEMNITY BOND is made this....................................................................................day
of........................................ 20 .....................by(Contractor’s Name) a Company registered under the
Companies Act, 1956/Partnership firm/Proprietary concern having its Registered Office at
........................................ (hereinafter called as 'Contractor' or "Obligor" which expression shall
include its successors and permitted assigns) in favour of......................................................
........................................ (Name of Employer), a Company incorporated under the Companies Act,
1956 having its Registered Office at...and its project at............................................. ....(hereinafter
called........................................ (Abbreviated name of the Employer), which expression shall include its
successors and assigns):

WHEREAS.......... @ ............ has awarded to the Contractor a Contract for ...................... vide
its Notification of Award/Contract No......................... dated ..............................................and its
Amendment No.............................................. and Amendment No (applicable............. when
amendments have been issued) (hereinafter called the Contract") in terms of which ..........@@
......................................................................................... is required to hand over various Equipments to the
Contractor for execution of the Contract.

And WHEREAS by virtue of Clause No ........................................ of the said Contract, the Contractor
is required to execute an Indemnity Bond in favour in ..........@ .............for the Equipments
handed over to it by ..........@ .............for the purpose of performance of the Contract/Erection
portion of the contract (hereinafter called the "Equipments")

NOW THEREFORE, This Indemnity Bond witnesseth as follows:

1. That in consideration of various Equipments as mentioned in the Contract,
valued at (Currency and amount in figures).....................................................................(Currency
and amount in words)...............................................................................................to be handed over
to the Contractor in instalments from time to time for the purpose of performance
of the Contract, the Contractor hereby undertakes to indemnify and shall
keep............... @ .....................indemnified for the full value of the
Equipments. The Contractor hereby acknowledges actual receipt of the initial
instalment of the Equipment etc. as per details in the Schedule appended hereto.
Further, the Contractor agrees to acknowledge actual receipt of the subsequent
installments of the Equipments etc. as required by...............@...........in the
form of Schedules consecutively numbered which shall be attached to this
Indemnity Bond so as to form integral parts of this Bond. The Contractor shall
hold such Equipments etc. in trust as a "Trustee" for and on behalf of
.........................@..................
2. That the Contractor is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the Equipment at…………. @……..project site against all risks whatsoever till the Equipments are duly used/erected in accordance with the terms of the Contract and the plant/package duly erected and commissioned in accordance with the terms of the Contract, is taken over by…………........@............... The Contractor undertakes to keep……………………. @ …………….. harmless against any loss or damage that may be caused to the Equipments.

3. The Contractor undertakes that the equipments shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the equipment shall be utilised for any other work of purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purpose including legal/penal consequences.

4. That........... @…………..is and shall remain the exclusive owner of the Equipments free from all encumbrances, charges or liens of any kind, whatsoever. The Equipments shall at all times be open to inspection and checking by the Project Manager or other employees/agents authorised by him in this regard. Further........@...........shall always be free at all times to take possession of the Equipments in whatever form the Equipments may be, if in its opinion, the equipments are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of………….@...............to return the Equipments without any demur or reservation.

5. That this Indemnity Bond is irrevocable. If at any time any loss or damage occurs to the Equipments or the same or any part thereof is mis-utilised in any manner whatsoever, then the Contractor hereby agrees that the decision of the Project Manager of…………...............@..................................as to assessment of loss or damage to the Equipment shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and/or damaged Equipments at its own cost and/or shall pay the amount of loss to.......................... @.........................without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to………….@...............against the Contractor under the Contract and under this Indemnity Bond.

6. NOW THE CONDITION of this Bond is that if the Contractor shall duly and punctually comply with the terms and conditions of this Bond to the satisfaction of…………....@............... , THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

@ Fill in abbreviated name of Employer
IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorised representative under the common seal of the Company, the day, month and year first above mentioned.

SCHEDULE No.1

<table>
<thead>
<tr>
<th>Particulars of the Equipments handed over</th>
<th>Quantity</th>
<th>Particulars of Despatch title Documents</th>
<th>Value of the Equipments</th>
<th>Signature of Attorney In token of receipt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RR/GR/ Bill of lading No. &amp; Date</td>
<td>Carrier</td>
<td></td>
</tr>
</tbody>
</table>

(Please number subsequent schedules)

For and on behalf of

..................................................

(Contractor's Name)

WITNESS

1. 1. Signature ............ .............  Signature .........................
2. Name .................. ............  Name .................. ............
3. Address .........................  Designation of .....................

Authorised representative *

2. 1. Signature .........................  (Common Seal)
2. Name.................................  (In case of Company)
3. Address .........................

* Indemnity Bond are to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the Power of Attorney issued under common seal of the company with authority to execute Indemnity Bond, (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to Indemnity Bond.
12. FORM OF AUTHORISATION LETTER
12. FORM OF AUTHORISATION LETTER

(NAME OF EMPLOYER)

(PROJECT..........................................)

REF. NO.

DATE

To,

Mis (Contractor's Name) .............................................................................

Ref Contract No .............................................. Dated ................................................

for{ Contract Name]........................... ........................................

awarded by (Name of Employer)

Dear Sirs,

Kindly refer to Contract No ................... Dated ................. for {Contract Name] You are hereby authorised on behalf of (Name of Employer) having its registered office at .......................................................... and its Project at.......................... to take physical delivery of materials/equipments covered under despatch Document/ Consignment Note no............* ............ dated.......................... and as detailed in the enclosed Schedule for the sole purpose of successful performance of the aforesaid contract and for no other purposes, whatsoever.

(Signature of Project Authority)

(Designation : .................................

Date .................................

ENCL : as above

* Mention LR/RR No.
### SCHEDULE OF MATERIAL/EQUIPMENT COVERED UNDER DESPATCH TITLE DOCUMENT (RR NO./ LR NO.…………………)

|---------|---------------|---------------------------------|--------------------------------------|----------------|-------|---------|

(SIGNATURE OF THE PROJECT AUTHORITY)

(Designation): ..........................................

Date): .................................................................
A. Contract and Interpretation

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

“Contract” means the Contract Agreement entered into between the Employer and the Contractor, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term “the Contract” shall in all such documents be construed accordingly.


“GCC” means the General Conditions of Contract hereof.

“SCC” means the Special Conditions of Contract.

“Day” means calendar day of the Gregorian Calendar.

“Month” means calendar month of the Gregorian Calendar.

“Employer” means the person named as such in the SCC and includes the legal successors or permitted assigns of the Employer.

“Project Manager” means the person appointed by the Employer in the manner provided in GCC Sub Clause 17.1 (Project Manager) hereof and named as such in the SCC to perform the duties delegated by the Employer.

“Contractor” means the person(s) whose bid to perform the Contract has been accepted by the Employer and is named as such in the Contract Agreement, and includes the legal successors or permitted assigns of the Contractor.

“Contractor’s Representative” means any person nominated by the Contractor and approved by the Employer in the manner provided in GCC Sub Clause 17.2 (Contractor’s Representative and Construction Manager) hereof to perform the duties delegated by the Contractor.

“Subcontractor,” including vendors, means any person to whom execution of any part of the Facilities, including preparation of any design or supply of any Plant and Equipment, is sub-contracted directly or indirectly by the Contractor, and includes its legal successors or permitted assigns.
**GENERAL CONDITION OF CONTRACT (GCC)**

“Adjudicator” means the person or persons named as such in the SCC to make a decision on or to settle any dispute or difference between the Employer and the Contractor referred to him or her by the parties pursuant to GCC Sub Clause 6.1 (Adjudicator) hereof.

“Contract Price” means the sum specified in Article 2.1 (Contract Price) of the Form of Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.

“Facilities” means the Plant and Equipments to be supplied and installed, as well as all the Installation Services to be carried out by the Contractor under the Contract.

“Plant and Equipments” means permanent plant, equipments, machinery, apparatus, articles and things of all kinds to be provided and incorporated in the Facilities by the Contractor under the Contract (including the spare parts to be supplied by the Contractor under GCC Sub Clause 7.3 hereof), but does not include Contractor’s Equipments.

“Installation Services” means all those services ancillary to the supply of the Plant and Equipments for the Facilities, to be provided by the Contractor under the Contract; e.g., transportation and provision of marine or other similar insurance, inspection, expediting, Site preparation works (including the provision and use of Contractor’s Equipments and the supply of all construction materials required), installation, testing, precommissioning, commissioning, operations, maintenance, the provision of operations and maintenance manuals, training, etc.

“Contractor’s Equipments” means all plant, facilities, equipments, machinery, tools, apparatus, appliances or things of every kind required in or for installation, completion and maintenance of Facilities that are to be provided by the Contractor, but does not include Plant and Equipments, or other things intended to form or forming part of the Facilities.

“Site” means the land and other places upon which the Facilities are to be installed, and such other land or places as may be specified in the Contract as forming part of the Site.

“Effective Date” means the date from which the Time for Completion shall be determined as stated in Article 3 (Effective Date for Determining Time for Completion) of the Form of Contract Agreement.
"Time for Completion" means the time within which Completion of the Facilities as a whole (or of a part of the Facilities where a separate Time for Completion of such part has been prescribed) is to be attained in accordance with the stipulations in the SCC and the relevant provisions of the Contract.

"Completion" means that the Facilities (or a specific part thereof where specific parts are specified in the SCC) have been completed operationally and structurally and put in a tight and clean condition, and that all work in respect of Precommissioning of the Facilities or such specific part thereof has been completed; and Commissioning has been attained as per Technical Specifications.

"Precommissioning" means the testing, checking and other requirements specified in the Technical Specifications that are to be carried out by the Contractor in preparation for Commissioning as provided in GCC Clause 24 (Completion) hereof.

"Commissioning" means operation of the Facilities or any part thereof by the Contractor, which operation is to be carried out by the Contractor as provided in GCC Sub Clause 25.1 (Commissioning) hereof, for the purpose of carrying out Guarantee Test(s).

"Guarantee Test(s)" means the test(s) specified in the Technical Specifications to be carried out to ascertain whether the Facilities or a specified part thereof is able to attain the Functional Guarantees specified in the Technical Specifications in accordance with the provisions of GCC Sub Clause 25.2 (Guarantee Tests) hereof.

"Operational Acceptance" means the acceptance by the Employer of the Facilities (or any part of the Facilities where the Contract provides for acceptance of the Facilities in parts), which certifies the Contractor’s fulfillment of the Contract in respect of Functional Guarantees of the Facilities (or the relevant part thereof) in accordance with the provisions of GCC Clause 28 (Functional Guarantees) hereof and shall include deemed acceptance in accordance with GCC Clause 25 (Commissioning and Operational Acceptance) hereof.

"Defects Liability Period" means the period of validity of the warranties given by the Contractor commencing at Completion of the Facilities or a part thereof, during which the Contractor is responsible for defects with respect to the Facilities (or the relevant part thereof) as provided in GCC Clause 27 (Defects Liability) hereof.
## GENERAL CONDITION OF CONTRACT (GCC)

### 2. Contract Documents

2.1 Subject to Article 1.2 (Order of Precedence) of the Form of Contract Agreement, all documents forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.

2.2 The Contract will be signed in three originals and the Contractor shall be provided with one signed original and the rest will be retained by the Employer.

2.3 The Contractor shall provide free of cost to the Employer all the engineering data, drawing and descriptive materials submitted with the bid, in at least six (6) copies to form a part of the Contract immediately after Notification of Award.

2.4 Subsequent to signing of the Contract, the Contractor at his own cost shall provide the Employer with at least twenty (20) true copies and three (3) soft copies on CD ROM of the Contract Agreement within thirty (30) days after signing of the Contract.

### 3. Interpretation

3.1 Language

3.1.1 Unless the Contractor is a national of the Employer’s country and the Employer and the Contractor agree to use the local language, all Contract Documents, all correspondence and communications to be given, and all other documentation to be prepared and supplied under the Contract shall be written in English, and the Contract shall be construed and interpreted in accordance with that language.

3.1.2 If any of the Contract Documents, correspondence or communications are prepared in any language other than the governing language under GCC Sub Clause 3.1.1 above, the English translation of such documents, correspondence or communications shall prevail in matters of interpretation.

3.2 Singular and Plural

The singular shall include the plural and the plural the singular, except where the context otherwise requires.

3.3 Headings

The headings and marginal notes in the General Conditions of Contract are included for ease of reference, and shall neither constitute a part of the Contract nor affect its interpretation.

3.4 Persons

Words importing persons or parties shall include firms, corporations and government entities.
3.5 **Incoterm**s

Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms.

Incoterms means International Rules for Interpreting Trade Terms published by the International Chamber of Commerce (latest edition), 38 Cours Albert 1er, 75008 Paris, France.

3.6 **Construction of the Contract**

3.6.1 The Contracts to be entered between the Employer and the Contractor shall be as under:

**For Foreign Contractor**

- ‘First Contract’ for CIF/CIP Supply of all Offshore Plant and Equipments and Materials including Mandatory Spares to be supplied from abroad and Type Test Charges.
- ‘Second Contract’ for Ex-Works Supply of all Plant and Equipments and Materials including Mandatory Spares of Indian origin and Type Test Charges.
- ‘Third Contract’ for providing all services i.e. Port Handling, Port Clearance and Port Charges for the imported goods, further Loading and Inland Transportation for Delivery at Site, Inland Transit Insurance, Unloading, Storage, Handling at Site, Installation, Insurance Covers other than inland transit insurance, Testing and Commissioning including carrying out Guarantee Tests in respect of all the Equipments supplied under the First Contract and the Second Contract and all other services specified in the Contract Documents.

If the foreign bidder has proposed an Assignee in his bid to execute the Second Contract and/or the Third Contract and has also furnished written unequivocal consent of the proposed Assignee to work as independent Contractor on the terms and conditions offered by the bidder and if the Employer is satisfied with capacity and experience of the Assignee, the Employer will enter into the ‘Second Contract’ and/or ‘Third Contract’ with the said Assignee. In case no Assignee has been proposed by the foreign bidder in his bid or if the Assignee fails to enter into the Second Contract and/or Third Contract with the Employer or if the Employer in its judgement does not find acceptance of the proposed Assignee as its Contractor, then the
foreign bidder shall be obliged to enter into and execute all the three Contracts with the Employer.

If the Employer accepts to enter into Second Contract and/or Third Contract with the Assignee of foreign bidder, the said Assignee, in addition to the Contract Performance Securities to be provided by the foreign Contractor for ten percent (10%) of the value of all the three Contracts, i.e. First Contract, Second Contract and Third Contract shall provide within twenty eight (28) days of Notification of Award, separate Contract Performance Security(ies) equivalent to ten percent (10%) of the value of the Contract(s) entered into with the Assignee for the due performance of the Contract, with an initial validity up to ninety (90) days beyond the scheduled Defects Liability Period.

For Domestic Bidder

- ‘First Contract’ for Ex-Works Supply of all Plant and Equipments and Materials including Mandatory Spares and Type Test Charges.

- ‘Second Contract’ for providing all services i.e. Inland Transportation for Delivery at Site, Unloading, Storage, Handling at Site, Installation, Testing and Commissioning including Performance Testing in respect of all the Plant and Equipments supplied under the ‘First Contract’ and any other services specified in the Contract Documents.

3.6.2 The award of the separate Contracts shall not in any way dilute the responsibility of the Contractor for the successful completion of the Facilities as per Contract Documents and a breach in one Contract shall automatically be construed as a breach of the other Contract(s) which will confer a right on the Employer to terminate the other Contract(s) also at the risk and the cost of the Contractor.

3.7 Entire Agreement
Subject to GCC Sub Clause 16.4 hereof, the Contract constitutes the entire agreement between the Employer and Contractor with respect to the subject matter of Contract and supersedes all communications, negotiations and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract.

3.8 Amendment
No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract,
3.9 **Independent Contractor**

The Contractor shall be an independent contractor performing the Contract. The Contract does not create any agency, partnership, joint venture or other joint relationship between the parties hereto.

Subject to the provisions of the Contract, the Contractor shall be solely responsible for the manner in which the Contract is performed. All employees, representatives or Subcontractors engaged by the Contractor in connection with the performance of the Contract shall be under the complete control of the Contractor and shall not be deemed to be employees of the Employer, and nothing contained in the Contract or in any subcontract awarded by the Contractor shall be construed to create any contractual relationship between any such employees, representatives or Subcontractors and the Employer.

3.10 **Joint Venture or Consortium**

If the Contractor is a joint venture or consortium of two or more firms, all such firms shall be jointly and severally bound to the Employer for the fulfillment of the provisions of the Contract and shall designate one of such firms to act as a leader with authority to bind the joint venture or consortium. The composition or the constitution of the joint venture or consortium shall not be altered without the prior consent of the Employer.

3.11 **Non-Waiver**

3.11.1 Subject to GCC Sub Clause 3.11.2 below, no relaxation, forbearance, delay or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect or restrict the rights of that party under the Contract, nor shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

3.11.2 Any waiver of a party’s rights, powers or remedies under the Contract must be in writing, must be dated and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

3.12 **Severability**

If any provision or condition of the Contract is prohibited or rendered
invalid or unenforceable, such prohibition, invalidity or
unenforceability shall not affect the validity or enforceability of any
other provisions and conditions of the Contract.

### 3.13 Country of Origin

“Origin” means the place where the materials, equipments and
other supplies for the Facilities are mined, grown, produced or
manufactured, and from which the services are provided.

### 4. Notices

#### 4.1 Unless otherwise stated in the Contract, all notices to be given
under the Contract shall be in writing, and shall be sent by
personal delivery, airmail post, special courier, cable, telegraph,
telex, facsimile or Electronic Data Interchange (EDI) to the
address of the relevant party set out in the Contract Coordination
Procedure to be finalised pursuant to GCC Sub Clause 17.2.3.1,
with the following provisions.

- **4.1.1** Any notice sent by cable, telegraph, telex, telefax,
facsimile or EDI shall be confirmed within two (2) days
after dispatch by notice sent by airmail post or special
courier, except as otherwise specified in the Contract.

- **4.1.2** Any notice sent by airmail post or special courier shall
be deemed (in the absence of evidence of earlier receipt)
to have been delivered ten (10) days after dispatch. In
proving the fact of dispatch, it shall be sufficient to show
that the envelope containing such notice was properly
addressed, stamped and conveyed to the postal authorities
or courier service for transmission by airmail or special
courier.

- **4.1.3** Any notice delivered personally or sent by cable, telegraph,
telex, telefax, facsimile or EDI shall be deemed to have
been delivered on date of its dispatch.

- **4.1.4** Either party may change its postal, cable, telex, telefax
number, facsimile or EDI address or addressee for receipt
of such notices by ten (10) days’ notice to the other
party in writing.

#### 4.2 Notices shall be deemed to include any approvals, consents,
instructions, orders and certificates to be given under the Contract.

### 5. Governing Laws

The Contract shall be governed by and interpreted in accordance
with laws in force in India. The Courts of Delhi shall have exclusive
jurisdiction in all matters arising under the Contract.

### 6. Settlement of Disputes

#### 6.1 Adjudicator

- **6.1.1** If any dispute of any kind whatsoever shall arise between

---

**GENERAL CONDITION OF CONTRACT (GCC)**

---
the Employer and the Contractor in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity or termination, or the execution of the Facilities—whether during the progress of the Facilities or after their completion and whether before or after the termination, abandonment or breach of the Contract—the parties shall seek to resolve any such dispute or difference by mutual consultation. If the parties fail to resolve such a dispute or difference by mutual consultation, then the dispute shall be referred in writing by either party to the Adjudicator, with a copy to the other party.

6.1.2 The Adjudicator shall give its decision in writing to both parties within twenty eight (28) days of a dispute being referred to it. If the Adjudicator has done so, and no notice of intention to commence arbitration has been given by either the Employer or the Contractor within fifty six (56) days of such reference, the decision shall become final and binding upon the Employer and the Contractor. Any decision that has become final and binding shall be implemented by the parties forthwith.

6.1.3 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not fulfilling its functions in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Employer and the Contractor. Failing agreement between the two within twenty eight (28) days, the new Adjudicator shall be appointed at the request of either party by the Appointing Authority specified in the SCC.

6.2 Arbitration

6.2.1 If either the Employer or the Contractor is dissatisfied with the Adjudicator’s decision, or if the Adjudicator fails to give a decision within twenty eight (28) days of a dispute being referred to it, then either the Employer or the Contractor may, within fifty six (56) days of such reference, give notice to the other party, with a copy for information to the Adjudicator, of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

6.2.2 Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with GCC Sub Clause 6.2.1, shall be finally settled by arbitration. Arbitration may be commenced prior to or after completion of the Facilities.
6.2.3 Any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below.

6.2.4 The Employer and the Contractor shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within twenty eight (28) days after the latter of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority for arbitrator designated in the SCC.

6.2.5 If one party fails to appoint its arbitrator within forty-two (42) days after the other party has named its arbitrator, the party which has named an arbitrator may request the Appointing Authority to appoint the second arbitrator.

6.2.6 If for any reason an arbitrator is unable to perform its function, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws as mentioned in GCC Clause 5 (Governing Laws) and a substitute shall be appointed in the same manner as the original arbitrator.

6.2.7 Arbitration proceedings shall be conducted (i) in accordance with the rules of procedure designated in the SCC, (ii) in the place designated in the SCC, and (iii) in the language in which this Contract has been executed.

6.2.8 The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or claims of immunity from such enforcement.

6.2.9 The arbitrator(s) shall give reasoned award.

6.3 Notwithstanding any reference to the Adjudicator or arbitration herein,

(a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree

(b) the Employer shall pay the Contractor any monies due to the Contractor.
B. Subject Matter of Contract

7. Scope of Facilities

7.1 Unless otherwise expressly limited in the Technical Specifications, the Contractor's obligations cover the provision of all Plant and Equipments including spares and the performance of all Services required for the design, the manufacture (including procurement, quality assurance, construction, installation, associated civil works, Structural and others construction works, precommissioning and delivery) of the Plant and Equipment and the installation, commissioning, completion of facilities and performance testing of the Facilities in accordance with the plans, procedures, specifications, drawings, codes and any other documents as specified in the Technical Specifications. Such specifications include, but are not limited to, the provision of supervision and engineering services; the supply of labour, materials, equipment, spare parts (as specified in GCC Sub Clause 7.3 below) and accessories; Contractor's Equipments; construction utilities and supplies; temporary materials, structures and facilities; transportation (including, without limitation, unloading and hauling to, from and at the Site); Insurance and storage, except for those supplies, works and services that will be provided or performed by the Employer, as set forth in Appendix 6 (Scope of Works and Supply by the Employer) to the Form of Contract Agreement.

7.2 The Contractor shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Completion of the Facilities as if such work and/or items and materials were expressly mentioned in the Contract.

7.3 In addition to the supply of Mandatory Spare Parts included in the Contract, the Contractor agrees to supply spare parts required for the operation and maintenance of the Facilities. However, the identity, specifications and quantities of such spare parts and the terms and conditions relating to the supply thereof are to be agreed between the Employer and the Contractor, and the price of such spare parts shall be that given in Price Schedule No. 6, which shall be added to the Contract Price. The price of such spare parts shall include the purchase price therefor and other costs and expenses (including the Contractor's fees) relating to the supply of spare parts. Unless otherwise specified in the SCC, the prices of spares covered under price Schedule No. 6 shall be kept valid for a period of six months after the date of Notification of Award of Main Equipment and Mandatory Spares.

7.3.1 The Contractor agrees that the spare parts recommended by him for 3 years operation and quoted in Schedule No. 6 shall be supplied by him at the same terms and
conditions as are otherwise applicable to this Contract. Further, the Contractor also agrees to supply spare parts required for the operation and maintenance of the Facilities as per provision of subsequent paragraphs of this Sub Clause.

7.3.1.1 All the spares for the equipment under the Contract will strictly conform to the Specification and other relevant documents and will be identical to the corresponding main equipment/components supplied under the Contract and shall be fully interchangeable.

7.3.1.2 All the Mandatory Spares covered under the Contract shall be produced alongwith the main equipments as a continuous operation and the delivery of the spares will be effected alongwith the main equipments in a phased manner and the delivery would be completed by the respective dates for the various categories of equipment as per the agreed network. In case of Recommended Spares the above will be applicable provided the order for the Recommended Spares have been placed with the Contractor prior to commencement of manufacture of the main equipment.

7.3.1.3 The Contractor will provide the Employer with the manufacturing drawings, catalogues, assembly drawings and any other document required by the Employer so as to enable the Employer to identify the recommended spares. Such details will be furnished to the Employer as soon as they are prepared but in any case not later than six months prior to commencement of manufacture of the corresponding main equipment.

7.3.1.4 To enable the Employer to finalise the requirement of recommended spares which are ordered subsequent to placement of order for main equipment/plant in addition to necessary technical details, catalogue and such other information brought-out hereinabove, the Contractor will also provide a justification in support of reasonableness of the quoted prices of spares which will, inter-alia, include documentary evidence that the prices quoted by the Contractor to the Employer are not higher than those charged by him from other customers in the same period.

7.3.1.5 In addition to the spares recommended by the Contractor, if the Employer further identifies certain particular items of spares, the Contractor will submit the prices and delivery quotation for such spares within 30 days of receipt of such request with a validity period of 6 months for
7.3.1.6 The quality plan and the inspection requirement finalised for the main equipment will also be applicable to the corresponding spares.

7.3.1.7 The Contractor will provide the Employer with all the addresses and particulars of his sub-suppliers while placing the order on vendors for items/components/equipment covered under the Contract and will further ensure with his vendors that the Employer, if so desires, will have the right to place order for spares directly on them on mutually agreed terms based on offers of such vendors.

7.3.1.8 The Contractor shall guarantee the long term availability of spares to the Employer for the full life of the equipment covered under the Contract. The Contractor shall guarantee that before going out of production of spare parts of the equipment covered under the Contract, he shall give the Employer atleast 2 years advance notice so that the latter may order his bulk requirement of spares, if it so desires. The same provision will also be applicable to Sub-contractors. Further, in case of discontinuance of manufacture of any spares by the Contractor and/or his Sub-contractor, Contractor will provide the Employer, two years in advance, with full manufacturing drawings, material specification and technical information including information on alternative equivalent makes required by the Employer for the purpose of manufacture/procurement of such items.

7.3.1.9 The prices of all future requirements of item of spares beyond 3 years operational requirement will be derived from the corresponding Ex-Works Price at which the order for such spares have been placed by Employer as a part of Mandatory Spares or Recommended Spares, or from the rates of Mandatory Spares or Recommended Spares as quoted by/negotiated with the Contractor. Ex-Works order price of future spares shall be computed in accordance with the price adjustment provisions covered under the main Contract excepting that the base indices will be counted from the scheduled date of Commissioning of the last equipment under the main project and there will be no ceiling on the amount of variation in the prices. The above option for procuring future recommended spares by the Employer shall remain valid for the period of 5 years from the Schedule date of completion of facilities of the last equipment covered under this Contract.
### 7.3.1.10 The Contractor will indicate in advance the delivery period of the items of spares, which the Employer may procure in accordance with above sub clause. In case of emergent requirements of spares, the Contractor would make every effort to expedite the manufacture and delivery of such spares on the basis of mutually agreed time schedule.

### 7.3.1.11 In case the Contractor fails to supply the mandatory, recommended or long term spares in the terms stipulated above, the Employer shall be entitled to purchase the same from the alternate sources at the risk and the cost of the Contractor and recover from the Contractor, the excess amount paid by the Employer over the rates worked on the above basis. In the event of such risk purchase by the Employer, the purchases will be as per the Works and Procurement Policy of the Employer prevalent at the time of such purchases and the Employer at his option may include a representative from the Contractor in finalising the purchases.

### 7.3.1.12 It is expressly understood that the final settlement between the parties in terms of relevant clauses of the Contract Documents shall not relieve the Contractor of any of his obligations under the provision of long term availability of spares and such provisions shall continue to be enforced till the expiry of 5 years period reckoned from the scheduled date of Commissioning of the Plant and Equipment unless otherwise discharged expressly in writing by the Employer. Further, the provisions pertaining to long term availability of spares shall be extended beyond 5 years applicability period mentioned hereinabove if so desired by the Employer and at the mutually acceptable escalation formula.

### 7.3.1.13 The Contractor shall warrant that all spares supplied will be new and in accordance with the Contract Documents and will be free from defects in design, material and workmanship and shall further guarantee as under:

(i) For 3 years operational spares (both Mandatory and Recommended)

   a) For any item of spares ordered or to be ordered by the Employer for 3 years operational requirement of the plant which are manufactured as a continuous operation together with the corresponding main equipment/component, the Defects Liability Period will be Twelve (12) months from the
scheduled date of commercial operation of the last unit of main equipment/plant under the Contract. 'Commercial Operation' shall mean the conditions of operation in which the complete equipment covered under the Contract is officially declared by the Employer to be available for continuous operation at different loads up to and including rated capacity. Such declaration by the Employer, however, shall not relieve or prejudice the Contractor any of his obligations under the Contract. In case of any failure in the original component/equipments due to faulty designs, materials and workmanship, the corresponding spare parts, if any, supplied will be replaced without any extra cost to the Employer unless a joint examination and analysis by the Employer and the Contractor of such spare parts prove that the defect found in the original part that failed, can safely be assumed not to be present in spare parts. Such replaced spare parts will have the same Defects Liability as applicable to the replacement made for the defective original part/component provided that such replacement for the original equipment and the spare replaced are again manufactured together. The discarded spare parts will become the property of the Contractor as soon as they have been replaced by the Contractor.

b) For the item of spares ordered or to be ordered by the Employer for 3 years operational requirement of the plant, which with the written approval of the Employer, are not manufactured as a continuous operation together with the manufacture of the corresponding main equipment/component, will be warranted for 7000 hrs of trouble free operation if used within a period of 18 months (reckoned from the date of actual delivery at site). However, if such spare parts are put to use after 18 months of the actual delivery at site then the guarantee of such spares will stand valid till the expiry of 36 months from the scheduled date of Completion of facilities for the last unit of equipment/plant covered under the contract or 7000 hrs of trouble free operation after such spares are put in service, whichever is earlier.
c) For long term requirement

For item of spares that may be ordered by the employer to cover requirements beyond 3 years of Initial Operation of the plant, the warranty will be till the expiry of 7000 hrs of trouble free operation if used within a period of 18 months from the date of delivery at site. For item of spares that may be used after 18 months from the date of actual delivery at site, the warranty period will be 12 months from the date they are put to use or 7000 hrs of trouble free operation, whichever is earlier. In any case the defect liability of spares will expire at the end of 48 months from the date of their receipt at site.

ii) The Defects Liability of spares that are not used within 18 months from the respective date of the delivery at Site covered in para (b) and (c) above will, however, be subject to condition that all such spares being stored/maintained/preserved in accordance with Contractor's standard recommended practice, if any, and the same has been furnished to the Employer.

8. Time for Commencement and Completion

8.1 The Contractor shall commence work on the Facilities from the date of Notification of Award and without prejudice to GCC Sub Clause 26.2 hereof, the Contractor shall thereafter proceed with the Facilities in accordance with the time schedule specified in Appendix 4 (Time Schedule) to the Form of Contract Agreement.

8.2 The Contractor shall attain Completion of the Facilities (or of a part where a separate time for Completion of such part is specified in the Contract) within the time stated in the SCC or within such extended time to which the Contractor shall be entitled under GCC Clause 40 (Extension of Time for Completion) hereof.

9. Contractor's Responsibilities

9.1 The Contractor shall design, manufacture (including associated purchases and/or subcontracting), install and complete the Facilities and carry out the Guarantee tests with due care and diligence in accordance with the Contract.

9.2 The Contractor confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the Facilities (including any data as to boring tests) provided by the Employer, and on the basis of information that the Contractor could have obtained from a visual inspection of the Site (if access
thereto was available) and of other data readily available to it
relating to the Facilities as at the date twenty eight (28) days
prior to bid submission. The Contractor acknowledges that any
failure to acquaint itself with all such data and information shall
not relieve its responsibility for properly estimating the difficulty or
cost of successfully performing the Facilities.

9.3 The Contractor shall acquire in its name all permits, approvals
and/or licenses from all local, state or national government
authorities or public service undertakings in the country where
the Site is located that are necessary for the performance of the
Contract, including, without limitation, visas for the Contractor’s
and Subcontractor’s personnel and entry permits for all imported
Contractor’s Equipment. The Contractor shall acquire all other
permits, approvals and/or licenses that are not the responsibility
of the Employer under GCC Sub Clause 10.3 hereof and that are
necessary for the performance of the Contract.

9.4 The Contractor shall comply with all laws in force in the country
where the Facilities are installed and where the Installation Services
are carried out. The laws will include all national, provincial,
municipal or other laws that affect the performance of the Contract
and bind upon the Contractor. The Contractor shall indemnify and
hold harmless the Employer from and against any and all liabilities,
damages, claims, fines, penalties and expenses of whatever nature
arising or resulting from the violation of such laws by the
Contractor or its personnel, including the Subcontractors and
their personnel, but without prejudice to GCC Sub Clause 10.1
hereof.

9.5 Any Plant, Material and Services that will be incorporated in or
be required for the Facilities and other supplies shall have their
origin as specified under GCC Sub Clause 3.13 (Country of Origin).

10. **Employer’s Responsibilities**

10.1 The Employer shall ensure the accuracy of all information and/
or data to be supplied by the Employer as described in Appendix
6 (Scope of Works and Supply by the Employer) to the Form of
Contract Agreement, except when otherwise expressly stated in
the Contract.

10.2 The Employer shall be responsible for acquiring and providing
legal and physical possession of the Site and access thereto,
and for providing possession of and access to all other areas
reasonably required for the proper execution of the Contract,
including all requisite rights of way, as specified in Appendix 6
(Scope of Works and Supply by the Employer) to the Form of
Contract Agreement. The Employer shall give full possession of
and accord all rights of access thereto on or before the date(s)
specified in Appendix 6.
10.3 The Employer shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located, which such authorities or undertakings require the Employer to obtain them in the Employer’s name, are necessary for the execution of the Contract (they include those required for the performance by both the Contractor and the Employer of their respective obligations under the Contract), including those specified in Appendix 6 (Scope of Works and Supply by the Employer) to the Form of Contract Agreement.

10.4 If requested by the Contractor, the Employer shall use its best endeavors to assist the Contractor in obtaining in a timely and expeditious manner all permits, approvals and/or licenses necessary for the execution of the Contract from all local, state or national government authorities or public service undertakings that such authorities or undertakings require the Contractor or Subcontractors or the personnel of the Contractor or Subcontractors, as the case may be, to obtain.

10.5 Unless otherwise specified in the Contract or agreed upon by the Employer and the Contractor, the Employer shall provide sufficient, properly qualified operating and maintenance personnel; shall supply and make available all raw materials, utilities, lubricants, chemicals, catalysts, other materials and facilities; and shall perform all work and services of whatsoever nature, to enable the Contractor to properly carry out Precommissioning, Commissioning and Guarantee Tests, all in accordance with the provisions of Appendix 6 (Scope of Works and Supply by the Employer) to the Form of Contract Agreement at or before the time specified in the program furnished by the Contractor under GCC Sub Clause 18.2 (Program of Performance) hereof and in the manner thereupon specified or as otherwise agreed upon by the Employer and the Contractor.

10.6 The Employer shall be responsible for the continued operation of the Facilities after Completion, in accordance with GCC Sub Clause 24.8, and shall be responsible for facilitating the Guarantee Test(s) for the Facilities, in accordance with GCC Sub Clause 25.2.

10.7 All costs and expenses involved in the performance of the obligations under this GCC Clause 10 shall be the responsibility of the Employer, save those to be incurred by the Contractor with respect to the performance of Guarantee Tests, in accordance with GCC Sub Clause 25.2.
C. Payment

11. Contract Price

11.1 The Contract Price shall be as specified in Article 2 (Contract Price and Terms of Payment) of the Form of Contract Agreement.

11.2 Subject to GCC Sub Clauses 9.2, 10.1 and 35 (Unforeseen Conditions) hereof, the Contractor shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.

12. Terms of Payment

12.1 The Contract Price shall be paid as specified in Appendix 1 (Terms and Procedures of Payment) to the Form of Contract Agreement. The procedures to be followed in making application for and processing payments shall be those outlined in the same Appendix-1.

12.2 No payment made by the Employer herein shall be deemed to constitute acceptance by the Employer of the Facilities or any part(s) thereof.

12.3 The currency or currencies in which payments are made to the Contractor under this Contract shall be specified in Appendix 1 (Terms and Procedures of Payment) to the Form of Contract Agreement, subject to the general principle that payments will be made in the currency or currencies in which the Contract Price has been stated in the Contractor’s bid.

13. Securities

13.1 Issuance of Securities

The Contractor shall provide the securities specified below in favor of the Employer at the times, and in the amount, manner and form specified below.

13.2 Advance Payment Security

13.2.1 The Contractor shall, within twenty-eight (28) days of the Notification of Contract Award, provide a security in an amount equal to the advance payment calculated in accordance with Appendix 1 (Terms and Procedures of Payment) to the Form of Contract Agreement, and in the same currency or currencies, with a initial validity of up to ninety (90) days beyond the date of Completion of Facilities covered under the package in accordance with GCC Clause 24.

13.2.2 The security shall be in the form of an Unconditional Bank Guarantee as per the proforma provided in Section VII (Forms and Procedures)- Form of Advance Payment
Security. The Advance payment Security shall be reduced prorata every three (3) months after First Running Account Bill/Stage Payment under the Contract based on the value of equipment/facilities received. The cumulative amount of reduction at any point of time shall not exceed seventy five percent (75%) of the advance corresponding to cumulative value of the Facilities supplied and received as per a certificate issued by the Project Manager and the balance of 25% shall be released on Completion of those Facilities. It should be clearly understood that reduction in the value of security for advance shall not in any way dilute the Contractor's responsibility and liabilities under the Contract including in respect of the Facilities for which the reduction in the value of security is allowed.

13.3 Performance Security

13.3.1 The Contractor shall, within twenty-eight (28) days of the notification of award, provide a security for the due performance of the Contract for ten percent (10%) of the Contract Price with an initial validity upto ninety (90) days beyond the Defects Liability Period. If the Employer enters into the Contract with the Assignee of a foreign Contractor pursuant to GCC Sub Clause 3.6, the said Assignee, in addition to the Contract Performance Security to be provided by the Contractor for ten percent (10%) of the value of all the Contracts shall provide within twenty eight (28) days of the Notification of Award, a separate Contract Performance Security equivalent to ten percent (10%) of the value of Contract entered into with the assignee, for the due performance of Contract with an initial validity upto Ninety (90) days beyond the Defects Liability Period.

13.3.2 The performance securities shall be denominated in the currency or currencies of the Contract, or in a freely convertible currency acceptable to the Employer, and shall be in the form of Bank Guarantee provided in Section VII(Forms and Procedures)- Form of Performance Security of the Bidding Documents.

13.3.3 If so stipulated in SCC, the security shall be reduced prorata to the Contract Price of a part of the Facilities for which a separate time for Completion is provided, twenty one (21) months after Completion of the Facilities or fifteen (15) months after Operational Acceptance of the Facilities (or the relevant part thereof), whichever occurs first; provided, however, that if the Defects Liability Period has been extended on any part of the Facilities pursuant to GCC Sub Clause 27.8 hereof, the Contractor shall issue an additional security in an amount proportionate
14. **Taxes and Duties**

14.1 Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all Taxes, Duties, Levies and Charges including Entry Tax, Service Tax, if applicable in connection with the Facilities in and outside of the country where the Site is located.

14.2 Notwithstanding GCC Sub Clause 14.1 above, the Employer shall bear and promptly pay all customs and import duties as well as other local taxes like, e.g., a value added tax (VAT), Entry Tax/Octroi (if applicable), imposed on the Plant and Equipments specified in Price Schedule No. 1 and that are to be incorporated into the Facilities by the law of the country where the Site is located. The Employer shall also bear and pay/reimburse to the Contractor Excise Duty, Sales Tax (but not surcharge in lieu of Sales Tax), Octroi (if applicable) and Entry Tax in respect of direct transactions between the Employer and the Contractor imposed on the Plant and Equipments and Mandatory Spares specified in Price Schedule No. 2 to be incorporated in the Facilities, by the law of country where the Site is located. For this purpose, the Ex-Works Price if stated in foreign currency and so incorporated in the Contract, shall be converted to Indian Rupees as per the TT Buying Exchange Rates established by State Bank of India prevailing on the date of actual despatch ex-Indian Contractor's works.

Employer will issue the requisite sales tax declaration forms in order to get the benefit of any concession in the rate of sales tax. Further, in case of all components, equipments and materials identified by the Contractor and NTPC to be despatched directly from the sub-vendor's work to NTPC site in a State different from the State wherein sub-vendor's works are located, the Contractor shall effect sale in transit. For effecting the sale in transit, the Contractor shall ensure that his sub-vendors raise invoices in the Contractor's name (and not in the name of NTPC) and obtains GR/LR/RR in the name of Contractor (and not in the name of NTPC). The Contractor shall further ensure that he endorses the GR/LR/RR in the name of NTPC during transit of the equipments before the delivery of equipments is taken by NTPC.
14.3 If any tax exemptions, reductions, allowances or privileges may be available to the Contractor in the country where the Site is located, the Employer shall use its best endeavors to enable the Contractor to benefit from any such tax savings to the maximum allowable extent.

All taxes, duties & levies on works contract, if any, shall be to the Contractor's account and no separate claim in this regard will be entertained by the Employer.

14.4 For the purpose of the Contract, it is agreed that the Contract Price specified in Article 2 (Contract Price and Terms of Payment) of the Form of Contract Agreement is based on the taxes, duties, levies and charges prevailing at the date seven (7) days prior to the date of bid submission in the country where the Site is located (hereinafter called “Tax” in this GCC Sub Clause 14.4). If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of Contract, which was or will be assessed on the Contractor in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction therefrom, as the case may be, in accordance with GCC Clause 36 (Change in Laws and Regulations) hereof. However, these adjustments would be restricted to direct transactions between the Employer and the Contractor and not on procurement of raw materials, intermediary components, etc. by the Contractor and shall also not be applicable on the bought out items despatched directly from sub-vendor's works to site. Further, no adjustment of the Contract Price and/or Payment/reimbursement of taxes, duties or levies shall be made on account of variation in/or withdrawal of benefits of concessional rate of custom duty, if applicable for coal mining project.

D. Intellectual Property

15. Copyright

15.1 The copyright in all drawings, documents and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or, if they are furnished to the Employer directly or through the Contractor by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party. The Employer shall however be free to reproduce all drawings, documents and other material furnished to the Employer for the purpose of the contract including, if required, for operation and maintenance.

16. Confidential Information

16.1 The Employer and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto,
divulge to any third party any documents, data or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract. Notwithstanding the above, the Contractor may furnish to its Subcontractor(s) such documents, data and other information it receives from the Employer to the extent required for the Subcontractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this GCC Clause 16.

16.2 The Employer shall not use such documents, data and other information received from the Contractor for any purpose other than the operation and maintenance of the Facilities. Similarly, the Contractor shall not use such documents, data and other information received from the Employer for any purpose other than the design, procurement of Plant and Equipments, construction or such other work and services as are required for the performance of the Contract.

16.3 The obligation of a party under GCC Sub Clauses 16.1 and 16.2 above, however, shall not apply to that information which

(a) now or hereafter enters the public domain through no fault of that party

(b) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party hereto

(c) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

16.4 The above provisions of this GCC Clause 16 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Facilities or any part thereof.

16.5 The provisions of this GCC Clause 16 shall survive termination, for whatever reason, of the Contract.

E. Work Execution

17. Representatives 17.1 Project Manager

If the Project Manager is not named in the Contract, then within fourteen (14) days of the Effective Date, the Employer shall appoint and notify the Contractor in writing of the name of the Project Manager. The Employer may from time to time appoint some
other person as the Project Manager in place of the person previously so appointed, and shall give a notice of the name of such other person to the Contractor without delay. The Employer shall take reasonable care to see that no such appointment is made at such a time or in such a manner as to impede the progress of work on the Facilities. The Project Manager shall represent and act for the Employer at all times during the currency of the Contract. All notices, instructions, orders, certificates, approvals and all other communications under the Contract shall be given by the Project Manager, except as herein otherwise provided.

All notices, instructions, information and other communications given by the Contractor to the Employer under the Contract shall be given to the Project Manager, except as herein otherwise provided.

17.2 Contractor’s Representative & Construction Manager

17.2.1 If the Contractor’s Representative is not named in the Contract, then within fourteen (14) days of the Effective Date, the Contractor shall appoint the Contractor’s Representative and shall request the Employer in writing to approve the person so appointed. If the Employer makes no objection to the appointment within fourteen (14) days, the Contractor’s Representative shall be deemed to have been approved. If the Employer objects to the appointment within fourteen (14) days giving the reason therefor, then the Contractor shall appoint a replacement within fourteen (14) days of such objection, and the foregoing provisions of this GCC Sub Clause 17.2.1 shall apply thereto.

17.2.2 The Contractor’s Representative shall represent and act for the Contractor at all times during the currency of the Contract and shall give to the Project Manager all the Contractor’s notices, instructions, information and all other communications under the Contract.

All notices, instructions, information and all other communications given by the Employer or the Project Manager to the Contractor under the Contract shall be given to the Contractor’s Representative or, in its absence, its deputy, except as herein otherwise provided.

The Contractor shall not revoke the appointment of the Contractor’s Representative without the Employer’s prior written consent, which shall not be unreasonably withheld. If the Employer consents thereto, the Contractor shall appoint some other person as the Contractor’s Representative, pursuant to the procedure set out in GCC Sub Clause 17.2.1.
17.2.3 The Contractor’s Representative may, subject to the approval of the Employer (which shall not be unreasonably withheld), at any time delegate to any person any of the powers, functions and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Contractor’s Representative, and shall specify the powers, functions and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until a copy thereof has been delivered to the Employer and the Project Manager.

Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with this GCC Sub Clause 17.2.3 shall be deemed to be an act or exercise by the Contractor’s Representative.

17.2.3.1 Notwithstanding anything stated in GCC Sub Clause 17.1 and 17.2.1 above, for the purpose of execution of contract, the Employer and the Contractor shall finalise and agree to a Contract Co-ordination Procedure and all the communication under the Contract shall be in accordance with such Contract Co-ordination Procedure.

17.2.4 From the commencement of installation of the Facilities at the Site until Operational Acceptance, the Contractor’s Representative shall appoint a suitable person as the construction manager (hereinafter referred to as “the Construction Manager”). The Construction Manager shall supervise all work done at the Site by the Contractor and shall be present at the Site throughout normal working hours except when on leave, sick or absent for reasons connected with the proper performance of the Contract. Whenever the Construction Manager is absent from the Site, a suitable person shall be appointed to act as his or her deputy.

17.2.5 The Employer may by notice to the Contractor object to any representative or person employed by the Contractor in the execution of the Contract who, in the reasonable opinion of the Employer, may behave inappropriately, may be incompetent or negligent, or may commit a serious breach of the Site regulations provided under GCC Sub Clause 22.3. The Employer shall provide evidence of the same, whereupon the Contractor shall remove such person from the Facilities.

17.2.6 If any representative or person employed by the Contractor is removed in accordance with GCC Sub Clause 17.2.5, the Contractor shall, where required, promptly appoint a replacement.

18. **Work Program**

18.1 **Contractor’s Organization**
The Contractor shall supply to the Employer and the Project

| PAKRI BARWADIH COAL MINING PROJECT BID DOCUMENT NO. CS-7010-155-2 | COAL HANDLING PLANT PACKAGE SECTION - IV (GCC) | PAGE 25 OF 71 |
Manager a chart showing the proposed organization to be established by the Contractor for carrying out work on the Facilities. The chart shall include the identities of the key personnel together with the curricula vitae of such key personnel to be employed within twenty one (21) days of the Effective Date. The Contractor shall promptly inform the Employer and the Project Manager in writing of any revision or alteration of such an organization chart.

18.2 Program of Performance
Within twentyeight (28) days after the date of Notification of Award of Contract, the Contractor shall prepare and submit to the Project Manager a detailed Program of Performance of the Contract, made in the form specified in the SCC and showing the sequence in which it proposes to design, supply, transport, assemble, install and precommission the Facilities, as well as the date by which the Contractor reasonably requires that the Employer shall have fulfilled its obligations under the Contract so as to enable the Contractor to execute the Contract in accordance with the program and to achieve Completion and Acceptance of the Facilities in accordance with the Contract. The program so submitted by the Contractor shall accord with the Time Schedule included in Appendix 4 (Time Schedule) to the Form of Contract Agreement and any other dates and periods specified in the Contract. The Contractor shall update and revise the program as and when appropriate or when required by the Project Manager, but without modification in the Times for Completion given in the SCC and any extension granted in accordance with GCC Clause 40, and shall submit all such revisions to the Project Manager.

18.3 Progress Report
The Contractor shall monitor progress of all the activities specified in the program referred to in GCC Sub Clause 18.2 (Program of Performance) above, and submit a Progress Report to the Project Manager every month.

The Progress Report shall be in a form acceptable to the Project Manager and shall indicate: (a) percentage completion achieved compared with the planned percentage completion for each activity; and (b) where any activity is behind the program, giving comments and likely consequences and stating the corrective action being taken.

18.4 Progress of Performance
If at any time the Contractor’s actual progress falls behind the program referred to in GCC Sub Clause 18.2 (Program of Performance), or it becomes apparent that it will so fall behind, the Contractor shall, at the request of the Employer or the Project Manager, prepare and submit to the Project Manager a revised program, taking into account the prevailing circumstances, and
shall notify the Project Manager of the steps being taken to expedite progress so as to attain Completion of the Facilities within the Time for Completion under GCC Sub Clause 8.2 (Time for Commencement and Completion), any extension thereof entitled under GCC Sub Clause 40.1 (Extension of Time for Completion), or any extended period as may otherwise be agreed upon between the Employer and the Contractor.

18.5 Work Procedures

The Contract shall be executed in accordance with the Contract Documents and the procedures given in the section on Forms and Procedures of the Contract Documents.

If agreed between the Employer and the Contractor, the Contractor may execute the Contract in accordance with its own standard project execution plans and procedures to the extent that they do not conflict with the provisions contained in the Contract.

19. Subcontracting

19.1 Appendix 5 (List of Approved Subcontractors) to the Contract Agreement specifies major items of supply or services and a list of approved Subcontractors against each item, including vendors. Insofar as no Subcontractors are listed against any such item, the Contractor shall prepare a list of Subcontractors for such item for inclusion in such list. The Contractor may from time to time propose any addition to or deletion from any such list. The Contractor shall submit any such list or any modification thereto to the Employer for its approval in sufficient time so as not to impede the progress of work on the Facilities. Such approval by the Employer for any of the Subcontractors shall not relieve the Contractor from any of its obligations, duties or responsibilities under the Contract.

19.2 The Contractor shall select and employ its Subcontractors for such major items from those listed in the lists referred to in GCC Sub Clause 19.1.

19.3 For items or parts of the Facilities not specified in Appendix 5 (List of Approved Subcontractors) to the Contract Agreement, the Contractor may employ such Subcontractors as it may select, at its discretion.

20. Design and Engineering

20.1 Specifications and Drawings

20.1.1 The Contractor shall execute the basic and detailed design and the engineering work in compliance with the provisions of the Contract, or where not so specified, in accordance with good engineering practice.
The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications, drawings and other technical documents that it has prepared, whether such specifications, drawings and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors or omissions are not because of inaccurate information furnished in writing to the Contractor by or on behalf of the Employer.

20.1.2 The Contractor shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designated by or on behalf of the Employer, by giving a notice of such disclaimer to the Project Manager.

20.2 Codes and Standards
Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date twenty eight (28) days prior to date of bid submission shall apply unless otherwise specified. During Contract execution, any changes in such codes and standards shall be applied after approval by the Employer and shall be treated in accordance with GCC Clause 39 (Changes Originating from Contractor).

20.3 Approval/Review of Technical Documents by Project Manager
20.3.1 The Contractor shall prepare (or cause its Subcontractors to prepare) and furnish to the Project Manager the documents listed in Appendix 7 (List of Documents for Approval or Review) to the Form of Contract Agreement for its approval or review as specified and as in accordance with the requirements of GCC Sub Clause 18.2 (Program of Performance).

Any part of the Facilities covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager’s approval thereof.

GCC Sub Clauses 20.3.2 through 20.3.7 shall apply to those documents requiring the Project Manager’s approval, but not to those furnished to the Project Manager for its review only.

20.3.2 Within twenty one (21) days after receipt by the Project Manager of any document requiring the Project Manager’s approval in accordance with GCC Sub Clause 20.3.1, the
20.3.3 The Project Manager shall not disapprove any document, except on the grounds that the document does not comply with some specified provision of the Contract or that it is contrary to good engineering practice.

20.3.4 If the Project Manager disapproves the document, the Contractor shall modify the document and resubmit it for the Project Manager’s approval in accordance with GCC Sub Clause 20.3.2. If the Project Manager approves the document subject to modification(s), the Contractor shall make the required modification(s), and upon resubmission with the required modifications the document shall be deemed to have been approved.

The procedure for submission of the documents by the Contractor and their approval by the Project Manager shall be discussed and finalised with the Contractor.

20.3.5 If any dispute or difference occurs between the Employer and the Contractor in connection with or arising out of the disapproval by the Project Manager of any document and/or any modification(s) thereto that cannot be settled between the parties within a reasonable period, then such dispute or difference may be referred to an Adjudicator for determination in accordance with GCC Sub Clause 6.1 (Adjudicator) hereof. If such dispute or difference is referred to an Adjudicator, the Project Manager shall give instructions as to whether and if so, how, performance of the Contract is to proceed. The Contractor shall proceed with the Contract in accordance with the Project Manager’s instructions, provided that if the Adjudicator upholds the Contractor’s view on the dispute and if the Employer has not given notice under GCC Sub Clause 6.1.2 hereof, then the Contractor shall be reimbursed by the Employer for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as the Adjudicator shall decide, and the Time for Completion shall be extended accordingly.

20.3.6 The Project Manager’s approval, with or without modification of the document furnished by the Contractor, shall not relieve the Contractor of any responsibility or
liability imposed upon it by any provisions of the Contract except to the extent that any subsequent failure results from modifications required by the Project Manager.

20.3.7 The Contractor shall not depart from any approved document unless the Contractor has first submitted to the Project Manager an amended document and obtained the Project Manager’s approval thereof, pursuant to the provisions of this GCC Sub Clause 20.3.

If the Project Manager requests any change in any already approved document and/or in any document based thereon, the provisions of GCC Clause 39 (Change in the Facilities) shall apply to such request.

21. Procurement

21.1 Plant and Equipment

Subject to GCC Sub Clause 14.2, the Contractor shall manufacture or procure and transport all the Plant and Equipments in an expeditious and orderly manner to the Site.

21.2 Employer-Supplied Plant, Equipments, and Materials

If Appendix 6 (Scope of Works and Supply by the Employer) to the Form of Contract Agreement provides that the Employer shall furnish any specific items of machinery, equipments or materials to the Contractor, the following provisions shall apply:

21.2.1 The Employer shall, at its own risk and expense, transport each item to the place on or near the Site as agreed upon by the parties and make such item available to the Contractor at the time specified in the program furnished by the Contractor, pursuant to GCC Sub Clause 18.2 (Program of Performance), unless otherwise mutually agreed.

21.2.2 Upon receipt of such item, the Contractor shall inspect the same visually and notify the Project Manager of any detected shortage, defect or default. The Employer shall immediately remedy any shortage, defect or default, or the Contractor shall, if practicable and possible, at the request of the Employer, remedy such shortage, defect or default at the Employer’s cost and expense. After inspection, such item shall fall under the care, custody and control of the Contractor. The provision of this GCC Sub Clause 21.2.2 shall apply to any item supplied to remedy any such shortage or default or to substitute for any defective item, or shall apply to defective items that have been repaired.
21.2.3 The foregoing responsibilities of the Contractor and its obligations of care, custody and control shall not relieve the Employer of liability for any undetected shortage, defect or default, nor place the Contractor under any liability for any such shortage, defect or default whether under GCC Clause 27 (Defects Liability) or under any other provision of Contract.

21.3 **Transportation**

21.3.1 The Contractor shall at its own risk and expense transport all the Plant and Equipments and the Contractor’s Equipments to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances.

21.3.2 Unless otherwise provided in the Contract, the Contractor shall be entitled to select any safe mode of transport operated by any person to carry the Plant and Equipments and the Contractor’s Equipment.

21.3.3 Upon dispatch of each shipment of the Plant and Equipments and the Contractor’s Equipments, the Contractor shall notify the Employer by telex, cable, telefax, facsimile or Electronic Data Interchange (EDI) of the description of the Plant and Equipments and of the Contractor’s Equipments, the point and means of dispatch, and the estimated time and point of arrival in the country where the Site is located, if applicable, and at the Site. The Contractor shall furnish the Employer with relevant shipping documents to be agreed upon between the parties.

21.3.4 The Contractor shall be responsible for obtaining, if necessary, approvals from the authorities for transportation of the Plant and Equipments and the Contractor’s Equipments to the Site. The Employer shall use its best endeavors in a timely and expeditious manner to assist the Contractor in obtaining such approvals, if requested by the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any claim for damage to roads, bridges or any other traffic facilities that may be caused by the transport of the Plant and Equipments and the Contractor’s Equipments to the Site.

21.4 **Customs Clearance**

The Contractor shall, at its own expense, handle all imported Plant and Equipments and spares and Contractor’s Equipments at the point(s) of import and shall handle any formalities for customs clearance, subject to the Employer’s obligations under
GCC Sub Clause 14.2, provided that if applicable laws or regulations require any application or act to be made by or in the name of the Employer, the Employer shall take all necessary steps to comply with such laws or regulations. In the event of delays in customs clearance due to fault of the Employer, the Contractor shall be entitled to an Extension in the Time for Completion, pursuant to GCC Clause 40.

22. Installation 22.1 Setting Out/Supervision/Labor

22.1.1 Bench Mark: The Contractor shall be responsible for the true and proper setting-out of the Facilities in relation to bench marks, reference marks and lines provided to it in writing by or on behalf of the Employer.

If, at any time during the progress of installation of the Facilities, any error shall appear in the position, level or alignment of the Facilities, the Contractor shall forthwith notify the Project Manager of such error and, at its own expense, immediately rectify such error to the reasonable satisfaction of the Project Manager. If such error is based on incorrect data provided in writing by or on behalf of the Employer, the expense of rectifying the same shall be borne by the Employer.

22.1.2 Contractor’s Supervision: The Contractor shall give or provide all necessary superintendence during the installation of the Facilities, and the Construction Manager or its deputy shall be constantly on the Site to provide full time superintendence of the installation. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

22.1.3 Labour:

(a) The Contractor shall provide and employ on the Site in the installation of the Facilities such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged to use local labour that has the necessary skills.

(b) Unless otherwise provided in the Contract, the Contractor shall be responsible for the recruitment, transportation, accommodation and catering of all labour, local or expatriate, required for the execution of the Contract and for all payments in connection therewith.
(c) The Contractor shall be responsible for obtaining all necessary permit(s) and/or visa(s) from the appropriate authorities for the entry of all labour and personnel to be employed on the Site into the country where the Site is located.

(d) The Contractor shall at its own expense provide the means of repatriation to all of its and its Subcontractor's personnel employed on the Contract at the Site to their various home countries. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.

(e) The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst its employees and the labour of its Subcontractors.

(f) The Contractor shall, in all dealings with its labour and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of labor.

22.2 Contractor’s Equipments

22.2.1 All Contractor’s Equipments brought by the Contractor onto the Site shall be deemed to be intended to be used exclusively for the execution of the Contract. The Contractor shall not remove the same from the Site without the Project Manager’s consent that such Contractor’s Equipments are no longer required for the execution of the Contract.

22.2.2 Unless otherwise specified in the Contract, upon completion of the Facilities, the Contractor shall remove from the Site all Equipments brought by the Contractor onto the Site and any surplus materials remaining thereon.

22.2.3 The Employer will, if requested, use its best endeavors to assist the Contractor in obtaining any local, state or
national government permission required by the Contractor for the export of the Contractor’s Equipments imported by the Contractor for use in the execution of the Contract that is no longer required for the execution of the Contract.

22.3 Site Regulations and Safety
The Employer and the Contractor shall establish Site regulations setting out the rules to be observed in the execution of the Contract at the Site and shall comply therewith. The Contractor shall prepare and submit to the Employer, with a copy to the Project Manager, proposed Site regulations for the Employer’s approval, which approval shall not be unreasonably withheld.

Such Site regulations shall include, but shall not be limited to, rules in respect of security, safety of the Facilities, gate control, sanitation, medical care, and fire prevention.

22.4 Opportunities for Other Contractors
22.4.1 The Contractor shall, upon written request from the Employer or the Project Manager, give all reasonable opportunities for carrying out the work to any other contractors employed by the Employer on or near the Site.

22.4.2 If the Contractor, upon written request from the Employer or the Project Manager, makes available to other contractors any roads or ways the maintenance for which the Contractor is responsible, permits the use by such other contractors of the Contractor’s Equipments, or provides any other service of whatsoever nature for such other contractors, the Employer shall fully compensate the Contractor for any loss or damage caused or occasioned by such other contractors in respect of any such use or service, and shall pay to the Contractor reasonable remuneration for the use of such equipments or the provision of such services.

22.4.3 The Contractor shall also so arrange to perform its work as to minimize, to the extent possible, interference with the work of other contractors. The Project Manager shall determine the resolution of any difference or conflict that may arise between the Contractor and other contractors and the workers of the Employer in regard to their work.

22.4.4 The Contractor shall notify the Project Manager promptly of any defects in the other Contractors’ work that come to its notice, and that could affect the Contractor’s work. The Project Manager shall determine the corrective measures, if any, required to rectify the situation after inspection of the Facilities. Decisions made by the Project Manager shall be binding on the Contractor.
### 22.5 Emergency Work
If, by reason of an emergency arising in connection with and during the execution of the Contract, any protective or remedial work is necessary as a matter of urgency to prevent damage to the Facilities, the Contractor shall immediately carry out such work.

If the Contractor is unable or unwilling to do such work immediately, the Employer may do or cause such work to be done as the Employer may determine is necessary in order to prevent damage to the Facilities. In such event the Employer shall, as soon as practicable after the occurrence of any such emergency, notify the Contractor in writing of such emergency, the work done and the reasons therefor. If the work done or caused to be done by the Employer is work that the Contractor was liable to do at its own expense under the Contract, the reasonable costs incurred by the Employer in connection therewith shall be paid by the Contractor to the Employer. Otherwise, the cost of such remedial work shall be borne by the Employer.

### 22.6 Site Clearance
22.6.1 Site Clearance in Course of Performance: In the course of carrying out the Contract, the Contractor shall keep the Site reasonably free from all unnecessary obstruction, store or remove any surplus materials, clear away any wreckage, rubbish or temporary works from the Site, and remove any Contractor's Equipments no longer required for execution of the Contract.

22.6.2 Clearance of Site after Completion: After Completion of all parts of the Facilities, the Contractor shall clear away and remove all wreckage, rubbish and debris of any kind from the Site, and shall leave the Site and Facilities clean and safe.

### 22.7 Watching and Lighting
The Contractor shall provide and maintain at its own expense all lighting, fencing, and watching when and where necessary for the proper execution and the protection of the Facilities, or for the safety of the owners and occupiers of adjacent property and for the safety of the public.

### 22.8 Work at Night and on Holidays
22.8.1 Unless otherwise provided in the Contract, no work shall be carried out during the night and on public holidays of the country where the Site is located without prior written consent of the Employer, except where work is necessary or required to ensure safety of the Facilities or for the
22.8.2 Notwithstanding GCC Sub Clauses 22.8.1 or 22.1.3, if and when the Contractor considers it necessary to carry out work at night or on public holidays so as to meet the Time for Completion and requests the Employer's consent thereto, the Employer shall not unreasonably withhold such consent.

23. **Testing and Inspection**

23.1 The Contractor shall at its own expense carry out at the place of manufacture and/or on the Site all such tests and/or inspections of the Plant and Equipments and any part of the Facilities as are specified in the Contract.

23.2 The Employer and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection, provided that the Employer shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

23.3 Whenever the Contractor is ready to carry out any such test and/or inspection, the Contractor shall give a reasonable advance notice of such test and/or inspection and of the place and time thereof to the Project Manager. The Contractor shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Employer and the Project Manager (or their designated representatives) to attend the test and/or inspection.

23.4 The Contractor shall provide the Project Manager with a certified report of the results of any such test and/or inspection. If the Employer or Project Manager (or their designated representatives) fails to attend the test and/or inspection, or if it is agreed between the parties that such persons shall not do so, then the Contractor may proceed with the test and/or inspection in the absence of such persons, and may provide the Project Manager with a certified report of the results thereof.

23.5 The Project Manager may require the Contractor to carry out any test and/or inspection not required by the Contract, provided that the Contractor’s reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of work on the Facilities and/or the Contractor’s
performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Completion and the other obligations so affected.

23.6 If any Plant and Equipment or any part of the Facilities fails to pass any test and/or inspection, the Contractor shall either rectify or replace such Plant and Equipment or part of the Facilities and shall repeat the test and/or inspection upon giving a notice under GCC Sub Clause 23.3.

23.7 If any dispute or difference of opinion shall arise between the parties in connection with or arising out of the test and/or inspection of the Plant and Equipments or part of the Facilities that cannot be settled between the parties within a reasonable period of time, it may be referred to the Adjudicator for determination in accordance with GCC Sub Clause 6.1 (Adjudicator).

23.8 The Contractor shall afford the Employer and the Project Manager, at the Employer’s expense, access at any reasonable time to any place where the Plant and Equipments are being manufactured or the Facilities are being installed, in order to inspect the progress and the manner of manufacture or installation, provided that the Project Manager shall give the Contractor a reasonable prior notice.

23.9 The Contractor agrees that neither the execution of a test and/or inspection of Plant and Equipments or any part of the Facilities, nor the attendance by the Employer or the Project Manager, nor the issue of any test certificate pursuant to GCC Sub Clause 23.4, shall release the Contractor from any other responsibilities under the Contract.

23.10 No part of the Facilities or foundations shall be covered up on the Site without the Contractor carrying out any test and/or inspection required under the Contract. The Contractor shall give a reasonable notice to the Project Manager whenever any such part of the Facilities or foundations are ready or about to be ready for test and/or inspection; such test and/or inspection and notice thereof shall be subject to the requirements of the Contract.

23.11 The Contractor shall uncover any part of the Facilities or foundations, or shall make openings in or through the same as the Project Manager may from time to time require at the Site, and shall reinstate and make good such part or parts.

If any part of the Facilities or foundations have been covered up at the Site after compliance with the requirement of GCC Sub Clause 23.10 and are found to be executed in accordance with
24. **Completion of the Facilities**

24.1 As soon as the Facilities or any part thereof has, in the opinion of the Contractor, been completed operationally and structurally and put in a tight and clean condition as specified in the Technical Specifications, excluding minor items not materially affecting the operation or safety of the Facilities, the Contractor shall so notify the Employer in writing.

24.2 Within seven (7) days after receipt of the notice from the Contractor under GCC Sub Clause 24.1, the Employer shall supply the operating and maintenance personnel specified in Appendix 6 (Scope of Works and Supply by the Employer) to the Form of Contract Agreement for Precommissioning of the Facilities or any part thereof.

Unless otherwise specified in the Technical Specifications, the Employer shall also provide, within the said seven (7) day period, the raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters required for Precommissioning of the Facilities or any part thereof.

24.3 As soon as reasonably practicable after the operating and maintenance personnel have been supplied by the Employer and the raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters, if so specified in Appendix 6 (Scope of Works and Supply by the Employer)/ Technical Specifications, have been provided by the Employer in accordance with GCC Sub Clause 24.2, the Contractor shall commence Precommissioning of the Facilities or the relevant part thereof in preparation for Commissioning.

24.4 As soon as all works in respect of Precommissioning are completed and, in the opinion of the Contractor, the Facilities or any part thereof is ready for Commissioning, the Contractor shall commence Commissioning as per procedures stipulated in Technical Specifications, and as soon as Commissioning is satisfactorily completed, the Contractor shall so notify the Project Manager in writing.

24.5 The Project Manager shall, within fourteen (14) days after receipt of the Contractor’s notice under GCC Sub Clause 24.4, either issue a Completion Certificate in the form specified in the Forms and Procedures in Section-VII of the Bidding Documents, stating
that the Facilities or that part thereof have reached Completion as at the date of the Contractor’s notice under GCC Sub Clause 24.4, or notify the Contractor in writing of any defects and/or deficiencies.

If the Project Manager notifies the Contractor of any defects and/or deficiencies, the Contractor shall then correct such defects and/or deficiencies, and shall repeat the procedure described in GCC Sub Clause 24.4.

If the Project Manager is satisfied that the Facilities or that part thereof have reached Completion, the Project Manager shall, within seven (7) days after receipt of the Contractor’s repeated notice, issue a Completion Certificate stating that the Facilities or that part thereof have reached Completion as at the date of the Contractor’s repeated notice.

If the Project Manager is not so satisfied, then it shall notify the Contractor in writing of any defects and/or deficiencies within seven (7) days after receipt of the Contractor’s repeated notice, and the above procedure shall be repeated.

24.6 If the Project Manager fails to issue the Completion Certificate and fails to inform the Contractor of any defects and/or deficiencies within fourteen (14) days after receipt of the Contractor’s notice under GCC Sub Clause 24.4 or within seven (7) days after receipt of the Contractor’s repeated notice under GCC Sub Clause 24.5, or if the Employer makes use of the Facilities or part thereof, then the Facilities or that part thereof shall be deemed to have reached Completion as of the date of the Contractor’s notice or repeated notice, or as of the Employer’s use of the Facilities, as the case may be.

24.7 As soon as possible after Completion, the Contractor shall complete all outstanding minor items so that the Facilities are fully in accordance with the requirements of the Contract, failing which the Employer will undertake such completion and deduct the costs thereof from any monies owing to the Contractor.

24.8 Upon Completion, the Employer shall be responsible for the care and custody of the Facilities or the relevant part thereof, together with the risk of loss or damage thereto, and shall thereafter take over the Facilities or the relevant part thereof.

25. Commissioning

25.1 Commissioning

25.1.1 Commissioning of the Facilities or any part thereof shall be completed by the Contractor as per procedures detailed in the Technical Specifications.
The Employer shall, unless otherwise specified in Appendix 6 (Scope of Works and Supply by the Employer)/ Technical Specifications, supply the operating and maintenance personnel and all raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters required for Commissioning.

25.2 Guarantee Tests
25.2.1 The Guarantee Tests (and repeats thereof) shall be conducted by the Contractor after Commissioning of the Facilities or the relevant part thereof to ascertain whether the Facilities or the relevant part can attain the Functional Guarantees specified in the Contract Documents. The Contractor’s and Project Manager’s advisory personnel shall attend the Guarantee Test. The Employer shall promptly provide the Contractor with such information as the Contractor may reasonably require in relation to the conduct and results of the Guarantee Tests (and any repeats thereof).

25.2.2 If for reasons not attributable to the Contractor, the Guarantee Tests of the Facilities or the relevant part thereof cannot be successfully completed within the period from the date of Completion, specified in the SCC or any other period agreed upon by the Employer and the Contractor, the Contractor shall be deemed to have fulfilled its obligations with respect to the Functional Guarantees, and GCC Sub Clauses 28.2 and 28.3 shall not apply.

25.3 Operational Acceptance
25.3.1 Subject to GCC Sub Clause 25.4 (Partial Acceptance) below, Operational Acceptance shall occur in respect of the Facilities or any part thereof when

(a) the Guarantee Tests have been successfully completed and the Functional Guarantees are met; or

(b) the Guarantee Tests have not been successfully completed or has not been carried out for reasons not attributable to the Contractor within the period from the date of Completion specified in the SCC or any other agreed upon period as specified in GCC Sub Clause 25.2.2 above, but successful Completion of the Facilities has been achieved; or

(c) the Contractor has paid the liquidated damages specified in GCC Sub Clause 28.3 hereof; and
(d) any minor items mentioned in GCC Sub Clause 24.7 hereof relevant to the Facilities or that part thereof have been completed.

25.3.2 At any time after any of the events set out in GCC Sub Clause 25.3.1 have occurred, the Contractor may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate in the form provided in the Bidding Documents or in another form acceptable to the Employer in respect of the Facilities or the part thereof specified in such notice as at the date of such notice.

25.3.3 The Project Manager shall, after consultation with the Employer, and within forty five (45) days after receipt of the Contractor’s notice, issue an Operational Acceptance Certificate.

25.3.4 If within forty five (45) days after receipt of the Contractor’s notice, the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Contractor in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the Facilities or the relevant part thereof shall be deemed to have been accepted as at the date of the Contractor’s said notice.

25.4 Partial Acceptance

25.4.1 If the Contract specifies that Completion, Commissioning and Guarantee Tests shall be carried out in respect of parts of the Facilities, the provisions relating to Completion and Commissioning including the Guarantee Tests shall apply to each such part of the Facilities individually, and the Operational Acceptance Certificate shall be issued accordingly for each such part of the Facilities.

25.4.2 If a part of the Facilities comprises facilities such as buildings, for which no Commissioning or Guarantee Tests are required, then the Project Manager shall issue the Operational Acceptance Certificate for such facility when it attains Completion, provided that the Contractor shall thereafter complete any outstanding minor items that are listed in the Operational Acceptance Certificate.

F. Guarantees and Liabilities

26. Completion Time Guarantee

26.1 The Contractor guarantees that it shall attain Completion of the Facilities (or a part for which a separate time for completion is specified in the SCC) within the Time for Completion specified
in the SCC pursuant to GCC Sub Clause 8.2, or within such extended time to which the Contractor shall be entitled under GCC Clause 40 (Extension of Time for Completion) hereof.

26.2 If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GCC Clause 40 (Extension of Time for Completion), the Contractor shall pay to the Employer liquidated damages in the amount computed at the rates specified in the SCC. The aggregate amount of such liquidated damages shall in no event exceed the amount specified as “Maximum” in the SCC. Once the “Maximum” is reached, the Employer may consider termination of the Contract, pursuant to GCC Sub Clause 42.2.2.

Such payment shall completely satisfy the Contractor’s obligation to attain Completion of the Facilities or the relevant part thereof within the Time for Completion or any extension thereof under GCC Clause 40 (Extension of Time for Completion). The Contractor shall have no further liability whatsoever to the Employer in respect thereof.

However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Facilities or from any other obligations and liabilities of the Contractor under the Contract.

Save for liquidated damages payable under this GCC Sub Clause 26.2, the failure by the Contractor to attain any milestone or other act, matter or thing by any date specified in Appendix 4 (Time Schedule) to the Form of Contract Agreement and/or other program of work prepared pursuant to GCC Clause 18 (Program of Performance) shall not render the Contractor liable for any loss or damage thereby suffered by the Employer.

26.3 No bonus will be given for earlier completion of the facilities or part there of

27. **Defects Liability**

27.1 The Contractor warrants that the Facilities or any part thereof shall be free from defects in the design, engineering, materials and workmanship of the Plant and Equipments supplied and of the work executed.

27.2 The Defects Liability Period shall be eighteen (18) months from the date of Completion of the Facilities (or any part thereof) or twelve (12) months from the date of Operational Acceptance of the Facilities (or any part thereof), whichever first occurs, unless specified otherwise in the SCC.
GENERAL CONDITION OF CONTRACT (GCC)

If during the Defects Liability Period any defect should be found in the design, engineering, materials and workmanship of the Plant and Equipments supplied or of the work executed by the Contractor, the Contractor shall promptly, in consultation and agreement with the Employer regarding appropriate remediating of the defects, and at its cost, repair, replace or otherwise make good (as the Contractor shall, at its discretion, determine) such defect as well as any damage to the Facilities caused by such defect. The Contractor shall not be responsible for the repair, replacement or making good of any defect or of any damage to the Facilities arising out of or resulting from any of the following causes:

(a) improper operation or maintenance of the Facilities by the Employer

(b) operation of the Facilities outside specifications provided in the Contract

(c) normal wear and tear.

27.3 The Contractor's obligations under this GCC Clause 27 shall not apply to

(a) any materials that are supplied by the Employer under GCC Sub Clause 21.2 (Employer-Supplied Plant, Equipments and Materials), are normally consumed in operation, or have a normal life shorter than the Defects Liability Period stated herein

(b) any designs, specifications or other data designed, supplied or specified by or on behalf of the Employer or any matters for which the Contractor has disclaimed responsibility herein

(c) any other materials supplied or any other work executed by or on behalf of the Employer, except for the work executed by the Employer under GCC Sub Clause 27.7.

27.4 The Employer shall give the Contractor a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. The Employer shall afford all reasonable opportunity for the Contractor to inspect any such defect.

27.5 The Employer shall afford the Contractor all necessary access to the Facilities and the Site to enable the Contractor to perform its obligations under this GCC Clause 27.
The Contractor may, with the consent of the Employer, remove from the Site any Plant and Equipments or any part of the Facilities that are defective if the nature of the defect, and/or any damage to the Facilities caused by the defect, is such that repairs cannot be expeditiously carried out at the Site.

27.6 If the repair, replacement or making good is of such a character that it may affect the efficiency of the Facilities or any part thereof, the Employer may give to the Contractor a notice requiring that tests of the defective part of the Facilities shall be made by the Contractor immediately upon completion of such remedial work, whereupon the Contractor shall carry out such tests.

If such part fails the tests, the Contractor shall carry out further repair, replacement or making good (as the case may be) until that part of the Facilities passes such tests. The tests in character shall in any case be not less than what has already been agreed by the Employer and the Contractor for the original equipment/part of the Facilities.

27.7 If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within a reasonable time (which shall in no event be considered to be less than fifteen (15) days), the Employer may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor or may be deducted by the Employer from any monies due to the Contractor or claimed under the Performance Security.

27.8 If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defects Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Employer because of any of the aforesaid reasons. Upon correction of the defects in the Facilities or any part thereof by repair/replacement, such repair/replacement shall have the Defects Liability Period extended by a period of twelve (12) month from the time such replacement/repair of the Facilities or any part thereof.

27.8.1 At the end of the Defects Liability Period, the contractor liability ceases except for latent defects. The contractor's liability for latent defects warranty shall be limited to a period of five (5) years from the end of Defects Liability Period. For the purpose of the this clause, the latent defects shall be the defects inherently lying within the material or arising out of design deficiency which do not manifest themselves during the Defects Liability Period as defined in this GCC clause 27, but later.
27.9 Except as provided in GCC Clauses 27 and 33 (Loss of or Damage to Property / Accident or Injury to Workers/Indemnification), the Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities or any part thereof, the Plant and Equipment, design or engineering or work executed that appear after Completion of the Facilities or any part thereof, except where such defects are the result of the gross negligence, fraud, criminal or willful action of the Contractor.

27.10 In addition, the Contractor shall also provide an extended warranty for any such component of the Facilities and during the period of time as may be specified in the SCC. Such obligation shall be in addition to the defect liability specified under GCC Sub Clause 27.2.

28. Functional Guarantees

28.1 The Contractor guarantees that during the Guarantee Tests, the Facilities and all parts thereof shall attain the Functional Guarantees specified in Appendix 8 (Functional Guarantees) to the Form of Contract Agreement, subject to and upon the conditions therein specified.

28.2 If, for reasons attributable to the Contractor, the guaranteed level of the Functional Guarantees specified in Appendix 8 (Functional Guarantees) to the Form of Contract Agreement are not met either in whole or in part, the Contractor shall, within a mutually agreed time, at its cost and expense make such changes, modifications and/or additions to the Plant or any part thereof as may be necessary to meet such Guarantees. The Contractor shall notify the Employer upon completion of the necessary changes, modifications and/or additions, and shall seek the Employer's consent to repeat the Guarantee Test. If the specified Functional Guarantees are not established even during the repeat of the Guarantee Tests, the Employer may at its option, either

(a) Reject the Equipments and recover the payments already made, or

(b) Terminate the Contract pursuant to GCC Sub Clause 42.2.2 and recover the payments already made, or

(c) Accept the equipment after levy of liquidated damages in accordance with the provisions specified in Appendix 8 (Functional Guarantees and Liquidated Damages) to the Form of Contract Agreement.

28.3 In case the Employer exercises its option to accept the equipment after levy of liquidated damages, the payment of liquidated damages under GCC Sub Clause 28.2, up to the limitation of liability
specified in the Appendix 8 (Functional Guarantees) to the Contract Agreement, shall completely satisfy the Contractor’s guarantees under GCC Sub Clause 28.2, and the Contractor shall have no further liability whatsoever to the Employer in respect thereof. Upon the payment of such liquidated damages by the Contractor, the Project Manager shall issue the Operational Acceptance Certificate for the Facilities or any part thereof in respect of which the liquidated damages have been so paid.

29. **Patents Indemnity**

29.1 The Contractor shall, subject to the Employer’s compliance with GCC Sub Clause 29.2, indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney’s fees and expenses, which the Employer may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract by reason of: (a) the installation of the Facilities by the Contractor or the use of the Facilities in the country where the Site is located; and (b) the sale of the products produced by the Facilities in any country.

Such indemnity shall not cover any use of the Facilities or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the Facilities or any part thereof, or any products produced thereby in association or combination with any other equipment, plant or materials not supplied by the Contractor, pursuant to the Contract Agreement.

29.2 If any proceedings are brought or any claim is made against the Employer arising out of the matters referred to in GCC Sub Clause 29.1, the Employer shall promptly give the Contractor a notice thereof, and the Contractor may at its own expense and in the Employer’s name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty eight (28) day period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim.

The Employer shall, at the Contractor’s request, afford all available assistance to the Contractor in conducting such proceedings or
claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.

29.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney’s fees and expenses, which the Contractor may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Employer.

30. Limitation of Liability

30.1 Except in cases of criminal negligence or willful misconduct,

(a) the Contractor shall not be liable to the Employer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer and

(b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement.

G. Risk Distribution

31. Transfer of Ownership

31.1 Ownership of the Plant and Equipments (including spare parts) to be imported into the country where the Site is located shall be transferred to the Employer upon loading on to the mode of transport to be used to convey the Plant and Equipments from the country of origin to that country.

31.2 Ownership of the Plant and Equipments (including spare parts) procured in the country where the Site is located shall be transferred to the Employer when the Plant and Equipments including spares are loaded on to the mode of transport to be used to convey the Plant and Equipments including spares from the works to the site and upon endorsement of the despatch documents in favour of the Employer.
31.3 Ownership of the Contractor’s Equipments used by the Contractor and its Subcontractors in connection with the Contract shall remain with the Contractor or its Subcontractors.

31.4 Ownership of any Plant and Equipments in excess of the requirements for the Facilities shall revert to the Contractor upon Completion of the Facilities or at such earlier time when the Employer and the Contractor agree that the Plant and Equipments in question are no longer required for the Facilities, provided quantity of any Plant and Equipments specifically stipulated in the Contract shall be the property of the Employer whether or not incorporated in the Facilities.

31.5 Notwithstanding the transfer of ownership of the Plant and Equipments, the responsibility for care and custody thereof together with the risk of loss or damage thereto shall remain with the Contractor pursuant to GCC Clause 32 (Care of Facilities) hereof until Completion of the Facilities or the part thereof in which such Plant and Equipments are incorporated.

31.6 In case of two/three Contracts entered into between the Employer and the Contractor as per GCC Sub Clause 3.6 or where the Employer hands over his equipments to the Contractor for executing the Contract, then the Contractor shall at the time of taking delivery of the Equipments through Bill of Lading or other despatch documents furnish Trust Receipt for Plant, Equipments and Materials and also execute an Indemnity Bond in favour of the Employer in the form acceptable to Employer for keeping the equipment in safe custody and to utilise the same exclusively for the purpose of the said Contract. Proforma for the Trust Receipt and Indemnity Bond is enclosed under Section VII (Forms and Procedures). The Employer shall also issue a separate Authorisation Letter to the Contractor to enable him to take physical delivery of plant, equipments and materials from the Employer as per proforma enclosed under Section-VII (Forms and Procedures).

32. Care of Facilities 32.1 The Contractor shall be responsible for the care and custody of the Facilities or any part thereof until the date of Completion of the Facilities pursuant to GCC Clause 24 (Completion of the Facilities) or, where the Contract provides for Completion of the Facilities in parts, until the date of Completion of the relevant part, and shall make good at its own cost any loss or damage that may occur to the Facilities or the relevant part thereof from any cause whatsoever during such period. The Contractor shall also be responsible for any loss or damage to the Facilities caused by the Contractor or its Subcontractors in the course of any work carried out, pursuant to GCC Clause 27 (Defects Liability). Notwithstanding the foregoing, the Contractor shall not be liable for any loss or damage to the Facilities or that part thereof.
32.2 If any loss or damage occurs to the Facilities or any part thereof or to the Contractor’s temporary facilities by reason of

(a) nuclear reaction, nuclear radiation, radioactive contamination, pressure wave caused by aircraft or other aerial objects, or any other occurrences that an experienced contractor could not reasonably foresee, or if reasonably foreseeable could not reasonably make provision for or insure against, insofar as such risks are not normally insurable on the insurance market and are mentioned in the general exclusions of the policy of insurance, including War Risks and Political Risks, taken out under GCC Clause 34 (Insurance) hereof;

(b) any use or occupation by the Employer or any third party (other than a Subcontractor) authorized by the Employer of any part of the Facilities;

(c) any use of or reliance upon any design, data or specification provided or designated by or on behalf of the Employer, or any such matter for which the Contractor has disclaimed responsibility herein,

the Employer shall pay to the Contractor all sums payable in respect of the Facilities executed, notwithstanding that the same be lost, destroyed or damaged, and will pay to the Contractor the replacement value of all temporary facilities and all parts thereof lost, destroyed or damaged. If the Employer requests the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Contractor shall make good the same at the cost of the Employer in accordance with GCC Clause 39 (Change in the Facilities). If the Employer does not request the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Employer shall either request a change in accordance with GCC Clause 39 (Change in the Facilities), excluding the performance of that part of the Facilities thereby lost, destroyed or damaged, or, where the loss or damage affects a substantial part of the Facilities, the Employer shall terminate the Contract pursuant to GCC Sub Clause 42.1 (Termination for Employer’s Convenience) hereof, except that the Contractor shall have no entitlement to profit under paragraph (e) of GCC Sub Clause 42.1.3 in respect of any unexecuted Facilities as at the date of termination.
32.3 The Contractor shall be liable for any loss of or damage to any Contractor's Equipments, or any other property of the Contractor used or intended to be used for purposes of the Facilities, except (i) as mentioned in GCC Sub Clause 32.2 (with respect to the Contractor’s temporary facilities), and (ii) where such loss or damage arises by reason of any of the matters specified in GCC Sub Clauses 32.2(b) and (c) and 38.1.

32.4 With respect to any loss or damage caused to the Facilities or any part thereof or to the Contractor's Equipment by reason of any of the matters specified in GCC Sub Clause 38.1, the provisions of GCC Sub Clause 38.3 shall apply.

33. **Subject to GCC Sub Clause 33.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property (other than the Facilities whether accepted or not), arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers or agents, except any injury, death or property damage caused by the negligence of the Employer, its contractors, employees, officers or agents.**

33.2 If any proceedings are brought or any claim is made against the Employer that might subject the Contractor to liability under GCC Sub Clause 33.1, the Employer shall promptly give the Contractor a notice thereof and the Contractor may at its own expense and in the Employer’s name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty eight (28) day period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim.

The Employer shall, at the Contractor’s request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.
33.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and Subcontractors from any liability for loss of or damage to property of the Employer, other than the Facilities not yet taken over, that is caused by fire, explosion or any other perils, in excess of the amount recoverable from insurances procured under GCC Clause 34 (Insurance), provided that such fire, explosion or other perils were not caused by any act or failure of the Contractor.

33.4 The party entitled to the benefit of an indemnity under this GCC Clause 33 shall take all reasonable measures to mitigate any loss or damage which has occurred. If the party fails to take such measures, the other party's liabilities shall be correspondingly reduced.

34. Insurance  

34.1 To the extent specified in Appendix 3 (Insurance Requirements) to the Form of Contract Agreement, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified in the said Appendix. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, who should not unreasonably withhold such approval.

(a) **Cargo Insurance During Transport**  
Covering loss or damage occurring while in transit from the Contractor's or Subcontractor's works or stores until arrival at the Site, to the Plant and Equipments (including spare parts therefor) and to the Contractor's Equipments.

(b) **Installation All Risks Insurance**  
Covering physical loss or damage to the Facilities at the Site, occurring prior to Completion of the Facilities, with an extended maintenance coverage for the Contractor's liability in respect of any loss or damage occurring during the Defects Liability Period while the Contractor is on the Site for the purpose of performing its obligations during the Defects Liability Period.

(c) **Third Party Liability Insurance**  
Covering bodily injury or death suffered by third parties (including the Employer's personnel) and loss of or damage to property occurring in connection with the supply and installation of the Facilities.
### GENERAL CONDITION OF CONTRACT (GCC)

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(d)</strong></td>
<td><strong>Automobile Liability Insurance</strong>&lt;br&gt;Covering use of all vehicles used by the Contractor or its Subcontractors (whether or not owned by them) in connection with the execution of the Contract.</td>
</tr>
<tr>
<td><strong>(e)</strong></td>
<td><strong>Workers’ Compensation</strong>&lt;br&gt;In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed.</td>
</tr>
<tr>
<td><strong>(f)</strong></td>
<td><strong>Employer’s Liability</strong>&lt;br&gt;In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed.</td>
</tr>
<tr>
<td><strong>(g)</strong></td>
<td><strong>Other Insurances</strong>&lt;br&gt;Such other insurances as may be specifically agreed upon by the parties hereto as listed in the said Appendix 3.</td>
</tr>
</tbody>
</table>

34.2 The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC Sub Clause 34.1, except for the Third Party Liability, Workers’ Compensation and Employer’s Liability Insurances, and the Contractor’s Subcontractors shall be named as co-insureds under all insurance policies taken out by the Contractor pursuant to GCC Sub Clause 34.1 except for the Cargo Insurance During Transport, Workers’ Compensation and Employer’s Liability Insurances. All insurer’s rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.

34.3 The Contractor shall, in accordance with the provisions of Appendix 3 (Insurance Requirements) to the Form of Contract Agreement, deliver to the Employer certificates of insurance (or copies of the insurance policies) as evidence that the required policies are in full force and effect. The certificates shall provide that no less than twenty one (21) days’ notice shall be given to the Employer by insurers prior to cancellation or material modification of a policy.

34.4 The Contractor shall ensure that, where applicable, its Subcontractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such Subcontractors are covered by the policies taken out by the Contractor.

34.5 The Employer shall at its expense take out and maintain in effect during the performance of the Contract those insurances specified in Appendix 3 (Insurance Requirements) to the Form of Contract Agreement.
34.6 If the Contractor fails to take out and/or maintain in effect the insurances referred to in GCC Sub Clause 34.1, the Employer may take out and maintain in effect any such insurances and may from time to time deduct from any amount due the Contractor under the Contract any premium that the Employer shall have paid to the insurer, or may otherwise recover such amount as a debt due from the Contractor. If the Employer fails to take out and/or maintain in effect the insurances referred to in GCC 34.5, the Contractor may take out and maintain in effect any such insurances and may from time to time deduct from any amount due the Employer under the Contract any premium that the Contractor shall have paid to the insurer, or may otherwise recover such amount as a debt due from the Employer. If the Contractor fails to or is unable to take out and maintain in effect any such insurances, the Contractor shall nevertheless have no liability or responsibility towards the Employer, and the Contractor shall have full recourse against the Employer for any and all liabilities of the Employer herein.

34.7 Unless otherwise provided in the Contract, the Contractor shall prepare and conduct all and any claims made under the policies effected by it pursuant to this GCC Clause 34, and all monies payable by any insurers shall be paid to the Contractor as per the procedure outlined in GCC Sub Clause 34.8 below. The Employer shall give to the Contractor all such reasonable assistance as may be required by the Contractor. With respect to insurance claims in which the Employer’s interest is involved, the Contractor shall not give any release or make any compromise with the insurer without the prior written consent of the Employer. With respect to insurance claims in which the Contractor’s interest is involved, the Employer shall not give any release or make any compromise with the insurer without the prior written consent of the Contractor.

34.8 (i) Wherever total damages/loss of equipments/materials, would occur, the Contractor will be entitled to payment of all payments received from the underwriters except the following amounts:

(a) The amount paid to the Contractor under the Contract in respect of equipments/materials damaged/lost (excluding the pro-rata initial advance) but including the entire amount of escalation, if any, already paid to the Contractor.

(b) Custom Duties and taxes which have already been paid by the Employer.
In the event the claim money settled is less than the total of the amount in a & b above, then the entire claim money settled will be retained by the Employer and the Contractor will forthwith pay the Employer the short fall amount between the claim money and the total of amounts as per a & b mentioned above.

Subsequent payments, if any, due under the Contract shall be regulated by the relevant terms of payment.

(ii) In case of damage to any equipments/materials during any stage, the Contractor upon rectification of the damaged equipment to the satisfaction of the Employer shall be paid to the extent of full claims settled by the underwriters.

35. **Unforeseen Conditions**

35.1 If, during the execution of the Contract, the Contractor shall encounter on the Site any physical conditions (other than climatic conditions) or artificial obstructions that could not have been reasonably foreseen prior to the date of the Contract Agreement by an experienced contractor on the basis of reasonable examination of the data relating to the Facilities (including any data as to boring tests) provided by the Employer, and on the basis of information that it could have obtained from a visual inspection of the Site (if access thereto was available) or other data readily available to it relating to the Facilities, and if the Contractor determines that it will in consequence of such conditions or obstructions incur additional cost and expense or require additional time to perform its obligations under the Contract that would not have been required if such physical conditions or artificial obstructions had not been encountered, the Contractor shall promptly, and before performing additional work or using additional Plant and Equipments or Contractor's Equipments, notify the Project Manager in writing of

(a) the physical conditions or artificial obstructions on the Site that could not have been reasonably foreseen

(b) the additional work and/or Plant and Equipments and/or Contractor’s Equipments required, including the steps which the Contractor will or proposes to take to overcome such conditions or obstructions

(c) the extent of the anticipated delay

(d) the additional cost and expense that the Contractor is likely to incur.
On receiving any notice from the Contractor under this GCC Sub Clause 35.1, the Project Manager shall promptly consult with the Employer and Contractor and decide upon the actions to be taken to overcome the physical conditions or artificial obstructions encountered. Following such consultations, the Project Manager shall instruct the Contractor, with a copy to the Employer, of the actions to be taken.

35.2 Any reasonable additional cost and expense incurred by the Contractor in following the instructions from the Project Manager to overcome such physical conditions or artificial obstructions referred to in GCC Sub Clause 35.1 shall be paid by the Employer to the Contractor as an addition to the Contract Price.

35.3 If the Contractor is delayed or impeded in the performance of the Contract because of any such physical conditions or artificial obstructions referred to in GCC Sub Clause 35.1, the Time for Completion shall be extended in accordance with GCC Clause 40 (Extension of Time for Completion).

36. **Change in Laws and Regulations**

36.1 If, after the date seven (7) days prior to the date of Bid submission, in the country where the Site is located, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the costs and expenses of the Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the Contract. However, these adjustments would be restricted to direct transactions between the Employer and the Contractor and not on procurement of raw materials, intermediary components etc. by the Contractor. Further, no adjustment of the Contract Price shall be made on account of variation in Deemed Export benefits. Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with the Appendix 2 to the Contract Agreement.

37. **Force Majeure**

37.1 “Force Majeure” shall mean any event beyond the reasonable control of the Employer or of the Contractor, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected.

37.2 If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within fourteen (14) days after the occurrence of such event.
37.3 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party’s performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with GCC Clause 40 (Extension of Time for Completion).

37.4 The party or parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect thereof upon its or their performance of the Contract and to fulfill its or their obligations under the Contract, but without prejudice to either party’s right to terminate the Contract under GCC Sub Clauses 37.6 and 38.5.

37.5 No delay or nonperformance by either party hereto caused by the occurrence of any event of Force Majeure shall

(a) constitute a default or breach of the Contract

(b) (subject to GCC Sub Clauses 32.2, 38.3 and 38.4) give rise to any claim for damages or additional cost or expense occasioned thereby

if and to the extent that such delay or nonperformance is caused by the occurrence of an event of Force Majeure.

37.6 If the performance of the Contract is substantially prevented, hindered or delayed for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of one or more events of Force Majeure during the currency of the Contract, the parties will attempt to develop a mutually satisfactory solution, failing which the dispute shall be resolved in accordance with GCC Clause 6.

37.7 Notwithstanding GCC Sub Clause 37.5, Force Majeure shall not apply to any obligation of the Employer to make payments to the Contractor herein.

38. **War Risks**

38.1 “War Risks” shall mean any of the following events occurring or existing in or near the country (or countries) where the Site is located:

(a) war, hostilities or warlike operations (whether a state of war is declared or not), invasion, act of foreign enemy and civil war

(b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion and terrorist acts, and
(c) any explosion or impact of any mine, bomb, shell, grenade or other projectile, missile, munitions or explosive of war.

<table>
<thead>
<tr>
<th>38.2</th>
<th>Notwithstanding anything contained in the Contract, the Contractor shall have no liability whatsoever for or with respect to</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>destruction of or damage to Facilities, Plant &amp; Equipments, or any part thereof</td>
</tr>
<tr>
<td>(b)</td>
<td>destruction of or damage to property of the Employer or any third party</td>
</tr>
<tr>
<td>(c)</td>
<td>injury or loss of life</td>
</tr>
</tbody>
</table>

if such destruction, damage, injury or loss of life is caused by any War Risks, and the Employer shall indemnify and hold the Contractor harmless from and against any and all claims, liabilities, actions, lawsuits, damages, costs, charges or expenses arising in consequence of or in connection with the same.

<table>
<thead>
<tr>
<th>38.3</th>
<th>If the Facilities or any Plant and Equipments or Contractor’s Equipments or any other property of the Contractor used or intended to be used for the purposes of the Facilities shall sustain destruction or damage by reason of any War Risks, the Employer shall pay the Contractor for</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>any part of the Facilities or the Plant and Equipments so destroyed or damaged (to the extent not already paid for by the Employer)</td>
</tr>
<tr>
<td>(b)</td>
<td>replacing or making good any Contractor’s Equipments or other property of the Contractor so destroyed or damaged so far as may be required by the Employer, and as may be necessary for completion of the Facilities,</td>
</tr>
<tr>
<td>(c)</td>
<td>replacing or making good any such destruction or damage to the Facilities or the Plant and Equipments or any part thereof.</td>
</tr>
</tbody>
</table>

If the Employer does not require the Contractor to replace or make good any such destruction or damage to the Facilities, the Employer shall either request a change in accordance with GCC Clause 39 (Change in the Facilities), excluding the performance of that part of the Facilities thereby destroyed or damaged or, where the loss, destruction or damage affects a substantial part of the Facilities, shall terminate the Contract, pursuant to GCC Sub Clause 42.1 (Termination for Employer’s Convenience).
38.4 Notwithstanding anything contained in the Contract, the Employer shall pay the Contractor for any increased costs or incidentals to the execution of the Contract that are in any way attributable to, consequent on, resulting from, or in any way connected with any War Risks, provided that the Contractor shall as soon as practicable notify the Employer in writing of any such increased cost.

38.5 If during the performance of the Contract any War Risks shall occur that financially or otherwise materially affect the execution of the Contract by the Contractor, the Contractor shall use its reasonable efforts to execute the Contract with due and proper consideration given to the safety of its and its Subcontractors’ personnel engaged in the work on the Facilities, provided, however, that if the execution of the work on the Facilities becomes impossible or is substantially prevented for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of any War Risks, the parties will attempt to develop a mutually satisfactory solution, failing which the dispute will be resolved in accordance with GCC Clause 6.

38.6 In the event of termination pursuant to GCC Sub Clauses 38.3, the rights and obligations of the Employer and the Contractor shall be specified in GCC Sub Clauses 42.1.2 and 42.1.3, except that the Contractor shall have no entitlement to profit under paragraph (e) of GCC Sub Clause 42.1.3 in respect of any unexecuted Facilities as of the date of termination.

H. Change in Contract Elements

39. Change in the Facilities

39.1 Introducing a Change

39.1.1 The Employer shall have the right to propose, and subsequently require, that the Project Manager order the Contractor from time to time during the performance of the Contract to make any change, modification, addition or deletion to, in or from the Facilities (hereinafter called “Change”), provided that such Change falls within the general scope of the Facilities and does not constitute unrelated work and that it is technically practicable, taking into account both the state of advancement of the Facilities and the technical compatibility of the Change envisaged with the nature of the Facilities as specified in the Contract.

39.1.2 The Contractor may from time to time during its performance of the Contract propose to the Employer (with a copy to the Project Manager) any Change that the Contractor considers necessary or desirable to improve
the quality, efficiency or safety of the Facilities. The Employer may at its discretion approve or reject any Change proposed by the Contractor.

39.1.3 Notwithstanding GCC Sub Clauses 39.1.1 and 39.1.2, no change made necessary because of any default of the Contractor in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Completion.

39.1.4 The procedure on how to proceed with and execute Changes is specified in GCC Sub Clauses 39.2 and 39.3.

39.2 Changes Originating from Employer

39.2.1 If the Employer proposes a Change pursuant to GCC Sub Clause 39.1.1, it shall send to the Contractor a “Request for Change Proposal,” requiring the Contractor to prepare and furnish to the Project Manager as soon as reasonably practicable a “Change Proposal,” which shall include the following:

(a) brief description of the Change
(b) effect on the Time for Completion
(c) estimated Cost of the Change
(d) effect on Functional Guarantees (if any)
(e) effect on any other provisions of the Contract.

39.2.2 The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices included in the Contract. If the rates and prices of any change are not available in the Contract, the parties thereto shall agree on specific rates for the valuation of the Change.

39.2.3 If before or during the preparation of the Change Proposal it becomes apparent that the aggregate effect of compliance therewith and with all other Change Orders that have already become binding upon the Contractor under this GCC Clause 39 would be to increase or decrease the Contract Price as originally set forth in Article 2 (Contract Price) of the Contract Agreement by more than fifteen (15) percent, the Contractor may give a written notice of objection thereto prior to furnishing the Change Proposal as aforesaid. If the Employer accepts
the Contractor’s objection, the Employer and the Contractor shall agree on specific rates for valuation of the change.

39.2.4 Upon receipt of the Change Proposal, the Employer and the Contractor shall mutually agree upon all matters therein contained including agreement on rates if such rates are not available in the Contract or if the limit of 15% set forth in Sub Clause 39.2.3 has been exceeded. Within fourteen (14) days after such agreement, the Employer shall, if it intends to proceed with the Change, issue the Contractor with a Change Order.

If the Employer is unable to reach a decision within fourteen (14) days, it shall notify the Contractor with details of when the Contractor can expect a decision.

If the Employer decides not to proceed with the Change for whatever reason, it shall, within the said period of fourteen (14) days, notify the Contractor accordingly.

39.2.5 If the Employer and the Contractor cannot reach agreement on the price for the Change, an equitable adjustment to the Time for Completion, or any other matters identified in the Change Proposal, the Employer may nevertheless instruct the Contractor to proceed with the Change by issue of a “Pending Agreement Change Order.”

Upon receipt of a Pending Agreement Change Order, the Contractor shall immediately proceed with effecting the Changes covered by such Order. The parties shall thereafter attempt to reach agreement on the outstanding issues under the Change Proposal.

If the parties cannot reach agreement within sixty (60) days from the date of issue of the Pending Agreement Change Order, then the matter may be referred to the Adjudicator in accordance with the provisions of GCC Sub Clause 6.1 (Adjudicator).

39.3 Changes Originating from Contractor

39.3.1 If the Contractor proposes a Change pursuant to GCC Sub Clause 39.1.2, the Contractor shall submit to the Project Manager a written “Application for Change Proposal,” giving reasons for the proposed Change and including the information specified in GCC Sub Clause 39.2.1.
Upon receipt of the Application for Change Proposal, the parties shall follow the procedures outlined in GCC Sub Clauses 39.2.4 and 39.2.5

40. **Extension of Time for Completion**

40.1 The Time(s) for Completion specified in the SCC shall be extended if the Contractor is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:

(a) any Change in the Facilities as provided in GCC Clause 39 (Change in the Facilities)

(b) any occurrence of Force Majeure as provided in GCC Clause 37 (Force Majeure), unforeseen conditions as provided in GCC Clause 35 (Unforeseen Conditions), or other occurrence of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GCC Sub Clause 32.2

(c) any suspension order given by the Employer under GCC Clause 41 (Suspension) hereof or reduction in the rate of progress pursuant to GCC Sub Clause 41.2 or

(d) any changes in laws and regulations as provided in GCC Clause 36 (Change in Laws and Regulations) or

(e) any default or breach of the Contract by the Employer, specifically including failure to supply the items listed in Appendix 6 (Scope of Works and Supply by the Employer) to the Form of Contract Agreement, or any activity, act or omission of any other contractors employed by the Employer or

(f) any other matter specifically mentioned in the Contract;

by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Contractor.

40.2 Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Project Manager a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Employer and the Contractor shall agree upon the period of such extension. In the event that the Contractor does not accept the Employer’s estimate of a fair and reasonable time extension, the Contractor shall be entitled to refer the matter to
the Adjudicator, pursuant to GCC Sub Clause 6.1 (Adjudicator). The Contractor shall at all times use its reasonable efforts to minimize any delay in the performance of its obligations under the Contract.

41. **Suspension**

41.1 The Employer/ Project Manager may, by notice to the Contractor, order the Contractor to suspend performance of any or all of its obligations under the Contract. Such notice shall specify the obligation of which performance is to be suspended, the effective date of the suspension and the reasons therefor. The Contractor shall thereupon suspend performance of such obligation (except those obligations necessary for the care or preservation of the Facilities) until ordered in writing to resume such performance by the Project Manager/ Employer.

If, by virtue of a suspension order given by the Project Manager/ Employer, other than by reason of the Contractor’s default or breach of the Contract, the Contractor’s performance of any of its obligations is suspended for an aggregate period of more than ninety (90) days, then at any time thereafter and provided that at that time such performance is still suspended, the Contractor may give a notice to the Project Manager requiring that the Employer shall, within twenty eight (28) days of receipt of the notice, order the resumption of such performance or request and subsequently order a change in accordance with GCC Clause 39 (Change in the Facilities), excluding the performance of the suspended obligations from the Contract.

If the Employer fails to do so within such period, the Contractor may, by a further notice to the Project Manager, elect to treat the suspension, where it affects a part only of the Facilities, as a deletion of such part in accordance with GCC Clause 39 (Change in the Facilities) or, where it affects the whole of the Facilities, as termination of the Contract under GCC Sub Clause 42.1 (Termination for Employer’s Convenience).

41.2 If

(a) the Employer has failed to pay the Contractor any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to Appendix 1 (Terms and Procedures of Payment) to the Form of Contract Agreement, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that requires payment of such sum, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such
sum, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, or fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Contractor’s notice or

(b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer’s failure to provide possession of or access to the Site or other areas in accordance with GCC Sub Clause 10.2, or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities;

then the Contractor may by fourteen (14) days’ notice to the Employer suspend performance of all or any of its obligations under the Contract, or reduce the rate of progress.

41.3 If the Contractor’s performance of its obligations is suspended or the rate of progress is reduced pursuant to this GCC Clause 41, then the Time for Completion shall be extended in accordance with GCC Sub Clause 40.1, and any and all additional costs or expenses incurred by the Contractor as a result of such suspension or reduction shall be paid by the Employer to the Contractor in addition to the Contract Price, except in the case of suspension order or reduction in the rate of progress by reason of the Contractor’s default or breach of the Contract.

41.4 During the period of suspension, the Contractor shall not remove from the Site any Plant and Equipment, any part of the Facilities or any Contractor’s Equipment, without the prior written consent of the Employer.

42. Termination

42.1 Termination for Employer’s Convenience

42.1.1 The Employer may at any time terminate the Contract for any reason by giving the Contractor a notice of termination that refers to this GCC Sub Clause 42.1.

42.1.2 Upon receipt of the notice of termination under GCC Sub Clause 42.1.1, the Contractor shall either immediately or upon the date specified in the notice of termination

(a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition
(b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d)(ii) below

(c) remove all Contractor’s Equipments from the Site, repatriate the Contractor’s and its Subcontractors’ personnel from the Site, remove from the Site any wreckage, rubbish and debris of any kind, and leave the whole of the Site in a clean and safe condition

(d) In addition, the Contractor, subject to the payment specified in GCC Sub Clause 42.1.3, shall

(i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination

(ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant and Equipments as at the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors

(iii) deliver to the Employer all non-proprietary drawings, specifications and other documents prepared by the Contractor or its Subcontractors as at the date of termination in connection with the Facilities.

42.1.3 In the event of termination of the Contract under GCC Sub Clause 42.1.1, the Employer shall pay to the Contractor the following amounts:

(a) the Contract Price, properly attributable to the parts of the Facilities executed by the Contractor as of the date of termination

(b) the costs reasonably incurred by the Contractor in the removal of the Contractor’s Equipment from the Site and in the repatriation of the Contractor’s and its Subcontractors’ personnel

(c) any amounts to be paid by the Contractor to its Subcontractors in connection with the termination of any subcontracts, including any cancellation charges

(d) costs incurred by the Contractor in protecting the Facilities and leaving the Site in a clean and safe condition pursuant to paragraph (a) of GCC Sub Clause 42.1.2
(e) the cost of satisfying all other obligations, commitments and claims that the Contractor may in good faith have undertaken with third parties in connection with the Contract and that are not covered by paragraphs (a) through (d) above.

42.2 **Termination for Contractor’s Default**

42.2.1 The Employer, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefor to the Contractor, referring to this GCC Sub Clause 42.2:

(a) if the Contractor becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Contractor is a corporation, a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Contractor takes or suffers any other analogous action in consequence of debt

(b) if the Contractor assigns or transfers the Contract or any right or interest therein in violation of the provision of GCC Clause 43 (Assignment).

(c) if the Contractor, in the judgement of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this Sub Clause:

"corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.

"fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.
**GENERAL CONDITION OF CONTRACT (GCC)**

42.2.2 If the Contractor

(a) has abandoned or repudiated the Contract

(b) has without valid reason failed to commence work on the Facilities promptly or has suspended (other than pursuant to GCC Sub Clause 41.2) the progress of Contract performance for more than twenty eight (28) days after receiving a written instruction from the Employer to proceed

(c) persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause

(d) refuses or is unable to provide sufficient materials, services or labor to execute and complete the Facilities in the manner specified in the program furnished under GCC Clause 18 (Program of Performance) at rates of progress that give reasonable assurance to the Employer that the Contractor can attain Completion of the Facilities by the Time for Completion as extended

then the Employer may, without prejudice to any other rights it may possess under the Contract, give a notice to the Contractor stating the nature of the default and requiring the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Employer may terminate the Contract forthwith by giving a notice of termination to the Contractor that refers to this GCC Sub Clause 42.2.

42.2.3 Upon receipt of the notice of termination under GCC Sub Clauses 42.2.1 or 42.2.2, the Contractor shall, either immediately or upon such date as is specified in the notice of termination,

(a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition

(b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) below
(c) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination

(d) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Works and to the Plant and Equipment as at the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors

(e) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as at the date of termination in connection with the Facilities.

42.2.4 The Employer may enter upon the Site, expel the Contractor, and complete the Facilities itself or by employing any third party. The Employer may, to the exclusion of any right of the Contractor over the same, take over and use with the payment of a fair rental rate to the Contractor, with all the maintenance costs to the account of the Employer and with an indemnification by the Employer for all liability including damage or injury to persons arising out of the Employer’s use of such equipment, any Contractor’s Equipments owned by the Contractor and on the Site in connection with the Facilities for such reasonable period as the Employer considers expedient for the supply and installation of the Facilities.

Upon completion of the Facilities or at such earlier date as the Employer thinks appropriate, the Employer shall give notice to the Contractor that such Contractor’s Equipment will be returned to the Contractor at or near the Site and shall return such Contractor’s Equipments to the Contractor in accordance with such notice. The Contractor shall thereafter without delay and at its cost remove or arrange removal of the same from the Site.

42.2.5 Subject to GCC Sub Clause 42.2.6, the Contractor shall be entitled to be paid the Contract Price attributable to the Facilities executed as at the date of termination, the value of any unused or partially used Plant and Equipments on the Site, and the costs, if any, incurred in protecting the Facilities and in leaving the Site in a clean and safe condition pursuant to paragraph (a) of GCC Sub Clause 42.2.3. Any sums due to the Employer from the Contractor accruing prior to the date of termination shall be deducted from the amount to be paid to the Contractor under this Contract.
42.2.6 If the Employer completes the Facilities, the cost of completing the Facilities by the Employer shall be determined.

If the sum that the Contractor is entitled to be paid, pursuant to GCC Sub Clause 42.2.5, plus the reasonable costs incurred by the Employer in completing the Facilities, exceeds the Contract Price, the Contractor shall be liable for such excess.

If such excess is greater than the sums due to the Contractor under GCC Sub Clause 42.2.5, the Contractor shall pay the balance to the Employer, and if such excess is less than the sums due to the Contractor under GCC Sub Clause 42.2.5, the Employer shall pay the balance to the Contractor.

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

42.3 Termination by Contractor

42.3.1 If

(a) the Employer has failed to pay the Contractor any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to Appendix 1 (Terms and Procedures of Payment) of the Form of Contract Agreement, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that requires payment of such sum, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such sum, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Contractor’s notice, or

(b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer’s failure to provide possession of or access to the Site or other
areas or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities which the Employer is required to obtain as per provision of the Contract or as per relevant applicable laws of the country,

then the Contractor may give a notice to the Employer thereof, and if the Employer has failed to pay the outstanding sum, to approve the invoice or supporting documents, to give its reasons for withholding such approval, or to remedy the breach within twenty eight (28) days of such notice, or if the Contractor is still unable to carry out any of its obligations under the Contract for any reason attributable to the Employer within twenty eight (28) days of the said notice, the Contractor may by a further notice to the Employer referring to this GCC Sub Clause 42.3.1, forthwith terminate the Contract.

42.3.2 The Contractor may terminate the Contract forthwith by giving a notice to the Employer to that effect, referring to this GCC Sub Clause 42.3.2, if the Employer becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Employer takes or suffers any other analogous action in consequence of debt.

42.3.3 If the Contract is terminated under GCC Sub Clauses 42.3.1 or 42.3.2, then the Contractor shall immediately

(a) cease all further work, except for such work as may be necessary for the purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition

(b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d)(ii)

(c) remove all Contractor’s Equipment from the Site and repatriate the Contractor’s and its Subcontractor’s personnel from the Site

(d) In addition, the Contractor, subject to the payment specified in GCC Sub Clause 42.3.4, shall
(i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination

(ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant and Equipments as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors

(iii) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as of the date of termination in connection with the Facilities.

42.3.4 If the Contract is terminated under GCC Sub Clauses 42.3.1 or 42.3.2, the Employer shall pay to the Contractor all payments specified in GCC Sub Clause 42.1.3, and reasonable compensation for all loss or damage sustained by the Contractor arising out of, in connection with or in consequence of such termination.

42.3.5 Termination by the Contractor pursuant to this GCC Sub Clause 42.3 is without prejudice to any other rights or remedies of the Contractor that may be exercised in lieu of or in addition to rights conferred by GCC Sub Clause 42.3.

42.4 In this GCC Clause 42, the expression “Facilities executed” shall include all work executed, Installation Services provided, any all Plant and Equipments acquired (or subject to a legally binding obligation to purchase) by the Contractor and used or intended to be used for the purpose of the Facilities, up to and including the date of termination.

42.5 In this GCC Clause 42, in calculating any monies due from the Employer to the Contractor, account shall be taken of any sum previously paid by the Employer to the Contractor under the Contract, including any advance payment paid pursuant to Appendix 1 (Terms and Procedures of Payment) to the Contract Agreement.
43. **Assignment**  

43.1 The Contractor shall not, without the express prior written consent of the Employer, assign to any third party the Contract or any part thereof, or any right, benefit, obligation or interest therein or thereunder, except that the Contractor shall be entitled to assign either absolutely or by way of charge any monies due and payable to it or that may become due and payable to it under the Contract.
### SECTION - IV

**GENERAL CONDITIONS OF CONTRACT (GCC)**

**TABLE OF CLAUSES**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td><strong>Contract and Interpretation</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Definitions</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Contract Documents</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>Interpretation</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Notices</td>
<td>8</td>
</tr>
<tr>
<td>5.</td>
<td>Governing Laws</td>
<td>8</td>
</tr>
<tr>
<td>6.</td>
<td>Settlement of Disputes</td>
<td>8</td>
</tr>
<tr>
<td>B.</td>
<td><strong>Subject Matter of Contract</strong></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Scope of Facilities</td>
<td>11</td>
</tr>
<tr>
<td>8.</td>
<td>Time for Commencement and Completion</td>
<td>16</td>
</tr>
<tr>
<td>9.</td>
<td>Contractor’s Responsibilities</td>
<td>16</td>
</tr>
<tr>
<td>10.</td>
<td>Employer’s Responsibilities</td>
<td>17</td>
</tr>
<tr>
<td>C.</td>
<td><strong>Payment</strong></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Contract Price</td>
<td>19</td>
</tr>
<tr>
<td>12.</td>
<td>Terms of Payment</td>
<td>19</td>
</tr>
<tr>
<td>13.</td>
<td>Securities</td>
<td>19</td>
</tr>
<tr>
<td>14.</td>
<td>Taxes and Duties</td>
<td>21</td>
</tr>
</tbody>
</table>

PAKRI BARWADIH COAL MINING PROJECT

BID DOCUMENT NO. CS-7010-155-2

COAL HANDLING PLANT PACKAGE

SECTION - IV (GCC)
<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.</td>
<td><strong>Intellectual Property</strong></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Copyright</td>
<td>22</td>
</tr>
<tr>
<td>16.</td>
<td>Confidential Information</td>
<td>23</td>
</tr>
<tr>
<td>E.</td>
<td><strong>Work Execution</strong></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Representatives</td>
<td>23</td>
</tr>
<tr>
<td>18.</td>
<td>Work Program</td>
<td>25</td>
</tr>
<tr>
<td>19.</td>
<td>Subcontracting</td>
<td>27</td>
</tr>
<tr>
<td>20.</td>
<td>Design and Engineering</td>
<td>27</td>
</tr>
<tr>
<td>21.</td>
<td>Procurement</td>
<td>30</td>
</tr>
<tr>
<td>22.</td>
<td>Installation</td>
<td>32</td>
</tr>
<tr>
<td>23.</td>
<td>Testing and Inspection</td>
<td>36</td>
</tr>
<tr>
<td>24.</td>
<td>Completion of the Facilities</td>
<td>38</td>
</tr>
<tr>
<td>25.</td>
<td>Commissioning and Operational Acceptance</td>
<td>39</td>
</tr>
<tr>
<td>F.</td>
<td><strong>Guarantees and Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>Completion Time Guarantee</td>
<td>41</td>
</tr>
<tr>
<td>27.</td>
<td>Defects Liability</td>
<td>42</td>
</tr>
<tr>
<td>28.</td>
<td>Functional Guarantees</td>
<td>45</td>
</tr>
<tr>
<td>29.</td>
<td>Patents Indemnity</td>
<td>46</td>
</tr>
<tr>
<td>30.</td>
<td>Limitation of Liability</td>
<td>47</td>
</tr>
<tr>
<td>G.</td>
<td><strong>Risk Distribution</strong></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Transfer of Ownership</td>
<td>47</td>
</tr>
<tr>
<td>32.</td>
<td>Care of Facilities</td>
<td>48</td>
</tr>
<tr>
<td>Sl.No.</td>
<td>Description</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>33.</td>
<td>Loss of or Damage to Property; Accident or Injury to Workers; Indemnification</td>
<td>50</td>
</tr>
<tr>
<td>34.</td>
<td>Insurance</td>
<td>51</td>
</tr>
<tr>
<td>35.</td>
<td>Unforeseen Conditions</td>
<td>54</td>
</tr>
<tr>
<td>36.</td>
<td>Change in Laws and Regulations</td>
<td>55</td>
</tr>
<tr>
<td>37.</td>
<td>Force Majeure</td>
<td>55</td>
</tr>
<tr>
<td>38.</td>
<td>War Risks</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td><strong>H. Change in Contract Elements</strong></td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>Change in the Facilities</td>
<td>58</td>
</tr>
<tr>
<td>40.</td>
<td>Extension of Time for Completion</td>
<td>61</td>
</tr>
<tr>
<td>41.</td>
<td>Suspension</td>
<td>62</td>
</tr>
<tr>
<td>42.</td>
<td>Termination</td>
<td>63</td>
</tr>
<tr>
<td>43.</td>
<td>Assignment</td>
<td>71</td>
</tr>
</tbody>
</table>
SECTION - IV

GENERAL CONDITIONS OF CONTRACT

(GCC)
SECTION - V

SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract (SCC), Section-V, shall supplement/amend the General Conditions of Contract (GCC), Section-IV. Wherever there is a conflict, the provisions in SCC shall prevail over those in the GCC. The corresponding clause number of the GCC is indicated in parentheses.

Name of Package : Coal Handling Plant Package for Pakri Barawadih Coal Mining Project

Document No. : CS-7010-155-2

<table>
<thead>
<tr>
<th>Special Conditions (SCC) No.</th>
<th>GCC Clause Ref, in any</th>
<th>Special Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Definitions (GCC Clause 1)</td>
<td>The Employer is:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Name of Employer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Telephone No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Project Manager is:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Name of Project Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Address of Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Telephone No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax No.</td>
</tr>
<tr>
<td>Special Conditions (SCC) No.</td>
<td>GCC Clause Ref, in any</td>
<td>Special Conditions</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td></td>
<td>Adjudicator :</td>
<td>Adjudicator under the contract shall be : Executive Director (CM&amp;CW)</td>
</tr>
<tr>
<td>2.</td>
<td>Interpretation (GCC Clause 3) GCC 3.10</td>
<td><strong>Time for Completion :</strong></td>
</tr>
<tr>
<td></td>
<td>&quot;Completion of the Facilities&quot; shall be attained within 18 months from the date of Notification of Award.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Settlement of Disputes (GCC Clause 6) GCC 6.1.3 GCC 6.2.4</td>
<td>Appointing Authority for Adjudicator : CMD, NTPC</td>
</tr>
<tr>
<td></td>
<td>Appointing Authority for Arbitrator :</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) President, Institution of Engineers in case of an Indian Contractor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) President, International Chamber of Commerce, Paris in case of Foreign Contractor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rules of procedure for arbitration proceedings :</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) In case of a foreign contractor, the arbitration proceeding shall be conducted in accordance with the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules of 1976.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) In case of an Indian Contractor, the arbitration proceedings shall be conducted in accordance with Indian Arbitration and Conciliation Act 1996. In case the Indian Contractor is an Indian Public Sector Enterprise/Government Department (but not a State Govt. Undertaking or Joint Sector Undertaking which is not a subsidiary of Central Govt. Undertaking), the dispute arising between the Employer and the Contractor shall be referred for resolution to a Permanent Arbitration Machinery (PAM) of the Department of Public Enterprises, Government of India.</td>
<td></td>
</tr>
<tr>
<td>Special Conditions (SCC) No.</td>
<td>GCC Clause Ref, in any</td>
<td>Special Conditions</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>4.</td>
<td>GCC 6.2.7(ii)</td>
<td>The Place for Arbitration shall be: New Delhi, India.</td>
</tr>
<tr>
<td></td>
<td>Scope of Facilities</td>
<td>Prices of recommended spares covered under price Schedule No. 6 shall be kept valid for a period of six (6) months after placement of Notification of Award for Main Equipment and Mandatory Spares.</td>
</tr>
<tr>
<td></td>
<td>(GCC Clause 7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GCC 7.3</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Time for Commencement and Completion (GCC Clause 8)</td>
<td>&quot;Completion of the Facilities&quot; shall be attained within 18 months from the date of Notification of Award.</td>
</tr>
<tr>
<td></td>
<td>GCC 8.2</td>
<td>The provisions regarding reduction in performance security(ies) is not applicable.</td>
</tr>
<tr>
<td>6.</td>
<td>Securities (GCC Clause 13.3.3)</td>
<td>Add a new GCC Sub-Clause 13.4:</td>
</tr>
<tr>
<td></td>
<td>GCC 13.4</td>
<td>13.4 Security for Deed of Joint Undertaking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In case Deed(s) of Joint Undertaking by the Contractor along with his associate(s)/collaborator(s) form part of the Contract, then, in addition to the Contract performance securities furnished by the Contractor, the associate(s)/collaborator(s) shall furnish, within twenty eight (28) days of the Notification of Award, separate unconditional Bank Guarantee(s) towards faithful performance of the Deed(s) of Joint Undertaking for amount(s) specified in item no. 3. of Bid Data Sheets and with validity till such period as specified in the corresponding format for Deed of Joint Undertaking. However, in case of delay in completion of the defect liability period, the validity of Bank Guarantee(s) submitted towards faithful performance of Deed(s) of Joint Undertaking shall be extended by such period of delay.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Bank Guarantee(s) shall be denominated in the currency or currencies of Contract and shall be as per the proforma provided in Section-VII (Forms and Procedures) - Form of Bank Guarantee by Associate/Collaborator.</td>
</tr>
<tr>
<td>Special Conditions (SCC) No.</td>
<td>GCC Clause Ref, in any</td>
<td>Special Conditions</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>GCC 13.5</td>
<td>Add a new GCC sub-clause 13.5 :</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13.5 The Bank Guarantee submitted towards Advance Payment Security, Contract Performance Security and Security for Deed of Joint Undertaking shall be essentially from any of the Banks listed at Annexure-I to Section-V (Special Conditions of Contract) of the Bidding Documents. In case of guarantees issued by branches outside India of foreign banks, the bank guarantees shall be routed through the correspondent bank in India for due verification of signatures of the executant.</td>
</tr>
<tr>
<td>7.</td>
<td>Taxes and Duties (GCC Clause 14)</td>
<td>(a) Add the following at the end of the sub-clause 14.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All taxes, duties and levies including entry tax/octroi (if any) in respect of all components, equipments and material to be despatched directly from the sub-vendor's works to NTPC site shall be to the Contractor's account and no separate claim in this regard will be entertained by the Employer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Further all taxes, duties and levies including sales tax on works contract, Entry Tax, if any, in respect of civil construction works, erection &amp; commissioning if any and custom duty/sales tax as applicable on the materials used for such construction works shall be to the contractor's account and no separate claim in this regard will be entertained by the Employer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Incidence of Service Tax on any component of the bid price shall be to the contractors account. Bidder shall include service tax as applicable at the date of seven (7) days prior to the last date of bid submission in the bid price. However, any change in the rate of service tax for direct transaction between the Employer and the contractor shall be to Employer account in line with the provision of clause 14.4.</td>
</tr>
</tbody>
</table>
|                           |                      | Add the following at the end of para :
|                           |                      | "Consequent to amendment in income tax w.e.f 01.04.2005 the TDS certificate will not be issued by the Employer. The credit of TDS will be given by Income Tax Department as per details furnished by Employer against your PAN. The Contractor will be required to submit PAN details to the Project Manager before the submission of the first bill." |
Taxes and Duties (GCC Clause 14)  

(b) Add the following at the end of first para of sub-clause 14.3 of GCC

As per extant Foreign Trade policy of Govt. of India, the benefits of concessional rate of custom duty (applicable for Coal Mining Projects) may be available for the import of raw materials, components, subassemblies and equipment, if any, required for manufacture of equipment/plant/spares to be supplied under the contract.

Employer shall issue the requisite certificates as specified in the relevant policy of Govt. of India provided the contractor has furnished the requisite data such as import content, etc. in the Attachment-9 in its bid. However if such certificates are required to be issued by any department/ministry of Government of India other than the Employer, the contractor shall himself be responsible for obtaining such certificate from the concerned department/ministry of Government of India. In such a case, the Employer may issue recommendatory letter to the contractor.

Further the contractor shall be solely responsible for obtaining benefit of concessional rate of custom duty from the Govt. of India. In case of failure of the contractor to receive benefits of concessional rate of custom duty partly or fully from Govt. of India or if there is a delay in receipt of such benefits, the Employer shall neither be responsible nor be liable in this regard, in any manner whatsoever. Contractor shall further note that contract price and/or payment/reimbursement towards taxes, duties, levies etc. shall not be adjusted on account of variation in or withdrawal of benefits of concessional rate of custom duty.

8. Guarantee Tests and Operational Acceptance (GCC Clause 25 GCC 25.1.2 & GCC 25.2.1)

The Guarantee Test of the facilities shall be successfully completed within 12 months from the date of completion of the facilities.
9. Completion Time Guarantee
(GCC clause 26)

GCC 26.2

**Applicable rate for liquidated damages:**

Liquidated Damages for delay in completion shall be as under:

a) If the Contractor fails to achieve commissioning & trial operation including coal feeding to silo through 1<sup>st</sup> stream of conveyer system within 14.5 months from the date of Notification of Award, the Contractor shall pay to the employer as liquidated damages and not as penalty, a sum calculated at the following rate:

A sum of US Dollar 22,340 (US Dollar Twenty two thousand three hundred forty only) in proportionate contract currencies based on bills selling exchange rate of SBI prevailing as on the date of Notification of Award for each day of delay of successful completion of commissioning & trial operation including coal feeding to silo through 1<sup>st</sup> stream of Conveyor system under the package as per scope of work of the contractor under the contract. The maximum amount of liquidated damages applicable for this milestone shall be 3.5% of total Contract price of the entire facilities under the contract excluding cost of spares.

b) If the Contractor fails to achieve the successful completion of all balance facilities within 18 months from the date of Notification of Award, the Contractor shall pay to the employer as liquidated damages and not as penalty, a sum calculated at the following rate:
<table>
<thead>
<tr>
<th>Special Conditions (SCC) No.</th>
<th>GCC Clause Ref, in any</th>
<th>Special Conditions</th>
</tr>
</thead>
</table>
| 10.                         | GCC 28                 | A sum of US Dollar 9575 (US Dollar Nine thousand five hundred seventy five only) in proportionate contract currencies based on bills selling exchange rate of SBI prevailing as on the date of Notification of Award. For each day of delay of successful completion of all balance facilities under the package as per scope of work of the contractor under the Contract. The liquidated damages for delay in supply of spares beyond the dates stipulated under the Contract shall be as follows:

One half of the one percent (½%) of CIF/Ex-works price of delayed mandatory spares, per week or part thereof or delay, subject to maximum of five percent (5%) of the total CIF/Ex-works of all mandatory spares included in the scope of work of the Contractor under the contract.

**Maximum deduction for liquidated damages:**

The total amount of liquidated damages for delay under the contracts will be subject to a maximum of five percent (5%) of the total contract price of First, Second and Third Contract.

**Functional Guarantees:**

The words "Appendix-8 (Functional Guarantees)" appearing in the GCC Clause 28 and at any other places in bidding documents shall be read in conjunction with Technical Specifications, Section-VI of Bidding Documents.

Add the following at the end of the Clause:

In case, there is any dispute between Employer and Contractor regarding latent defects, any of the parties listed hereunder or any other third party as mutually agreed upon by the Employer and the Contractor shall be engaged by the Employer for setting the dispute:

a) M/S KEMA, Netherlands
b) M/S TUV, Germany
c) M/S EPRI, USA
<table>
<thead>
<tr>
<th>Special Conditions (SCC) No.</th>
<th>GCC Clause Ref, in any</th>
<th>Special Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td></td>
<td>The third party, so engaged by the Employer, shall be paid fee plus reasonable expenditures incurred in the execution of its duties as mentioned above. These costs shall be initially paid by the Employer. In case of latent defect being proved, such costs shall be recoverable from the Contractor and the Contractor shall bear and reimburse such costs to the Employer. If the dispute regarding latent defects cannot be settled as above, then the dispute shall be settled as per provision of GCC Clause 6 (Settlement of Disputes).</td>
</tr>
<tr>
<td>13. GCC Cl. 18.0</td>
<td></td>
<td>Add a new sub-clause 18.6 as below: The Contractor shall be required to attend all weekly site progress review meetings organized by the 'Project Manager' or his authorised representative. The deliberations in the meetings shall interalia include the weekly program, progress of work (including details of manpower, tools &amp; plants deployed by the Contractor vis-a-vis agreed schedule), inputs to be provided by Employer, delays, if any and recovery program, specific hindrances to work and work instructions by Employer. The minutes of the weekly meetings shall be recorded in triplicate in a numbered register available with the Project Manager or his authorized representative. These recordings shall be jointly signed by the Project Manager or his authorized representative and the Contractor and one copy of the signed records shall be handed over to the Contractor.</td>
</tr>
<tr>
<td>Special Conditions (SCC) No.</td>
<td>GCC Clause Ref. in any</td>
<td>Special Conditions</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>14.</td>
<td>GCC Cl. 26 and GCC Cl. 40</td>
<td>The following documents shall form the principal basis for consideration of Time Extension pursuant to GCC clause 40 with or without LD, levy of liquidated damages pursuant to GCC clause 26 and settlement of extra claims during the execution of contract:</td>
</tr>
<tr>
<td></td>
<td>1. The joint recordings in the weekly meetings register.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Records of Technical Coordination Meetings.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Written notices issued by the &quot;Project Manager&quot; or his authorized representative to Contractor in the relevant period.</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>GCC Cl. 42.2.1(c)</td>
<td>Add the following at the end of sub-clause 42.2.1(c)</td>
</tr>
<tr>
<td></td>
<td>“The contractor along with their associate/collaborator/sub-contractors/sub-vendors/consultants/service providers shall strictly adhere to the Fraud policy of the Employer displayed on its tender website [<a href="http://www.ntpc">http://www.ntpc</a> Tender.com](<a href="http://www.ntpc">http://www.ntpc</a> Tender.com). The Contractor alongwith their associate/collaborator/sub-contractors/sub-vendors/consultants/service providers shall observe the highest standard of ethics and shall not indulge or allow anybody else working in their organization to indulge in fraudulent activities during execution of the contract. The contractor shall immediately apprise the Employer about any fraud or suspected fraud as soon as it comes to their notice”.</td>
<td></td>
</tr>
<tr>
<td>Sl.No.</td>
<td>Description</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>1.</td>
<td>Definitions (GCC Clause 1)</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Interpretation (GCC Clause 3)</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Settlement of Disputes (GCC Clause 6)</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>Scope of Facilities (GCC Clause 7)</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>Time for Commencement and Completion (GCC Clause 8)</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>Securities (GCC Clause 13)</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>Taxes and Duties (GCC Clause 14)</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>Guarantee Tests and Operational Acceptance (GCC Clause 25 GCC 25.1.2 &amp; GCC 25.2.1)</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td>Completion Time Guarantee (GCC Clause 26)</td>
<td>6</td>
</tr>
<tr>
<td>10.</td>
<td>Functional Guarantee (GCC Clause 28)</td>
<td>7</td>
</tr>
<tr>
<td>11.</td>
<td>Defect Liability (GCC Clause 27)</td>
<td>7</td>
</tr>
<tr>
<td>12.</td>
<td>Contractor Performance Feedback and Evaluation System</td>
<td>8</td>
</tr>
<tr>
<td>13.</td>
<td>Regarding Weakly Site Progress Review Meetings (GCC Clause 18.0)</td>
<td>8</td>
</tr>
<tr>
<td>15.</td>
<td>Regarding Fraud Policy [GCC Clause 42.2.1 (c)]</td>
<td>9</td>
</tr>
</tbody>
</table>
SECTION - V

SPECIAL CONDITIONS OF CONTRACT

(SCC)
1.00.00 **GENERAL**

1.01.00 The following provisions shall supplement the conditions already contained in the other parts of these specifications and documents and shall govern that portion of the work of this contract which is to be performed at site. The erection requirements and procedures not specified in these documents shall be in accordance with the recommendations of the equipment manufacturer, or as mutually agreed to between the Employer and the Contractor prior to commencement of erection work.

1.02.00 The Contractor upon signing of the Contract shall, in addition to a Project Coordinator, nominate another responsible officer as his representative at Site suitably designated for the purpose of overall responsibility and co-ordination of the Works to be performed at Site. Such a person shall function from the Site office of the Contractor during the pendency of Contract.

2.00.00 **REGULATION OF LOCAL AUTHORITIES AND STATUTES**

2.01.00 In addition to the local laws and regulations, the Contractor shall also comply with the Minimum Wages Act and the Payment of Wages Act (both of the Government of India) and the rules made there under in respect of its labour and the labour of its sub-contractors currently employed on or connected with the contract.

2.02.00 All registration and statutory inspection fees, if any, in respect of his work pursuant to this Contract shall be to the account of the Contractor. However, any registration, statutory inspection fees lawfully payable under the provisions of the Indian Boiler Regulations and any other statutory laws and its amendments from time to time during erection in respect of the plant equipment ultimately to be owned by the Employer, shall be to the account of the Employer. Should any such inspection or registration need to be re-arranged due to the fault of the Contractor or his Sub-Contractor, the additional fees for such inspection and/or registration shall be borne by the Contractor.

3.00.00 **WELDING OF PRESSURE PARTS AND HIGH PRESSURE PIPING**

The welding of all pressure parts and high pressure piping shall be in accordance with the following requirements:

3.01.00 **Qualification of Weld Procedures**

Only qualified welding procedures as per ASME Section IX shall be used by contractor at site. Procedure qualification records along with WPS shall be submitted to NTPC for review. Welding procedure shall indicate all essential and non-essential parameters as per ASME Section IX. Makes of welding consumables shall be subject to employer’s approval.

3.02.00 **Welder’s Qualification**

Only welders who are qualified in accordance with the latest applicable requirements of the Indian Boiler Regulations, shall be permitted to perform any welding work on the pressure parts and its attachment welding. In addition to such statutory qualification requirements, the welders shall also undergo a satisfactory pre-production qualification test to be conducted by the Contractor at site as per ASME.
Sec IX in presence of employer’s representative(s), prior to performing work under these specifications. The services of an independent testing laboratory shall be retained by the Contractor to perform welder qualification tests for welders.

All the welders carrying out welding at site shall carry an identification badge, which shall indicate the category and the grade of welding for which they have been tested and authorised to carry out welding. All such badges shall be countersigned by the Employer.

### 3.03.00 Records

Welders performance shall be monitored regularly and record of their performance shall be maintained by contractor in a manner acceptable to the employer. Contractor shall maintain such records including record of procedure qualification & welder qualification and hand-over to the employer at the end of work.

### 3.04.00 MARKING

On completion of each welded joint, the welder shall mark his regularly assigned identification mark near the joint. The welder's identification numbers, inspection stamps or code symbol stamps and any other information shall not be directly stamped on any alloy steel piping. In alloy steel piping, all such information shall be stamped on separate marking plate which shall be tack welded on pipe near the weld.

### 4.00.00 HEAT TREATMENT

#### 4.01.00
Pre-heating, post-heating and post-weld stress relief operations of all welds, shall be performed in accordance with the requirements of applicable code. Local post weld stress relieving heat - treatments shall be adopted only in cases where it is normally impracticable to subject the entire assembly as such for stress relieving operations. Heating may be by means of electric induction coils or electric resistance coils. Oxy-acetylene flame heating or exothermic chemical heating methods will not be permitted. Complete recording of the temperatures throughout the stress relieving cycle of the material and the weld subjected to heat treatment shall be made by means of a potentiometric recorder. Recorders other than those of potentiometric type shall not be used for such temperature recording during stress relieving operations.

The contractor & employer’s representative, at start and at the end of HT Cycle shall sign the time and temperature charts for heat-treatment.

#### 4.02.00
After setting up the weld joint for heat treatment operation, the Employer’s signature shall be obtained on the strips chart of the recorder prior to starting of heat treatment cycle. The right hand corner of the strip chart at the starting point of the heat treatment cycle shall contain details like the weld number, material, diameter and thickness, method of heating adopted, prescribed ranges of heat treatment temperatures, date of heat treatment, reference to item number of the Field welding Schedule (as specified at clause no 7.00.00- of this chapter) etc.

### 5.00.00 WELD EDGE PREPARATION

Preparation at site of weld joint shall be in accordance with details acceptable to the Employer. Wherever possible, machining or automatic flame cutting shall be used for
edge preparation. Hand flame cutting will be permitted only where edge preparation otherwise is impractical. All slag shall be removed from cuts and all the hand cuts shall be ground smooth to the satisfaction of the Employer. Flame cutting of alloy steel pipe shall be avoided. Wherever such cutting is done, a 200mm length at the cut face shall be removed by machining. Pneumatic hand tools such as edge preparation, tube cutting machine can be used.

6.00.00 CLEANING AND SERVICING

6.01.00 The inside of all tubes, pipes, valves and fittings shall be free from dirt, and loose scales before being erected. All the pipelines shall be thoroughly blown and/or flushed. Each steam and water tubes shall be blown with compressed air and shall be subjected to 'ball test' before erection to ensure that no obstructions exist. A system for recording of all such operations shall be developed and maintained in a manner to ensure that no obstructions are left inside the tubes and no tubes are left uncleaned and untested.

6.02.00 All valves and valve actuators, and dampers and damper actuators, if any, shall be thoroughly cleaned and serviced prior to pre-commissioning tests and/or Initial Operations of the plant. A system for recording of such servicing operation shall be developed and maintained in a manner acceptable to the Employer and to ensure that no valves or dampers including their actuators are left unserviced.

6.03.00 All interior surfaces of the turbine shall be thoroughly cleaned prior to boxing - up to remove all traces of oil preservations.

7.00.00 FIELD WELDING SCHEDULE

The Contractor shall submit to the Employer, a certified and complete field welding schedule for all the field welding activities to be carried out in respect of the pressure parts involved in the equipment furnished and erected by him, at least 90 days prior to the scheduled start of erection work at site. Such schedule will be strictly followed by the Contractor during the process of erection. The above field-welding schedule to be issued by the Contractor shall contain the following:

(a.) Drawing No (s)
(b.) Location of the weld
(c.) Size of the weld (outside diameter and thickness)
(d.) Type of joints
(e.) Material specifications
(f.) Size of fillet on backing ring, when the type of joint is with backing ring
(g.) Electrode/ filler metal specifications
(h.) Number of welds per unit
(i.) Quantity of filler metal per weld
(j.) Indication of required Non-destructive Examination (NDE) for each weld
(k.) Pre-heat temperatures for welding
(l.) Process of welding
(m.) Post-welding heat treatment temperature ranges, duration, under as specified at clause no 4.00.00- of this chapter entitled "Heat Treatment".
(n.) Qualification details of weld procedures to be adopted as specified under as specified at clause no 3.01.00- of this chapter entitled 'Qualification of Weld Procedures'.

8.00.00 SITE RUN MISCELLANEOUS PIPING

Sketches or diagrams of the proposed routings of all piping, not already indicated and routed on the shop drawings which were reviewed by the Employer, shall be submitted to the Employer for review. Employer's acceptance of such site routings shall be obtained before the piping is erected. All these site run piping shall be installed in such a manner as to present an orderly and neat installation. They shall be located as to avoid obstruction of access and passages. Valves, instruments or any other special items shall be located convenient for operation by the operating personnel. Pipe runs shall be plumb or level except where pitch for drainage is required. Pipe runs that are not parallel to the building structure, walls or column rows shall be avoided so that deflection of pipes between hangers does not exceed 6 mm. No miscellaneous pipe shall be routed and installed above or adjacent to electrical equipment.

9.00.00 THERMAL EXPANSIONS

All piping installation shall be such that no excessive or destructive expansion forces exist either in the cold condition or under condition of maximum temperature. All bends, expansion joints and any other special fittings, necessary to provide proper expansion, shall be incorporated. During installation of expansion joints and anchors, care must be taken to make sure that full design movement is available at all times for maximum to minimum temperature and vice-versa.

10.00.00 PIPING SUPPORTS

10.01.00 Hangers, supports and anchors shall be installed as required to obtain a safe, reliable and complete pipe installation. All supports shall be properly levelled and anchored when installed. The anchors shall be so placed that thermal expansion will be absorbed by bends without subjecting the valves or equipment to excessive strains.

10.02.00 The hanger assemblies shall not be used for the attachment of rigging to hoist the pipe into place. Other means shall be used to securely hold the pipe in place till the pipe support is completely assembled and attached to the pipe and building structures and spring support is set to accommodate the pipe way. All temporary rigging shall be removed in such a way that the pipe support is not subjected to any sudden load. All piping, having variable spring type supports, shall be held securely in place by temporary means during the hydraulic test of pipe system. Constant support type spring hangers used during hydraulic test shall be pinned or blocked solid during the test. After complete installation and insulation of the piping and filling of the piping with its normal operating medium, the pipe support springs shall be
adjusted to the cold positions. If necessary, the spring support shall be re-adjusted to
the hot positions after the line has been placed for service at its normal maximum
operating temperature conditions. Electric arc welding only shall be used to weld all
pipe supports to structural steel members that form part of the building supporting
structure. The structural beams shall not be heated more than necessary during
welding of supports and such welds shall run parallel to the axis of the span. All lugs
or any other attachments welded to the piping shall be of the same material as the
pipe.

**11.00.00 PRESSURE TESTING**

11.01.00 On completion of erection of pressure parts, a hydraulic test in accordance with the
requirements of the Indian Boiler Regulations shall be performed by the Contractor.

11.02.00 All the valves, high pressure pipes and inter-connected pipes connecting the
pressure parts shall be tested along with pressure parts. All blank flanges or any
removable plugs required for openings not closed by the valves, and piping provided,
shall be furnished by the Contractor. The pressurization equipment including water
piping from the supply, needed for the above test shall also be furnished by the
Contractor. Any defects noticed during the testing are to be rectified and the unit re-
tested. If any welding is done on the pressure parts after the Hydraulic test, the
Hydraulic test for that portion of pressure parts shall be repeated.

11.03.00 Thy hydraulic test shall be considered successful only on certification to that effect by
the concerned inspecting Authority as per the provisions of the Indian Boiler
Regulations and the Employer.

**12.00.00 THERMOWELLS AND FLOW NOZZLES**

12.01.00 All the thermowells and flow nozzles in the equipment furnished under the technical
specifications shall be installed as a part of this work.

12.02.00 All thermowell connections incorporated in the steam service shall be plugged during
the pressure testing and the blow out of steam piping systems. Upon completion of
the blow out operation, all thermowells shall be installed and seam welded. Similarly,
all flow nozzles in the steam lines shall also be installed only on completion of steam
blowing operations unless otherwise agreed to by the Employer, depending upon the
sequence of cleaning and purging operations to be adopted by the Contractor at the
field.

**13.00.00 INSULATION, LAGGING AND CLADDING**

The provision of insulation, lagging and cladding of the various equipments and
portion of the equipment covered under the Contract, shall be furnished by the
Contractor as specified elsewhere or agree to separately in writing. Welds required
for holding insulation on pressure parts shall be carried out by IBR qualified welder.

**13.01.00 Protection of Equipment during Insulation Applications**

All equipment and structures shall be suitably protected from damage while applying
insulation after completion of insulation. All equipment and structures shall be
thoroughly cleaned and remove insulating materials which might have fallen on them.
<table>
<thead>
<tr>
<th>CLAUSE NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.00.00</td>
<td>CODE REQUIREMENTS</td>
</tr>
<tr>
<td>15.00.00</td>
<td>ELECTRICAL SAFETY REGULATIONS</td>
</tr>
<tr>
<td>15.01.00</td>
<td>In no circumstances will the Contractor interfere with fuses and electrical equipment belonging to the other Contractor or Employer.</td>
</tr>
<tr>
<td>15.02.00</td>
<td>Before the Contractor connects any electrical appliances to any plug or socket belonging to the other Contractor or Employer, he shall:</td>
</tr>
<tr>
<td></td>
<td>(a.) Satisfy the Employer that the appliance is in good working condition;</td>
</tr>
<tr>
<td></td>
<td>(b.) Inform the Employer of the maximum current rating, voltage and phases of the appliances;</td>
</tr>
<tr>
<td></td>
<td>(c.) Obtain permission of the Employer detailing the socket to which the appliances may be connected.</td>
</tr>
<tr>
<td></td>
<td>The Employer will not grant permission to connect until he is satisfied that</td>
</tr>
<tr>
<td></td>
<td>(a) The appliance is in good condition and is fitted with a suitable plug.</td>
</tr>
<tr>
<td></td>
<td>(b) The appliance is fitted with a suitable cable having two earth conductors, one of which shall be an earthed metal sheath surrounding the cores.</td>
</tr>
<tr>
<td>15.03.00</td>
<td>No electric cable in use by the other Contractor/ Employer will be disturbed without permission. No weight of any description will be imposed on any such cable and ladder or similar equipment will rest against or be attached to it.</td>
</tr>
<tr>
<td>15.04.00</td>
<td>No repair work shall be carried out on any live equipment. The equipment must be declared safe by the Employer and a permit to work issued before any work is carried out.</td>
</tr>
<tr>
<td>15.05.00</td>
<td>The Contractor shall employ the necessary number of qualified, full time electricians to maintain his temporary electrical installation.</td>
</tr>
<tr>
<td>16.00.00</td>
<td>REMOVAL OF MATERIAL</td>
</tr>
<tr>
<td>17.00.00</td>
<td>INSPECTION, TESTING AND INSPECTION CERTIFICATES</td>
</tr>
</tbody>
</table>
| | The provisions of the clause entitled Inspection, Testing and Inspection Certificates given in Part - C of the Technical Specification, shall also be applicable to the erection portion of the Works. The Employer shall have the right to re-inspect any equipment though previously inspected and approved by him at the Contractor’s works, before and after the same are erected at Site. If by the above inspection, the
Employer rejects any equipment, the Contractor shall make good for such rejections either by replacement or modification/repairs as may be necessary to the satisfaction of the Employer. Such replacements will also include the replacements or re-execution of such of those works of other Contractors and/or agencies, which might have got damaged or affected by the replacements or re-work done to the Contractor’s work.

### 18.00.00 ACCESS TO SITE AND WORKS ON SITE

18.01.00 Suitable access to site and permission to work at the Site shall be accorded to the Contractor by the Employer in reasonable time.

18.02.00 In the execution of the Works, no person other than the Contractor or his duly appointed representative, Sub-Contractor and workmen, shall be allowed to do work on the Site, except by the special permission, in writing by the Employer or his representative.

### 19.00.00 CONTRACTOR’S SITE OFFICE ESTABLISHMENT

The Contractor shall establish an Office at the Site and keep posted an authorised representative for the purpose of the Contract. Any written order or instruction of the Employer or his duly authorised representative, shall be communicated to the said authorised resident representative of the Contractor and the same shall be deemed to have been communicated to the Contractor at his legal address.

### 20.00.00 CO-OPERATION WITH OTHER CONTRACTORS

20.01.00 The Contractor shall co-operate with all other Contractors or tradesmen of the Employer, who may be performing other works on behalf of the Employer and the workmen who may be employed by the Employer and doing work in the vicinity of the works under the Contract. The Contractor shall also arrange to perform his work as to minimise, to the maximum extent possible, interference with the work of other Contracts and their workmen. Any injury or damage that may be sustained by the employees of the other Contractors and the Employer, due to the Contractor’s work shall promptly be made good at his own expense. The Employer shall determine the resolution of any difference or conflict that may arise between the Contractor and other Contractors or between the Contractor and the workmen of the Employer in regard to their work. If the work of the Contractor is delayed because of any acts of omission of another Contractor, the Contractor shall have no claim against the Employer on that account other than an extension of time for completing his works. Employer shall have full access to visit the contractor’s site at any time for inspection and surveillance checks.

20.02.00 The Employer shall be notified promptly by the Contractor of any defects in the other Contractor’s works that could affect the Contractor’s Works. The Employer shall determine the corrective measures if any, required to rectify this situation after inspection of the works and such decisions by the Employer shall be binding on the Contractor.

### 21.00.00 DISCIPLINE OF WORKMEN

The Contractor shall adhere to the disciplinary procedure set by the Employer in respect of his employees and workmen at Site. The Employer shall be at liberty to object to the presence of any representative or employee of the Contractor at the
<table>
<thead>
<tr>
<th>CLAUSE NO.</th>
<th>ERECTION CONDITIONS OF CONTRACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.00.00</td>
<td>CONTRACTOR'S FIELD OPERATION</td>
</tr>
<tr>
<td>22.01.00</td>
<td>The Contractor shall keep the Employer informed in advance regarding his field activity plans and schedules for carrying out each part of the works. Any review of such plan or schedule or method of work by the Employer shall not relieve the Contractor of any of his responsibilities towards the field activities. Such reviews shall also not be considered as an assumption of any risk or liability by the Employer or any of his representatives and no claim of the Contractor will be entertained because of the failure or inefficiency of any such plan or schedule or method of work reviewed. The Contractor shall be solely responsible for the safety, adequacy and efficiency of plant and equipment and his erection methods.</td>
</tr>
<tr>
<td>22.02.00</td>
<td>The Contractor shall have the complete responsibility for the conditions of the Work-Site including the safety of all persons employed by him or his Sub-Contractor and all the properties under his custody during the performance of the work. This requirement shall apply continuously till the completion of the Contract and shall not be limited to normal working hours. The construction review by the Employer is not intended to include review of Contractor’s safety measures in, on or near the Work-Site, and their adequacy or otherwise.</td>
</tr>
<tr>
<td>23.00.00</td>
<td>PHOTOGRAPHS AND PROGRESS REPORT</td>
</tr>
<tr>
<td>23.01.00</td>
<td>The Contractor shall furnish three (3) prints each to the Employer of progress photographs of the work done at Site. Photographs shall be taken as and when indicated by the Employer or his representative. Photographs shall be adequate in size and number to indicate various stages of erection. Each photograph shall contain the date, the name of the Contractor and the title of the photograph.</td>
</tr>
<tr>
<td>23.02.00</td>
<td>The above photographs shall accompany the monthly progress report detailing out the progress achieved on all erection activities as compared to the schedules. The report shall also indicate the reasons for the variance between the scheduled and actual progress and the action proposed for corrective measures, wherever necessary.</td>
</tr>
<tr>
<td>23.03.00</td>
<td>The Contractor shall submit the progress of work in video cassettes (2 copies) quarterly highlighting the progress and constraints at site.</td>
</tr>
<tr>
<td>24.00.00</td>
<td>MAN-POWER REPORT</td>
</tr>
<tr>
<td>24.01.00</td>
<td>The Contractor shall submit to the Employer, on the first day of every month, a man hour schedule for the month, detailing the man hours scheduled for the month, skill-wise and area-wise.</td>
</tr>
<tr>
<td>24.02.00</td>
<td>The Contractor shall also submit to the Employer on the first day of every month, a man power report of the previous month detailing the number of persons scheduled to have been employed and actually employed, skill-wise and the areas of employment of such labour.</td>
</tr>
</tbody>
</table>
25.00.00 PROTECTION OF WORK

The Contractor shall have total responsibility for protecting his works till it is finally taken over by the Employer. No claim will be entertained by the Employer or the representative of the Employer for any damage or loss to the Contractor’s works and the Contractor shall be responsible for complete restoration of the damaged works to original conditions to comply with the specification and drawings. Should any such damage to the Contractor’s Works occur because of other party not being under his supervision or control, the Contractor shall make his claim directly with the party concerned. If disagreement or conflict or dispute develops between the Contractor and the other party or parties concerned regarding the responsibility for damage to the Contractor’s Works the same shall be resolved as per the provisions of the as specified at clause no 20.00.00- of this chapter entitled “Co-operation with other Contractors.” The Contractor shall not cause any delay in the repair of such damaged Works because of any delay in the resolution of such disputes. The Contractor shall proceed to repair the Work immediately and no cause thereof will be assigned pending resolution of such disputes.

26.00.00 EMPLOYMENT OF LABOUR

26.01.00 In addition to all local laws and regulations pertaining to the employment of labour to be complied with by the Contractor pursuant to GCC, the Contractor will be expected to employ on the work only his regular skilled employees with experience of the particular work. No female labour shall be employed after darkness. No person below the age of eighteen years shall be employed.

26.02.00 All travelling expenses including provisions of all necessary transport to and from Site, lodging allowances and other payments to the Contractor’s employees shall be the sole responsibility of the Contractor.

26.03.00 The hours of work on the Site shall be decided by the Employer and the Contractor shall adhere to it. Working hours will normally be eight (8) hours per day - Monday through Saturday.

26.04.00 Contractor’s employees shall wear identification badges while on work at Site.

26.05.00 In case the Employer becomes liable to pay any wages or dues to the labour or any Government agency under any of the provisions of the Minimum Wages Act, Workmen Compensation Act, Contact Labour Regulation Abolition Act or any other law due to act of omission of the Contractor, the Employer may make such payments and shall recover the same from the Contractor’s Bills.

27.00.00 FACILITIES TO BE PROVIDED BY THE EMPLOYER

27.01.00 Space

The Contractor shall advise the Employer within thirty (30) days from the date of acceptance of the Notification of Award about his exact requirement of space for his office, storage area, pre-assembly and fabrication areas, labour and staff colony area, toilets, etc. The above requirement shall be reviewed by the Employer and space as decided by Employer will be allotted to the Contractor for construction of his temporary structures/ facilities like office, storage sheds, pre-assembly and fabrication areas, labour and staff colony, toilets, etc. for Contractor’s as well as his Sub-Contractor’s use.
### ERECTION CONDITIONS OF CONTRACT

**27.02.00 Electricity**

The Contractor shall submit to the Employer within thirty (30) days from the date of acceptance of the Notification of Award, his electrical power requirements, if any, to allow the planning of the same by the Employer. The Contractor shall be provided with free supply of electricity for the purposes of the Contract, only at two locations in the Employer's Site and at 415V voltage level. The Contractor shall make his own further distribution arrangement. All temporary wiring must comply with local regulations and will be subject to Employer's inspection and approval before connection to supply. The free supply of power will not be provided for the use in the labour and staff colony. Power supply for labour and staff colony shall be provided at one point and the Contractor shall be charged at rates prevalent at the site.

**27.03.00 Water**

Contractor shall make all arrangements himself for the supply of construction water as well as potable water for labour and other personnel at the worksite/colony.

**27.04.00 Communication**

The Employer will extend the telephone facilities, if available at Site, for purposes of Contract. The Contractor shall be charged at actuals for such facilities.

**28.00.00 FACILITIES TO BE PROVIDED BY THE CONTRACTOR**

**28.01.00 Contractor's site office Establishment**

The Contractor shall establish a site office at the site and keep posted an authorized representative for the purpose of the contract, pursuant to GCC.

**28.02.00 Tools, tackles and scaffoldings**

The Contractor shall provide all the construction equipments, tools, tackles and scaffoldings required for pre-assembly, installation, testing, commissioning and conducting Guarantee tests of the equipments covered under the Contract. He shall submit a list of all such materials to the Employer before the commencement of pre-assembly at Site. These tools and tackles shall not be removed from the Site without the written permission of the Employer. The Contractor shall arrange Dozer, Hydra, Cranes, Trailer, etc. for the purpose of fabrication, erection and commissioning.

**28.03.00 Testing Equipment and Facilities:**

The contractor shall provide the necessary testing, equipment and facilities.

**28.04.00 Site laboratory for civil works:**

Contractor shall provide and maintain a site laboratory for the testing of construction material under the direction and general supervision of employer.
<table>
<thead>
<tr>
<th>CLAUSE NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.05.00</td>
<td>First-aid</td>
</tr>
<tr>
<td>28.05.01</td>
<td>The Contractor shall provide necessary first-aid facilities for all his employees, representatives and workmen working at the Site. Enough number of Contractor’s personnel shall be trained in administering first-aid.</td>
</tr>
<tr>
<td>28.05.02</td>
<td>The Employer will provide the Contractor, in case of any emergency, the services of an ambulance for transportation to the nearest hospital.</td>
</tr>
<tr>
<td>28.06.00</td>
<td>Cleanliness</td>
</tr>
<tr>
<td>28.06.01</td>
<td>The Contractor shall be responsible for keeping the entire area allotted to him clean and free from rubbish, debris etc. during the period of Contract. The Contractor shall employ enough number of special personnel to thoroughly clean his work-area at least once in a day. All such rubbish and scrap material shall be stacked or disposed in a place to be identified by the Employer. Materials and stores shall be so arranged to permit easy cleaning of the area. In areas where equipment might drip oil and cause damage to the floor surface, a suitable protective cover of a flame resistant, oil proof sheet shall be provided to protect the floor from such damage.</td>
</tr>
<tr>
<td>28.06.02</td>
<td>Similarly the labour colony, the offices and the residential areas of the Contractor’s employees and workmen shall be kept clean and neat to the entire satisfaction of the Employer. Proper sanitary arrangements shall be provided by the Contractor, in the work-areas, office and residential areas of the Contractor.</td>
</tr>
<tr>
<td>29.00.00</td>
<td>LINES AND GRADES</td>
</tr>
<tr>
<td>29.00.01</td>
<td>All the Works shall be performed to the lines, grades and elevations indicated on the drawings. The Contractor shall be responsible to locate and layout the Works. Basic horizontal and vertical control points will be established and marked by the Employer at Site at suitable points. These points shall be used as datum for the works under the Contract. The Contractor shall inform the Employer well in advance of the times and places at which he wishes to do work in the area allotted to him so that suitable datum points may be established and checked by the Employer to enable the Contractor to proceed with his works. Any work done without being properly located may be removed and/or dismantled by the Employer at Contractor’s expense.</td>
</tr>
<tr>
<td>30.00.00</td>
<td>FIRE PROTECTION</td>
</tr>
<tr>
<td>30.01.00</td>
<td>The work procedures that are to be used during the erection shall be those which minimise fire hazards to the extent practicable. Combustible materials, combustible waste and rubbish shall be collected and removed from the Site at least once each day. Fuels, oils and volatile or flammable materials shall be stored away from the construction and equipment and materials storage areas in safe containers. Untreated canvas, paper, plastic or other flammable flexible materials shall not at all be used at Site for any other purpose unless otherwise specified. If any such materials are received with the equipment at the Site, the same shall be removed and replaced with acceptable material before moving into the construction or storage area.</td>
</tr>
<tr>
<td>30.02.00</td>
<td>Similarly corrugated paper fabricated cartons etc. will not be permitted in the construction area either for storage or for handling of materials. All such materials used shall be of water proof and flame resistant type. All the other materials such as</td>
</tr>
</tbody>
</table>

| PAKRI BARWAHI COAL MINING PROJECT COAL HANDLING SYSTEM | TECHNICAL SPECIFICATIONS | ERECTION CONDITIONS OF CONTRACT | Page 0 of 39 |
working drawings, plans etc. which are combustible but are essential for the works to be executed shall be protected against combustion resulting from welding sparks, cutting flames and other similar fire sources.

30.03.00 All the Contractor’s supervisory personnel and sufficient number of workers shall be trained for fire-fighting and shall be assigned specific fire protection duties. Enough of such trained personnel must be available at the Site during the entire period of the Contract.

30.04.00 The Contractor shall provide enough fire protection equipment of the types and number for the warehouses, office, temporary structures, labour colony area etc. Access to such fire protection equipment, shall be easy and kept open at all time.

31.00.00 SECURITY

The Contractor shall have total responsibility for all equipment and materials in his custody stores, loose, semi-assembled and/or erected by him at Site. The Contractor shall make suitable security arrangements including employment of security personnel to ensure the protection of all materials, equipment and works from theft, fire, pilferage and any other damages and loss. All materials of the Contractor shall enter and leave the Employer Site only with the written permission of the Employer in the prescribed manner.

32.00.00 CONTRACTOR’S AREA LIMITS

The Employer will mark-out the boundary limits of access roads, parking spaces, storage and construction areas for the Contractor and the Contractor shall not trespass the areas not so marked out for him. The Contractor shall be responsible to ensure that none of his personnel move out of the areas marked out for his operations. In case of such a need for the Contractor’s personnel to work out of the areas marked out for him the same shall be done only with the written permission of the Employer.

33.00.00 CONTRACTOR’S CO-OPERATION WITH THE EMPLOYER

In case where the performance of the erection work by the Contractor affects the operation of the system facilities of the Employer, such erection work of the Contractor shall be scheduled to be performed only in the manner stipulated by the Employer and the same shall be acceptable at all times to the Contractor. The Employer may impose such restrictions on the facilities provided to the Contractor such as electricity, etc. as he may think fit in the interest of the Employer and the Contractor shall strictly adhere to such restrictions and co-operate with the Employer. It will be the responsibility of the Contractor to provide all necessary temporary instrumentation and other measuring devices required during start-up and operation of the equipment systems which are erected by him. The Contractor shall also be responsible for flushing and initial filling of all the oil and lubricants required for the equipment furnished and installed by him, so as to make such equipment ready for operation. The Contractor shall be responsible for supplying such flushing oil and other lubricants unless otherwise specified elsewhere in documents and specifications.
<table>
<thead>
<tr>
<th>Clause No.</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.00.00</td>
<td>PRE-COMMISSIONING AND COMMISSIONING ACTIVITIES</td>
</tr>
<tr>
<td>34.01.00</td>
<td>GENERAL</td>
</tr>
<tr>
<td>34.01.01</td>
<td>The Contractor upon completion of installation of equipments and systems, shall conduct pre-commissioning and commissioning activities, to make the equipment/systems ready for safe, reliable and efficient operation on sustained basis. All pre-commissioning/commissioning activities considered essential for such readiness of the equipment/systems including those mutually agreed and included in the Contractor’s quality assurance programme as well as those indicated in clauses elsewhere in the technical specifications shall be performed by the contractor.</td>
</tr>
<tr>
<td>34.01.02</td>
<td>The pre-commissioning and commissioning activities including Guarantee tests, checks and trial operations of the equipment/systems furnished and installed by the contractor shall be the responsibility of the Contractor as detailed in relevant clauses in Technical Specification. The Contractor shall provide, in addition, test instruments, calibrating devices etc. and labour required for successful performance of these operations. If it is anticipated that the above test may prolong for a long time, the Contractor’s workmen required for the above test shall always be present at site during such operations.</td>
</tr>
<tr>
<td>34.01.03</td>
<td>The following activities shall be carried out by the contractor, 18 month prior to schedule date of commissioning of the equipment/systems installed by him.</td>
</tr>
<tr>
<td>34.01.04</td>
<td>It shall be the responsibility of the Contractor to provide all necessary temporary instrumentation and other measuring devices required during start-up and initial operation of the equipment/systems which are installed by him.</td>
</tr>
<tr>
<td>34.01.05</td>
<td>The Contractor shall also be responsible for flushing and initial filling of all oils and lubricants required for the equipment furnished and installed by him so as to make such equipment ready for operation. The Contractor shall be responsible for supplying such flushing oil and other lubricants unless otherwise specified elsewhere in these specifications and documents.</td>
</tr>
<tr>
<td>34.02.00</td>
<td>COMMISSIONING DOCUMENTATION</td>
</tr>
<tr>
<td>34.02.01</td>
<td>The contractor shall submit the commissioning documentation, comprising of Standard checklists, pre-commissioning procedures, testing schedules,</td>
</tr>
</tbody>
</table>
commissioning schedules and commissioning networks for various equipment/systems covered under the contract, for the approval of employer.

34.02.02 Standard checklist, as the name suggests, shall be a fairly general documents, containing the list of all checks required to be carried out for similar and repetitive type of equipment to ensure consistent and thorough checking. An indicative list of such equipment is enclosed as Annexure I.

34.02.03 The testing schedule is a document, designed for safe and systematic commissioning of individual equipment/sub-system. Commissioning schedule is a document envisaged for commissioning of a system. The testing/Commissioning schedule shall have a standard format in order to maintain consistency of presentation, content and reporting. A brief write up on the contents of the Testing Schedule/Commissioning Schedule is enclosed as Annexure-II.

34.02.04 The contractor shall submit the list of commissioning documentation to be submitted by him, along with their submission schedule for various equipment/systems covered under the contract, with in 6(six) month from the date of award of contract, for the acceptance of employer.

34.02.05 The Contractor shall submit the commissioning documentation, for various equipment/covered under the contract, for the approval of employer, at least 18 months before the scheduled date of commissioning of the equipment/systems.

34.03.00 COMMISSIONING ACTIVITIES

34.03.01 Upon completion of pre-commissioning activities/tests, the contractor shall initiate commissioning of facilities. During commissioning the Contractor shall carry out system checking and reliability trials on various parts of the facilities.

34.03.02 Contractor shall carry out the checks/tests at site to prove to the Employer that each equipment of the supply complies with requirements stipulated and is installed in accordance with requirements specified.

34.03.03 Before the plant is put into initial operation the Contractor shall be required to conduct test to demonstrate to the Employer that each item of the plant is capable of correctly performing the functions for which it was specified and its performance, parameters etc. are as per the specified/approved values. These tests may be conducted concurrently with those required under commissioning sequence.

34.03.04 Other tests shall be conducted, if required by the Employer, to establish that the plant equipment are in accordance with requirements of the specifications.

34.03.05 The Contractor shall conduct all the commissioning tests and undertake commissioning activities pertaining to all other auxiliaries and equipments including all electrical equipment/systems not specifically brought out above but are within the scope of work and facilities being supplied and installed by the Contractor and follow the guidelines indicated above or elsewhere in these technical specifications(Section-VI)
<table>
<thead>
<tr>
<th>CLAUSE NO.</th>
<th>ERECTION CONDITIONS OF CONTRACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.04.00</td>
<td>Initial Operation</td>
</tr>
</tbody>
</table>

Upon completion of system checking/Tests as above and as a part of commissioning of facilities, complete plant/facilities shall be put on initial operation as stipulated in General Technical Requirements.

<table>
<thead>
<tr>
<th>35.00.00</th>
<th>MATERIALS HANDLING AND STORAGE</th>
</tr>
</thead>
</table>

| 35.01.00  | All the equipments furnished under the Contract and arriving at Site shall be promptly received, unloaded and transported and stored in the storage spaces by the Contractor. |

| 35.02.00  | Contractor shall be responsible for examining all the shipment and notify the Employer immediately of any damage, shortage, discrepancy etc. for the purpose of Employer's information only. The Contractor shall submit to the Employer every week a report detailing all the receipts during the week. However, the Contractor shall be solely responsible for any shortages or damage in transit, handling and/or in storage and erection of the equipment at Site. Any demurrage, wharfage and other such charges claimed by the transporters, railways etc. shall be to the account of the Contractor. |

| 35.03.00  | The Contractor shall maintain an accurate and exhaustive record detailing out the list of all equipment received by him for the purpose of erection and keep such record open for the inspection of the Employer. |

| 35.04.00  | All equipment shall be handled very carefully to prevent any damage or loss. No bare wire ropes, slings, etc. shall be used for unloading and/or handling of the equipment without the specific written permission of the Employer. The equipment stored shall be properly protected to prevent damage either to the equipment or to the floor where they are stored. The equipment from the store shall be moved to the actual location at the appropriate time so as to avoid damage of such equipment at Site. |

| 35.05.00  | All electrical panels, controls gear, motors and such other devices shall be properly dried by heating before they are installed and energised. Motor bearings, slip rings, commutators and other exposed parts shall be protected against moisture ingress and corrosion during storage and periodically inspected. Heavy rotating parts in assembled conditions shall be periodically rotated to prevent corrosion due to prolonged storage. |

| 35.06.00  | All the electrical equipment such as motors, etc. shall be tested for insulation resistance at least once in three months from the date of receipt till the date of commissioning and a record of such measured insulation values maintained by the Contractor. Such records shall be open for inspection by the Employer. |

| 35.07.00  | The Contractor shall ensure that all the packing materials and protection devices used for the various equipments during transit and storage are removed before the equipment are installed. |

| 35.08.00  | The consumables and other supplies likely to deteriorate due to storage must be thoroughly protected and stored in a suitable manner to prevent damage or deterioration in quality by storage. |

| 35.09.00  | All the materials stored in the open or dusty location must be covered with suitable weatherproof and flameproof covering material wherever applicable. |
35.10.00 If the materials belonging to the Contractor are stored in areas other than those earmarked for him, the Employer will have the right to get it moved to the area earmarked for the Contractor at the Contractor’s cost.

35.11.00 The Contractor shall be responsible for making suitable indoor storage facilities to store all equipment which require indoor storage. Normally, all the electrical equipments such as motors, control gear, exciters and consumables like electrodes, lubricants etc. shall be stored in the closed storage space. The Employer, in addition, may direct the Contractor to move certain other materials, which in his opinion will require indoor storage, to indoor storage areas which the Contractor shall strictly comply with.

36.00.00 CONSTRUCTION MANAGEMENT

36.01.00 The field activities of the Contractors working at Site, will be coordinated by the Employer and the Employer decision shall be final in resolving any disputes or conflicts between the Contractor and other Contractors and tradesmen of the Employer regarding scheduling and co-ordination of work. Such decision by the Employer shall not be a cause for extra compensation or extension of time for the Contractor.

36.02.00 The Employer shall hold weekly meetings of all the Contractors working at Site, at a time and place to be designated by the Employer. The Contractor shall attend such meetings and take notes of discussions during the meeting and the decisions of the Employer and shall strictly adhere to those decisions in performing his Works. In addition to the above weekly meeting, the Employer may call for other meeting either with individual Contractors or with selected number of Contractors and in such a case the Contractor if called, will also attend such meetings.

36.03.00 Time is the essence of the Contract and the Contractor shall be responsible for performance of his works in accordance with the specified construction schedule. If at any time, the Contractor is falling behind the schedule, he shall take necessary action to make good for such delays by increasing his work force or by working overtime or otherwise accelerate the progress of the work to comply with the schedule and shall communicate such actions in writing to the Employer, satisfying that his action will compensate for the delay. The Contractor shall not be allowed any extra compensation for such action.

36.04.00 The Employer shall however not be responsible for provision of additional labour and/or materials or supply or any other services to the Contractor except for the co-ordination work between various Contractors as set out earlier.

37.00.00 FIELD OFFICE RECORDS

The Contractor shall maintain at his Site Office up-to-date copies of all drawings, specifications and other Contract Documents and any other supplementary data complete with all the latest revisions thereto. The Contractor shall also maintain in addition the continuous record of all changes to the above Contract Documents, drawings, specifications, supplementary data, etc. effected at the field and on completion of his total assignment under the Contract shall incorporate all such changes on the drawings and other Engineering data to indicate as installed conditions of the equipment furnished and erected under the Contract. Such drawings and Engineering data shall be submitted to the Employer in required number of copies.
38.00.00 CONTRACTOR’S MATERIALS BROUGHT ON TO SITE

38.01.00 The Contractor shall bring to Site all equipment, components, parts, materials, including construction equipment, tools and tackles for the purpose of the Works under intimation to the Employer. All such goods shall, from the time of their being brought vest in the Employer, but may be used for the purpose of the Works only and shall not on any account be removed or taken away by the Contractor without the written permission of the Employer. The Contractor shall nevertheless be solely liable and responsible for any loss or destruction thereof and damage thereto.

38.02.00 The Employer shall have a lien on such goods for any sum or sums which may at any time be due or owing to him by the Contractor, under, in respect of or by reasons of the Contract. After giving a fifteen (15) days notice in writing of his intention to do so, the Employer shall be at liberty to sell and dispose off any such goods, in such manner as he shall think fit including public auction or private treaty and to apply the proceeds in or towards the satisfaction of such sum or sums due as aforesaid.

38.03.00 After the completion of the Works, the Contractor shall remove from the Site under the direction of the Employer the materials such as construction equipment, erection tools and tackles, scaffolding etc. with the written permission of the Employer. If the Contractor fails to remove such materials, within fifteen (15) days of issue of a notice by the Employer to do so then the Employer shall have the liberty to dispose off such materials as detailed under as specified at clause no 38.02.00- of this chapter and credit the proceeds thereto to the account of the Contractor.

39.00.00 PROTECTION OF PROPERTY AND CONTRACTOR’S LIABILITY

39.01.00 The Contractor shall be responsible for any damage resulting from his operations. He shall also be responsible for protection of all persons including members of public and employees of the Employer and the employees of other Contractors and Sub-Contractors and all public and private property including structures, building, other plants and equipments and utilities either above or below the ground.

39.02.00 The Contractor will ensure provision of necessary safety equipment such as barriers, sign - boards, warning lights and alarms, etc. to provide adequate protection to persons and property. The Contractor shall be responsible to give reasonable notice to the Employer and the Employers of public or private property and utilities when such property and utilities are likely to get damaged or injured during the performance of his Works and shall make all necessary arrangements with such Employers, related to removal and/or replacement or protection of such property and utilities.

40.00.00 PAINTING

All exposed metal parts of the equipment including pipings, structure railings, etc. wherever applicable, after installation unless otherwise surface protected, shall be first painted with at least two coats of suitable primer which matches the shop primer paint used, after thoroughly cleaning all such parts of all dirt, rust, scales, greases, oils and other foreign materials by wire brushing, scraping or sand blasting and the same being inspected and approved by the Employer for painting. Afterwards, the above parts shall be finished painted with three coats of allowed resin machinery enamel paints. The minimum thickness of paint film shall not be less than 100 microns. The
quality of the finish paint shall be as per the standards of Bureau of Indian Standards (BIS) or equivalent and to be of the colour as approved by the Employer.

### INSURANCE

1. **41.00.00**  
   In addition to the conditions covered under the Clause entitled “Insurance” in Section General Conditions of Contract (GCC), the following provisions will also apply to the portion of works to be done beyond the Contractor’s own or his Sub-Contractor’s manufacturing Works.

2. **41.02.00**  
   **Workmen’s Compensation Insurance**  
   This insurance shall protect the Contractor against all claims applicable under the Workmen’s Compensation Act, 1948 (Government of India). This policy shall also cover the Contractor against claims for injury, disability disease or death of his or his Sub-Contractor’s employees, which for any reason are not covered under the Workmen’s Compensation Act, 1948. The liabilities shall not be less than the following:

   - Workmen’s Compensation  
     - As per Statutory Provisions
   - Employee’s Liability  
     - As per Statutory Provisions

3. **41.03.00**  
   **Comprehensive Automobile Insurance**  
   This insurance shall be in such a form to protect the Contractor against all claims for injuries, disability, disease and death to members of public including the Employer’s men and damage to the property of other arising from the use of motor vehicles during on or off the Site operations, irrespective of the Ownership of such vehicles. The liability covered shall be as herein indicated:

   - Fatal Injury  
     - Rs.100,000 each person  
     - Rs.200,000 each occurrence
   - Property Damage  
     - Rs.100,000 each occurrence

4. **41.04.00**  
   **Comprehensive General Liability Insurance**  
   The insurance shall protect the Contractor against all claims arising from injuries, disabilities, disease or death of members of public or damage to property of others, due to any act or omission on the part of the Contractor, his agents, his employees, his representatives and Sub-Contractors or from riots, strikes and civil commotion. This insurance shall also cover all the liabilities of the Contractor arising out of the Clause entitled “Defence of Suits” in Section General Conditions of Contract (GCC).

   - The hazards to be covered will pertain to all the Works and areas where the Contractor, his Sub-Contractors, his agents and his employees have to perform work pursuant to the Contract.

   - The above are only illustrative list of insurance covers normally required and it will be the responsibility of the Contractor to maintain all necessary insurance coverage to the extent both in time and amount to take care of all his liabilities either direct or indirect, in pursuance of the Contract.
42.00.00 UNFAVOURABLE WORKING CONDITIONS

The Contractor shall confine all his field operations to those works which can be performed without subjecting the equipment and materials to adverse effects during inclement weather conditions, like monsoon, storms, etc. and during other unfavourable construction conditions. No field activities shall be performed by the Contractor under conditions which might adversely affect the quality and efficiency thereof, unless special precautions or measures are taken by the Contractor in a proper and satisfactory manner in the performance of such Works and with the concurrence of the Employer. Such unfavourable construction conditions will in no way relieve the Contractor of his responsibility to perform the Works as per the schedule.

43.00.00 PROTECTION OF MONUMENTS AND REFERENCE POINTS

The Contractor shall ensure that any finds such as relic, antiquity, coins, fossils, etc. which he may come across during the course of performance of his Works either during excavation or elsewhere, are properly protected and handed over to the Employer. Similarly the Contractor shall ensure that the bench marks, reference points, etc., which are marked either with the help of Employer or by the Employer shall not be disturbed in any way during the performance of his Works. If, any work is to be preformed which disturb such reference, the same shall be done only after these are transferred to other suitable locations under the direction of the Employer. The Contractor shall provide all necessary materials and assistance for such relocation of reference points etc.

44.00.00 WORK & SAFETY REGULATIONS

44.01.00 The Contractor shall ensure proper safety of all the workmen, materials, plant and equipments belonging to him or to Employer or to others, working at the Site. The Contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislation and the Employer as he may deem necessary.

44.02.00 The Contractor will notify well in advance to the Employer of his intention to bring to the Site any container filled with liquid or gaseous fuel or explosive or petroleum substance or such chemicals which may involve hazards. The Employer shall have the right to prescribe the conditions, under which such container is to be stored, handled and used during the performance of the works and the Contractor shall strictly adhere to and comply with such instructions. The Employer shall have the right at his sole discretion to inspect any such container or such construction plant/equipment for which material in the container is required to be used and if in his opinion, its use is not safe, he may forbid its use. No claim due to such prohibition shall be entertained by the Employer and the Employer shall not entertain any claim of the Contractor towards additional safety provisions/conditions to be provided for/constructed as per the Employer's instructions.

Further, any such decision of the Employer shall not, in any way, absolve the Contractor of his responsibilities and in case, use of such a container or entry thereof into the Site area is forbidden by the Employer, the Contractor shall use alternative methods with the approval of the Employer without any cost implication to the Employer or extension of work schedule.
<table>
<thead>
<tr>
<th>CLAUSE NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.03.00</td>
<td>Where it is necessary to provide and/or store petroleum products or petroleum mixtures and explosives, the Contractor shall be responsible for carrying-out such provision and/or storage in accordance with the rules and regulations laid down in Petroleum Act 1934, Explosives Act, 1948, and Petroleum and Carbide of Calcium Manual published by the Chief Inspector of Explosives of India. All such storage shall have prior approval of the Employer. In case, any approvals are necessary from the Chief Inspector (Explosives) or any statutory authorities, the Contractor shall be responsible for obtaining the same.</td>
</tr>
<tr>
<td>44.04.00</td>
<td>All equipment used in construction and erection by Contractor shall meet Indian/International Standards and where such standards do not exist, the Contractor shall ensure these to be absolutely safe. All equipments shall be strictly operated and maintained by the Contractor in accordance with manufacturer’s operation Manual and safety instructions and as per Guidelines/Rules of Employer in this regard.</td>
</tr>
<tr>
<td>44.05.00</td>
<td>Periodical Examinations and all tests for all lifting/hoisting equipment &amp; tackles shall be carried-out in accordance with the relevant provisions of Factories Act 1948, Indian Electricity Act 1910 and associated Laws/Rules in force from time to time. A register of such examinations and tests shall be properly maintained by the Contractor and will be promptly produced as and when desired by Employer or by the person authorised by him.</td>
</tr>
<tr>
<td>44.06.00</td>
<td>The Contractor shall be fully responsible for the safe storage of his and his Sub-Contractor’s radioactive sources in accordance with BARC/DAE (Bhabha Atomic Research Centre/ Department of Atomic Energy, Govt. of India) Rules and other applicable provisions. All precautionary measures stipulated by BARC/DAE in connection with use, storage and handling of such material will be taken by Contractor.</td>
</tr>
<tr>
<td>44.07.00</td>
<td>The Contractor shall provide suitable safety equipment of prescribed standard to all employees and workmen according to the need, as may be directed by Employer who will also have right to examine these safety equipments to determine their suitability, reliability, acceptability and adaptability.</td>
</tr>
<tr>
<td>44.08.00</td>
<td>Where explosives are to be used, the same shall be used under the direct control and supervision of an expert, experienced, qualified and competent person strictly in accordance with the Code of Practices/Rules framed under Indian Explosives Act pertaining to handling, storage and use of explosives.</td>
</tr>
<tr>
<td>44.09.00</td>
<td>The Contractor shall provide safe working conditions to all workmen and employees at the Site including safe means of access, railings, stairs, ladders, scaffoldings etc. The scaffoldings shall be erected under the control and supervision of an experienced and competent person. For erection, good and standard quality of material only shall be used by the Contractor.</td>
</tr>
<tr>
<td>44.10.00</td>
<td>The Contractor shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the Employer or other Contractors under any circumstances, whatsoever, unless expressly permitted in writing by the Employer to handle such fuses, wiring or electrical equipment.</td>
</tr>
<tr>
<td>44.11.00</td>
<td>Before the Contractor connects any electrical appliances to any plug or socket belonging to the other Contractor or Employer, he shall:</td>
</tr>
</tbody>
</table>
|           | (a.) Satisfy the Employer that the appliance is in good working condition:
(b.) Inform the Employer of the maximum current rating, voltage and phases of the appliances;

(c.) Obtain permission of the Employer detailing the sockets to which the appliances may be connected.

44.12.00 The Employer will not grant permission to connect until he is satisfied that;

(a.) The appliance is in good condition and is fitted with suitable plug;

(b.) The appliance is fitted with a suitable cable having two earth conductors, one of which shall be an earthed metal sheath surrounding the cores.

44.13.00 No electric cable in use by the Contractor/Employer will be disturbed without prior permission. No weight of any description will be imposed on any cable and no ladder or similar equipment will rest against or attached to it.

44.14.00 No repair work shall be carried out on any live equipment. The equipment must be declared safe by the Employer and a permit to work shall be issued by the Employer before any repair work is carried out by the Contractor. While working on electric lines/equipments whether live or dead, suitable type and sufficient quantity of tools will have to be provided by Contractor to electricians/workmen/officers.

44.15.00 The Contractors shall employ necessary number of qualified, full time Electricians/Electrical Supervisors to maintain his temporary electrical installations.

44.16.00 The Contractor employing more than 250 workmen whether temporary, casual, probationer, regular or permanent or on contract, shall employ atleast one full time officer exclusively as Safety Officer to supervise safety aspects of the equipments and workmen, who will co-ordinate with the Employer Safety Officer. In case of work being carried out through sub-Contractors, the Sub- Contractor’s workmen/employees will also be considered as the Contractor’s employees/workmen for the above purpose.

The name and address of such Safety Officer of Contractor will be promptly informed in writing to Employer with a copy to Safety Officer-Incharge before he starts work or immediately after any change of the incumbent is made during currency of the Contract.

44.17.00 In case any accident occurs during the construction/erection or other associated activities undertaken by the Contractor thereby causing any minor or major or fatal injury to his employees due to any reason, whatsoever, it shall be the responsibility of the Contractor to promptly inform the same to the Employer in prescribed form and also to all the authorities envisaged under the applicable laws.

44.18.00 The Employer shall have the right at his sole discretion to stop the work, if in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and/or property, and/or equipments. In such cases, the Contractor shall be informed in writing about the nature of hazards and possible injury/accident and he shall comply to remove shortcomings promptly. The Contractor after stopping the specific work can, if felt necessary appeal against the order of stoppage of work to the Employer within 3 days of such stoppage of work.
and decision of the Employer in this respect shall be conclusive and binding on the Contractor.

44.19.00 The Contractor shall not be entitled for any damages/ compensation for stoppage of work due to safety reasons as provided in para 44.18.00 and the period of such stoppage of work will not be taken as an extension of time for completion of the facilities and will not be the ground for waiver of levy of liquidated damages.

44.20.00 The Contractor shall follow and comply with all Safety Rules of the Employer, relevant provisions of applicable laws pertaining to the safety of workmen, employees plant and equipment as may be prescribed from time to time without any demur, protest or contest or reservation. In case of any inconformity between statutory requirement and Safety Rules of the Employer referred above, the later shall be binding on the Contractor unless the statutory provisions are more stringent.

44.21.00 If the Contractor fails in providing safe working environment as per the Employer's Safety Rules or continues the work even after being instructed to stop work by the Employer Manager as provided 44.18.00, the Contractor shall promptly pay to the Employer, on demand by the Employer compensation at the rate of Rs. 5,000/- per day or part thereof till the instructions are complied with and so certified by the Employer. However, in case of accident taking place causing injury, to any individual, the provisions contained in paragraph 44.22.00 shall also apply in addition to compensation mentioned in this paragraph.

44.22.00 If the Contractor does not take all safety precautions and/or fails to comply with the Safety Rules as prescribed by the Employer or under the applicable law for the safety of the equipment and plant and for the safety of personnel and the Contractor does not prevent hazardous conditions which cause injury to his own employees or employees of other Contractors, or the Employer's employees or any other person who are at Site or adjacent thereto, the Contractor shall be responsible for payment of compensation to Employer as per the following schedule:-

<table>
<thead>
<tr>
<th>Description</th>
<th>Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Fatal injury or accident</td>
<td>Rs. 1,00,000/-</td>
</tr>
<tr>
<td>2 Major injuries or accident</td>
<td>Rs. 20,000/-</td>
</tr>
</tbody>
</table>

Permanent disablement shall have same meaning as indicated in Workmen’s Compensation Act. The compensation mentioned above shall be in addition to the compensation payable to the workmen/employees under the relevant provisions of the Workmen’s Compensation Act and rules framed thereunder or any other applicable laws as applicable from time to time. In case the Employer is made to pay such Compensation then the Contractor is liable to reimburse the Employer such amount in addition to the compensation indicated above.

44.23.00 If the Contractor observes all the Safety Rules and Codes, Statutory Laws and Rules during the currency of Contract awarded by the Employer and no accident occurs then the Employer may consider the performance of the Contractor and award suitable “ACCIDENT FREE SAFETY MERITORIOUS AWARD” as per scheme as may be announced separately from time to time.
**FOREIGN PERSONNEL**

45.01.00 The Contractor shall submit to the Employer data on all personnel he proposes to bring into India from abroad for the performance of the Works under the Contract, at least sixty (60) days prior to their departure to India. Such data will include for each person the name, his present address, his assignment and responsibility in connection with the works, and a short resume of his qualification, experience etc. in relation to the work to be performed by him.

45.02.00 Any person unsuitable and unacceptable to the Employer shall not be brought to India. Any person brought to India, if found unsuitable or unacceptable by the Employer, the Contractor shall within a reasonable time make alternate arrangements for providing a suitable replacement and repatriation of such unsuitable personnel.

45.03.00 No person brought to India for the purposes of the works shall be repatriated without the consent of the Employer in writing, based on a written request from the Contractor for such repatriation giving reasons for such an action to the Employer. The Employer may give permission for such repatriation provided he is satisfied that the progress of work will not suffer due to such repatriation.

45.04.00 The cost of passports, visas and all other travel expenses to and from India, incurred by the Contractor shall be to his account. The Employer will not provide any residential accommodation and/or furniture for any of the Contractor's personnel including foreign personnel and Contractor shall make his own arrangements for such facilities in the area allotted at Site, to him by the Employer for that purpose.

45.05.00 The Contractor and his expatriate personnel shall respect all Indian Acts, Laws, rules and regulations and shall not in any way interfere with Indian political and religious affairs and shall conform to any other rules and regulations which the Government of India and the Employer may establish from time to time, on them. The Contractor's expatriate personnel shall work and live in close co-operation and coordination with their co-workers and the community and shall not engage themselves in any other employment neither part-time or full-time nor shall they take part in any local politics.

45.06.00 The Employer shall assist the Contractor, to the extent possible, in obtaining necessary permits to travel to India and back, by issue of necessary certificates and other information needed by the Government agencies.

**FOUNDATION DRESSING & GROUTING FOR EQUIPMENT/ EQUIPMENT BASES**

46.01.00 The surfaces of foundations shall be dressed to bring the top surface of the foundations to the required level, prior to placement of equipment/equipment bases on the foundations.

46.02.00 All the equipment/ equipment bases, shall be grouted and finished as per these specifications unless otherwise recommended by the equipment manufacturer.

46.03.00 The concrete foundation surfaces shall be properly prepared by chipping, grinding as required to bring the top of such foundation to the required level, to provide the necessary roughness for bondage and to assure enough bearing strength.
46.04.00 Grout

The grout shall be high strength grout having a minimum characteristic compressive strength of 60 N/mm² at 28 days. The grout shall be chloride-free, cement based, free flowing, non-metallic grout.

The Grout shall have good flowability even at very low water/grout powder ratio.

The Grout shall have characteristics of controlled expansion to be able to occupy its original volume to fill the voids and to compensate for shrinkage. Grout shall be of pre-mix variety so that only water needs to be added before use.

The mixing of the Grout shall conform to the recommendations of the manufacturer of the Grout.

46.05.00 Placing of Grout

46.05.01 After the base has been prepared, its alignment and level has been checked and approved and before actually placing the grout, a low dam shall be set around the base at a distance that will permit pouring and manipulation of the grout. The height of such dam shall be at least 25mm above the bottom of the base. Suitable size and number of chains shall be introduced under the base before placing the grout, so that such chains can be moved back & forth to push the grout into every part of the space under the base.

46.05.02 The grout shall be poured either through grout holes if provided or shall be poured at one side or at two adjacent sides to make the grout move in a solid mass under the base and out in the opposite side. Pouring shall be continued until the entire space below the base is thoroughly filled and the grout stands at least 25 mm higher all around than the bottom of the base. Enough care should be taken to avoid any air or water pockets beneath the bases.

46.05.03 In addition to the above, recommendations of Grout manufacturer shall also be followed.

46.06.00 Finishing of the Edges of the Grout

The poured grout should be allowed to stand undisturbed until it is well set. Immediately thereafter, the dam shall be removed and grout which extends beyond the edges of the structural or equipment base plates shall be cut off, flushed and removed. The edges of the grout shall then be pointed and finished with 1:2 cement mortar pressed firmly to bond with the body of the grout and smoothened with a tool to present a smooth vertical surface. The work shall be done in a clean and scientific manner and the adjacent floor spaces, exposed edges of the foundations, and structural steel and equipment base plates shall be thoroughly cleaned of any spillage of the grout.

46.07.00 Checking of Equipment After Grouting

After the grout is set and cured, the Contractor shall check and verify the alignment of equipments, alignment of shafts of rotating machinery, the slopes of all bearing pedestals, centering of rotors with respect to their sealing bores, couplings, etc. as applicable and the like items to ensure that no displacement had taken place.
during grouting. The values recorded prior to grouting shall be used during such post grouting check- up and verifications. Such pre and post grout records of alignment details shall be maintained by the Contractor in a manner acceptable to the Employer.

47.00.00 SHAFT ALIGNMENTS

All the shafts of rotating equipment shall be properly aligned to those of the matching equipments to as perfect an accuracy as practicable. The equipment shall be free from excessive vibration so as to avoid overheating of bearings or other conditions which may tend to shorten the life of the equipment. The vibration level of rotating equipments measured at bearing housing shall not exceed forty (40) microns and shall conform to VDI 2056. All bearings, shafts and other rotating parts shall be thoroughly cleaned and suitably lubricated before starting.

48.00.00 DOWELLING

All the motors and other equipment shall be suitably doweled after alignment of shafts with tapered machined dowels as per the direction of the Employer.

49.00.00 CHECK OUT OF CONTROL SYSTEMS

After completion of wiring, cabling furnished under separate specification and laid and terminated by the Employer, the Contractor shall check out the operation of all control systems for the equipment furnished and installed under these specifications and documents.

50.00.00 COMMISSIONING SPARES

50.01.00 It will be the responsibility of the Contractor to provide all commissioning spares including consumable spares required for initial operation till the Completion of Facilities. The Contractor shall furnish a list of all commissioning spares within 60 days from the date of Notification of Award and such list shall be reviewed by the Employer and mutually agreed to. However, such review and agreement will not absolve the Contractor of his responsibilities to supply all commissioning spares so that initial operation do not suffer for want of commissioning spares. All commissioning spares shall be deemed to be included in the scope of the Contract at no extra cost to the Employer.

50.02.00 These spare will be received and stored by the Contractor atleast 3 months prior to the schedule date of commencement of initial operation of the respective equipment and utilised as and when required. The unutilised spares and replaced parts, if any, at the end of successful completion of guarantee tests shall be the property of the Contractor and he will be allowed to take these parts back at his own cost with the permission of Employer.

51.00.00 CABLING

51.01.00 All cables shall be supported by conduits or cable tray run in air or in cable channels. These shall be installed in exposed runs parallel or perpendicular to dominant surfaces with right angle turn made of symmetrical bends or fittings. When cables are run on cable trays, they shall be clamped at a minimum intervals of 2000mm or otherwise as directed by the Employer.
51.02.00 Each cable, whether power or control, shall be provided with a metallic or plastic tag of an approved type, bearing a cable reference number indicated in the cable and conduit list (prepared by the Contractor), at every 5 meter run or part thereof and at both ends of the cable adjacent to the terminations. Cable routing is to be done in such a way that cables are accessible for any maintenance and for easy identification.

51.03.00 Sharp bending and kinking of cables shall be avoided. The minimum radii for PVC insulated cables 1100 V grade shall be 15 D where D is the overall diameter of the cable. Installation of other cables like high voltage, coaxial, screened, compensating, mineral insulated shall be in accordance with the cable manufacturer’s recommendations. Wherever cables cross roads and water, oil, sewage or gaslines, special care should be taken for the protection of the cables in designing the cable channels.

51.04.00 In each cable run some extra length shall be kept at a suitable point to enable one or two straight through joints to be made, should the cable develop fault at a later date.

51.05.00 Control cable terminations shall be made in accordance with wiring diagrams, using identifying codes subject to the Employer’s approval. Multicore control cable jackets shall be removed as required to train and terminate the conductors. The cable jacket shall be left on the cable, as far as possible, to the point of the first conductor branch. The insulated conductors from which the jacket is removed shall be neatly twined in bundles and terminated. The bundles shall be firmly but not tightly tied utilising plastic or nylon ties or specifically treated fungus protected cord made for this purpose. Control cable conductor insulation shall be securely and evenly cut.

51.06.00 The connectors for control cables shall be covered with a transparent insulating sleeve so as to prevent accidental contact with ground or adjacent terminals and shall preferably terminate in Elmex terminals and washers. The insulating sleeve shall be fire resistant and shall be long enough to over pass the conductor insulation. All control cables shall be fanned out and connection made to terminal blocks and test equipment for proper operation before cables are corded together.

52.00.00 EQUIPMENT DELIVERY AND ERECTION

52.01.00 General Requirements

(a.) This part covers Contractor’s responsibilities for packing, shipping, warehousing and the installation of all equipment and materials furnished and installed under this specification.

(b.) The Contractor shall submit for Employer’s approval draft manual for Equipment Delivery and Erection (EDE Manual) covering detailed instructions, write up, technical data, drawings, check-lists, documentation formats for all activities after equipment manufacture upto installation of equipment. This manual shall cover general instructions for all equipment and specific instructions for individual equipment wherever required and shall include at least the following :

(1.) Instructions for packing, shipping, receiving handling, ware-housing and storage.
<table>
<thead>
<tr>
<th>52.02.00 Crating</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a.) All equipment and materials shall be suitably coated, wrapped, or covered and boxed or crated for moist humid tropical shipment and to prevent damage or deterioration during handling and storage at the site.</td>
</tr>
<tr>
<td>(b.) Equipment shall be packed with suitable desiccants, sealed in water proof vapour-proof wrapping and packed in lumber of plywood enclosures, suitably braced, tied and skidded. Lumber enclosures shall be solid, not slatted.</td>
</tr>
<tr>
<td>(c.) Desiccants shall be either silica gel or calcium sulphate, sufficiently ground to provide the required surface area and activated prior to placing in the packaging. Calcium sulphate desiccants shall be of a chemical nature to absorb moisture. In any case, the desiccant shall not be of a type that will absorb enough moisture to go into solution. Desiccants shall be packed in porous containers, strong enough to withstand handling encountered during normal shipment. Enough desiccant shall be used for the volumes enclosed in wrapping.</td>
</tr>
<tr>
<td>(d.) Review by the Employer of the Contractor's proposed packaging methods shall not relieve the Contractor of responsibility for damage or deterioration to the equipment and materials specified.</td>
</tr>
<tr>
<td>(e.) All accessory items shall be shipped with the equipment. Boxes and crates containing accessory items shall be marked so that they are identified with the main equipment. The contents of each box and crates shall be indicated by markings on the exterior.</td>
</tr>
<tr>
<td>(f.) All boxes, crates, cases bundles, loose pieces, etc. shall be marked consecutively from No.1 upward throughout all shipments from a given port to completion of the order without repeating the same number.</td>
</tr>
</tbody>
</table>
(g.) An itemized list of contents shall be enclosed inside each case and one other copy securely fastened to the outside of the case in a tin or light weight sheet metal envelope or pocket. The lists shall be plainly marked and placed in accessible locations to facilitate receipt and inspection. The packing list shall indicate whether shipment is partial or complete and shall incorporate the following information on each container, etc., according to its individual shipping number:

1. Export case markings
2. Case number
3. Gross weight and net weight in Kilograms
4. Dimensions in centimeters
5. Complete description of material

(h.) Packaging or shipping units shall be designed within the limitations of unloading facilities and the equipment which will be used for transport. Complications involved with ocean shipment and the limitations of ports, railways and roads shall be considered. It shall be the Contractor's responsibility to investigate these limitations and to provide suitable packaging to permit safe handling during transit and at the job site.

(i.) Electrical equipment, control and instrumentation shall be protected against moisture and water damage. All external gasket surfaces and flange faces, couplings, motor pump shafts, bearing and like items shall be thoroughly cleaned and coated with rust preventive compound as specified above and protected with suitable wood, metal or other substantial type covering to ensure their full protection.

(j.) Equipment having antifriction or sleeve bearings shall be protected by weather tight enclosures.

(k.) Coated surfaces shall be protected against impact, abrasion, discolouration and other damage. Surfaces which are damaged shall be repaired.

(l.) All exposed threaded parts shall be greased and protected with metallic or other substantial type protectors. All female threaded openings shall be closed with forged steel plugs. All pipings, tubing, and conduit equipment and other equipment openings shall be sealed with metallic or other rough usage covers and tapped to seal the interior of the equipment piping, tubing, or conduit.

(m.) Provisions shall be made to ensure that water does not enter any equipment during shipment or in storage at the plant site.

(n.) Returnable containers and special shipping devices shall be returned by the manufacturer's field representative at the Contractor's expense.

(o.) While packaging the material, care shall be taken for the limitation from the point of view of availability of railway wagon sizes in India.
### Factory Assembly

(a.) Instrument enclosures shall be supplied and erected completely in the factory with instrument, air supply and blow down piping with necessary valves, fittings, etc. and also all electrical wiring between the instruments and the enclosure terminal blocks. Control panel and cubicles shall also be fully wired in the factory. Control panel mounted equipments are to be dismounted from the panels before shipment and individually packed for shipment. Electronic control modules of the plug-in type are to be removed from equipment racks after factory checkout and individually packed for shipment. Other equipment shall be fully assembled at the factory, except for necessary shipping splits in panels.

(b.) All separately packaged accessories items and parts shall be shipped with the equipment. Containers for separately packaged items shall be marked so that they are identified with the main equipment. An itemized packing slip, indicating what is in that carton only, shall be attached to the outside and inside of each container used for packing.

A master packing slip covering all accessories items for a given piece of equipment which are shipped in separate containers, shall be attached to one container.

### Equipment Installation

(a.) General Requirements

The Contractor shall furnish all construction materials, tools and equipment and shall perform all work required for complete installation of all control and instrument equipment furnished under this specification.

Contractor shall prepare detailed installation drawings for each equipment furnished under this specification for Employer's approval. Installation of all equipment/systems furnished by this specification shall be as per Employer's approval.

Erection procedures not specified herein shall be in accordance with the recommendations of the equipment manufacturers. The procedures shall be acceptable to the Employer.

The Contractor shall coordinate his work with other suppliers where their instruments and devices are to be installed under specifications.

(b.) Installation Materials

All materials required for installation, testing and commissioning of the equipment shall be furnished by the Contractor.

(c.) Regulatory Requirements

All installation procedures shall confirm with the accepted good engineering practice and with all applicable governmental laws, regulations and codes.

(d.) Cleaning
All equipment shall be cleaned of all sand, dirt and other foreign materials immediately after removal from storage and before the equipment is brought inside the power plant building or to other installation sites. All piping and tubes shall be air blown.

(e.) Equipment Assembly

Equipment installed under these specifications shall be assembled if shipped unassembled. The equipment shall be dismantled and reassembled as required to perform the installation and commissioning work described in these specifications.

(f.) Equipment Setting

Field mounted instruments and accessories shall be bracket or sub panel mounted on the nearest suitable firm steel work or masonry. The brackets, stands, supports and other miscellaneous hardware required for mounting instruments and accessories such as receiver gauge, air set, valve manifold, purge-meter etc. shall be furnished and installed. No field mounted instruments shall be installed such that it depends for support or rigidity on the impulse piping or on electrical connection to it.

Indicating type field mounted instruments shall be installed in such a way that centre of indicating dial shall be about 1600-1800mm from operating floor level. Non-indicating type field instruments shall be installed such that operating handle of manifold block / isolating cock comes within 1600 mm from operating floor level.

All free standing instrumentation cabinets and panels shall be located within the construction tolerances of +/- 3 mm of the location dimensions indicated on the Employer's plant arrangement drawings.

(g.) Free-Standing Equipment

Free-standing Cabinets shall be attached to the floor, concrete equipment bases or supporting steel as indicated on the manufacturer's drawings and the Employer's Plant Arrangement Drawings. The cabinets shall be shimmed for proper alignment before bolting them to the floor. Adjacent enclosures shall be shimmed to maintain mutually level appearance before they are attached to floor. Vibration dampening mounts shall be installed between supporting structures and panels when specified.

(h.) Non-free Standing Equipment

Non-free standing local enclosures and cabinets shall be mounted in accessible locations on columns, walls, or stands in locations as indicated on the Employer's Plant Arrangement Drawings. Bracket and stands shall be fabricated as required to install the local enclosures and cabinets in a workman like manner.

Rough edges and welds on all fabricated supports shall be ground smooth. The supports shall be finished with two coats of primer and two coats of paint as specified in this part.
### (i.) Equipment Location

All individual items of equipment not located in cabinets or on panels and racks are located approximately according to the floor elevation and the nearest building column designated by the Employer.

Solenoid valves not located in enclosures or mounted on valves shall be mounted in easily accessible protected locations near the components with which they are associated.

All brackets, stands, supports and other miscellaneous hardware required for mounting devices shall be furnished and installed.

Thermometers shall be installed in the process lines and ducts as required and adjusted for ease in reading.

Permanent temperature wells on the main steam, hot reheat and cold reheat piping shall not be installed until steam blowing has been completed. Temporary temperature wells shall be installed in the main and reheat steam piping during steam blow and discarded after completion.

Any required adapting hardware such as pipe bushings, nipples, drilled caps and the like shall be provided for complete installation of control devices into process connections.

For location of C&I related equipment/devices, the requirement specified elsewhere in the technical specification may be referred.

### (j.) Installation of Field Mounted Instruments and Devices

The Contractor shall submit installation drawings for all field mounted equipment furnished under this specification for Employer's approval. These drawings shall meet the requirements of this specification, installation drawings, applicable codes and standards and recommendations of manufacturers of instruments/devices. All installation work under this specification shall be strictly as per installation drawings approved by the Employer during detailed engineering stage.

In addition to above relevant Portion as specified elsewhere in technical specification may be referred.

### (k.) Piping Connections

All equipment having piping connections shall be levelled, aligned and wedged in place but shall not be grouted or bolted prior to the initial fitting and alignment of connecting piping. All equipment shall, however, be grouted or bolted to its foundation prior to final bolting or welding of the connection piping.

All flanged joints shall be checked and retightened after approximately 10 days of operation at normal operating temperature.
(l.) Equipment Checkout

All equipment shall be cleaned after installation. Equipment subject to pressure differentials shall be checked for leakage.

After erection, all equipment having moving parts, having electrical apparatus, or subject to pressure differentials shall be trial-operated.

(m.) Defects

All defects in erection shall be corrected to the satisfaction of the Employer and the Project Manager. The dismantling and reassembly of Contractor furnished equipment to remove defective parts, replace parts, or make adjustments shall be included as a part of the work under these specifications.

The removal of control and instrument equipment in order to allow bench calibration, if required, and the re-installation of the said equipment after calibration shall also be included as a part of the work under these specifications.

(n.) Equipment Protection

All equipment to be erected under these specifications shall be protected from damage of any kind from the time of contract award until commissioning of each unit.

The equipment shall be protected during storage as described herein.

Equipment shall be protected from weld spatter during construction.

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

Equipment having glass components such as gauges, or equipment having other easily breakable components, shall be protected during the construction period with plywood enclosures or other suitable means. Broken, stolen, or lost components shall be replaced by the Contractor.

Machine finished surfaces, polished surfaces, or other bare metal surfaces which are not to be painted, such as machinery shafts and couplings shall be provided temporary protection during storage and constructional periods by a coating of a suitable non-drying, oily type, rust preventive compound.

53.00.00 WELDING - SPECIAL REQUIREMENTS

If the manufacturer has special requirements relating to the welding procedures for welds at the terminals of the equipments to be performed under separate specifications, the requirements shall be submitted to the Project Manager in advance of commencement of erection work.
## 54.00.00 Deviations Dispositioning:

Any deviation to the contract and employer approved documents shall be properly recorded in the format prescribed by NTPC. All the deviations shall be brought to the knowledge of employer’s representative for suitable dispositioning.

## 55.00.00 Non-Destructive Testing (NDT):

The contractor shall record results of NDTs carried out at site in the format acceptable to employer. All the radiographs & its report duly signed & correlated to the job shall be handed over to the employer. Sensitivity of all the test equipment shall be compatible to the job & acceptance norms agreed.

## 56.00.00 Testing Equipment & Facilities:

Contractor shall provide the testing equipment and facilities necessary to carry out tests & inspections.
### STANDARD CHECKLIST (TYPICAL)

Commissioning/Testing Essential pre-requisite

(a.) Mechanical

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i.)</td>
<td>Manually operated valve</td>
</tr>
<tr>
<td>(ii.)</td>
<td>Electrically operated valve</td>
</tr>
<tr>
<td>(iii.)</td>
<td>Pneumatically actuated valve</td>
</tr>
<tr>
<td>(iv.)</td>
<td>Hydraulically actuated valve</td>
</tr>
<tr>
<td>(v.)</td>
<td>Safety valve</td>
</tr>
<tr>
<td>(vi.)</td>
<td>Butterfly valve (electrically operated)</td>
</tr>
<tr>
<td>(vii.)</td>
<td>Butterfly valve (manually operated)</td>
</tr>
<tr>
<td>(viii.)</td>
<td>Butterfly valve (four way-electrical)</td>
</tr>
<tr>
<td>(ix.)</td>
<td>Non-return valve (including hydraulic/pneumatic FCNRVS)</td>
</tr>
<tr>
<td>(x.)</td>
<td>Relief valve</td>
</tr>
<tr>
<td>(xi.)</td>
<td>Differential pressure regulating valve</td>
</tr>
<tr>
<td>(xii.)</td>
<td>Float operated valves</td>
</tr>
</tbody>
</table>

### Pumps

| (xiii.) | Pump Low Pressure Centrifugal (Motor Driven) |
| (xiv.) | Pump up to 350 HP (260 Kw) |
| (xv.) | Pump Sump Installation |
| (xvi.) | Gear Pump/Screw Pump |

### PIPE WORK SYSTEM

| (xvii.) | Water services |
| (xviii.) | Oil Resistant Fluid System |
| (xix.) | Air services (compressor) |
| (xx.) | High pressure services |
(xxi.) Constant load support

(xxii.) Spring supports

(xxiii.) Hangers and other supports

**STRAINER AND FILTER**

(xxiv.) Strainer/Filter Basket Type

**Heat Exchanger (Scoop Coupling)**

(xxv.) Heat exchanger (general)

(xxvi.) Heat Exchanger-Oil/Water

**FANS AND COMPRESSORS**

(xxvii.) Fans-Non-pressure Lubricated

(xxviii.) Fans-Axial flow pressure Lubricated

(xxix.) Compressors-General

**GATES**

(xxx.) Manually operated gate

(xxxi.) Electrically operated gate

**Duct Work**

(xxxii.) Ventilation ducting

(xxxiii.) Expansion Joints

(xxxiv.) Observations & Access Door

**HOISTS AND ELEVATORS**

(xxxv.) Electric Hoist / Elevator

(xxxvi.) Travel Support Structure For Hoists / Elevator

(xxxvii.) Long travel & cross traverse motion of hoists

(xxxviii.) Main aux. Hoist motion

**POWER TRANSMISSION**

(xxxix.) Power transmission gear box

(xl.) Bearing

(xli.) Fluid Couplings
(b.) Electrical

D.C. Motor

HV squirrel cage induction motor

415 V squirrel cage induction motor

Motor operated actuators

HT Switchgears

LT Switchgears/MCC

Standard Checklists for all types of relays used in Switchgears Protection System

PT Carriage and Cubicles

Cable/Bus Duct/Bus Bars

Contractor Module

Switch fuse module

Master Panel of Lube Oil Panel

Feeder panel of lube oil panel

Space heater and cable module

HT Circuit Breaker

415 V Circuit Breaker

Power cable

Auxiliary cable

D.C. cable

Explosion Proof Electrical Equipment

Junction box

Control transformer module

Soot blower sequence panel

Brush gear assembly
Aux. Control and relay panel desk
Indicating instrument
Recording instrument
Integrating instrument
Level switch (float actuated)
Level switch (electrode type)
Level Switch Displaced actuated
Level Indicator (Float/Pulley Type)
Local temperature indicators including test procedure
Resistance Thermometer Element including Test Procedure
Thermocouple element and connecting cable
Thermocouple and Resistance Thermometer Convertor/Transmitter including Test Procedures.
Temperature Switch/Thermostat including test procedures
Cold Junction Boxes
Pressure and Vacuum Gauge
Pressure And Vacuum Switch Including Test Procedure
Differential Pressure Transmitter including test procedure
Differential Pressure switch including test procedure.
Flow Indicator(variable area)
Orifice plate
Tachometer
Vibration measurement
Digital indicator
Moving coil indicator including test procedure
Recorder including test procedure

Electrical auto manual control station

Push button module

Alarm annunciator equipment including test procedure

Test procedure for electronic Modules of DDCMIS

Note: The items which are not part of this specification may not be considered as not applicable.
Annexure-II

BRIEF WIRE UP ON THE CONTENTS OF TESTING SCHEDULE / COMMISSIONING SCHEDULE

Testing Schedules should be designed to ensure that the plant area, equipment or apparatus are tested and commissioned and will operate as per the employer's specifications and good engineering practices.

Testing Schedule/Commissioning Schedule is required to be of a standard format in order to maintain consistency of presentation, content and reporting.

Testing Schedule/Commissioning Schedule should contain the following sections to make the document a self contained one:

(c.) Plant Details/Design data

(d.) Testing Objective/Proposals

(e.) STATE OF THE PLANT

   Erection Status with respect to Mech. Elect

   AVAILABILITY OF THE SERVICES REQUIRED

   SAFETY REQUIREMENTS AS PER MANUFACTURER’S

(f.) Test method including completion/acceptance criteria

(g.) RESULTS

(h.) APPENDIX

   TESTING PROGRAMME

   Mech/Elect–Plant item completing list

   List of Drawing/documents required for carrying out the testing.
In accordance with the provisions of GCC Clause 12 (Terms of Payment), the Employer shall pay the Contractor in the following manner and at the following times, on the basis of the Price Break down given in the Price Schedules. Payments will be made in the currencies quoted by the Bidder unless otherwise agreed between the parties. Application for payment in respect of part deliveries may be made by the Contractor as work proceeds.

**TERMS OF PAYMENT**

A. **Schedule No.1 : Plant and Equipment (excluding Mandatory Spares) quoted on CIF (Indian Port-of-entry) basis**

A.1 In respect of Plant and Equipment (excluding mandatory spares) supplied from abroad the following payments shall be made:

For **FOB Price Component of Plant and Equipment**:

1. Fifteen Percent (15%) of the total FOB price components as Initial Advance Payment on:
   
   (i) Acceptance of Notification of Award and Signing of the Contract Agreement.
   
   (ii) Submission of an unconditional Bank Guarantee covering the advance amount which shall be initially kept valid up to (ninety) 90 days beyond the schedule date of Completion of the Facilities under the Package. However, in case of delay in completion of facilities, the validity of this Bank Guarantee shall be extended by the period of such delay. Proforma of Bank Guarantee is enclosed in Section - VII - Bank Guarantee Form for Advance payment.
   
   (iii) Submission of an unconditional Bank Guarantee(s) towards Performance Security(s) in respect of First, Second and Third Contracts (including the Contracts entered into with the Contractor’s Assignee if applicable in case of foreign Contractor) initially valid up to ninety (90) days after the end of Defects Liability Period of all the equipment covered under the contract. The proforma of Bank Guarantee is enclosed in Section - VII - Form of Performance Security.
(iv) In case Joint Deed of Undertaking by the Contractor alongwith his Collaborator forms part of the contract then submission of an unconditional Bank Guarantee from such Collaborator towards faithful performance of the Joint Deed of Undertaking for an amount specified in the deed and valid upto ninety (90) days after the end of Defect Liability Period of all equipment covered under the contract. The proforma of Bank Guarantee(s) shall be as enclosed in Section-III.

(v) Submission of a detailed PERT network based on the work schedule stipulated in Appendix-4 to Form of the Contract Agreement and its approval by the Employer.

(II) Sixty Percent (60%) of FOB price component of the Contract price for each identified equipment upon despatch of equipment from manufacturer's works on pro-rata basis on production of invoices and satisfactory evidence of shipment (which shall be 3 of 3 original Bill of Lading) including Material Despatch Clearance Certificate (MDCC) issued by the Employer's Corporate QA & I representative.

(III) Fifteen Percent (15%) of FOB price component of the Contract Price for each identified equipment on receipt of equipment at site on pro-rata basis and physical verification and certification by the Project Manager of the equipment received and stored at site.

(IV) Ten Percent (10%) of FOB price component of the Contract Price on successful completion of Guarantee Test of entire Coal Handling Plant package and issuance of Operational Acceptance Certificate by the Project Manager.

A.2 Ocean Freight and Marine Insurance Charges (excluding Mandatory Spares parts) for equipment covered above:

One Hundred percent (100%) Ocean Freight and Marine Insurance charges covered in Schedule-1 shall be paid upon shipment of equipment on pro-rata basis to the FOB price of the equipment shipped. The aggregate of all such pro-rata payments shall not exceed the total amount identified in the contract. However, whenever equipment wise Ocean Freight and Marine Insurance charges have been identified in the contract the payment of Ocean Freight and Marine Insurance Charges shall be based on such charges identified in the contract against shipment of equipment.
B. **Schedule No. 2 : Plant and Equipment (excluding Mandatory Spares) quoted on Ex-Works (India) basis**:

In respect of Plant and Equipment supplied from within the Employer’s country the following payment shall be made:

For **Ex-works Price component of Plant and Equipment**:

1. Fifteen Percent (15%) of the total Ex-works price component as Initial Advance Payment on:
   
   i. Acceptance of Notification of Award and Signing of the Contract Agreement.

   ii. Submission of an unconditional Bank Guarantee covering the advance amount which shall be initially kept valid upto (ninety) 90 days beyond the schedule date for successful Completion of the Facilities under the Package. However, in case of delay in completion of facilities, the validity of this Bank Guarantee shall be extended by the period of such delay Proforma of Bank Guarantee is enclosed in Section-VII - Bank Guarantee Form for Advance Payment.

   iii. Submission of an unconditional Bank Guarantee(s) towards Contract Performance Security(s) in respect of First, Second and Third Contracts (including the Contracts entered into with the Contractor’s Assignee, if applicable in case of foreign Contractor) and valid upto (ninety) 90 days after the end of Defects Liability Period of all the equipment covered under the contract. The proforma of Bank Guarantee is enclosed in Section - VII Form of Performance Security.

   iv. In case Joint Deed of Undertaking by the Contractor alongwith his Collaborator forms part of the contract then submission of an unconditional Bank guarantee from such Collaborator towards faithful performance of the Joint Deed of Undertaking for an amount specified in the deed and valid upto ninety (90) days after the end of Defect Liability Period of all equipment covered under the contract. The proforma of Bank Guarantee(s) shall be as enclosed in Section-VII.

   v. Submission of a detailed PERT Network based on the work schedule stipulated in Appendix-4 to Form of the Contract Agreement and its approval by the Employer.
(II) Sixty Percent (60%) of Ex-Works Price component of the Contract price for each identified equipment upon despatch of equipment from manufacturer's works on pro-rata basis on production of invoices and satisfactory evidence of shipment which shall be original Good Receipt/Rail Receipt including Material Despatch Clearance Certificate (MDCC) issued by the Employer.

(III) Fifteen Percent (15%) of Ex-works price component of the Contract Price for each identified equipment on receipt of equipment at site and pro-rata basis and physical verification and certification by the Project Manager of the equipment received and stored at site.

(IV) Ten Percent (10%) of Ex-works price component of the Contract Price on successful completion of Guarantee Tests of entire Coal Handling Plant package and issuance of Operational Acceptance Certificate by the Project Manager.

C. Schedule 1, 2 and 6 : Payment Terms for Mandatory Spares and Recommended Spares (When ordered)

The CIF price component of spares to be supplied from abroad and Ex-works price component of spares to be manufactured or fabricated within the Employer's country shall be paid as under:

(i) Seventy five percent (75%) of CIF/Ex-works price component of the spares : upon despatch to site and against invoices and shipping documents along with Material Despatch Clearance Certificate (MDCC) issued by the Employer.

(ii) Twenty five percent (25%) of CIF/Ex-works price component of the spares : on receipt and storage at site and on physical verifications by the Project Manager.

D. Schedule No. 3 : Local Transportation

(a) All Plant and Equipment excluding Mandatory spares

One hundred Percent (100%) Local Transportation (including port clearance and port charges, and inland insurance charges) for the equipment covered in Schedule-1 and Schedule-2 shall be paid to the Contractor pro-rata to the value of the equipment received at site and on production of invoices by the Contractor. The aggregate of all such prorata payments shall, however, not exceed the total amount identified in the Contract for Local Transportation. However, wherever equipment wise local transportation charges (including insurance charges, Port clearance and Port charges) have been furnished by the Contractor, the payment shall be made after receipt of equipment at site based on the charges so identified in the Contract.
The above terms of payment shall be applicable for Foreign currency portion as well as Local currency portion of the Local Transportation component of the Contract Price, if any.

(b) Hundred Percent (100%) Local Transportation (including inland insurance, port clearance and port charges) for the spares shall be paid to the Contractor pro-rata to the value of spares received at site and on production of invoices by the contractor. The aggregate of all such prorata payments shall, however, not exceed the total amount identified for the Contract of Local Transportation. However, wherever itemwise local transportation charges (including insurance charges, Port clearance and Port charges) have been furnished by the Contractor, the payment shall be made after receipt of spares at site based on the charges so identified in the Contract.

The above terms of payment shall be applicable for Foreign currency portion as well as Local currency portion of the Local Transportation component of the Contract Price, if any.

E. Schedule No. 4 : Installation Services excluding Civil works and Structural Works

The Foreign currency portion as well as Local currency portion of the Installation Services component of the Equipment Price shall be paid as under:

(I) Ten Percent (10%) of the total installation services component of the Contract Price will be paid to the Contractor as Interest bearing advance payment on:

(i) Establishing their office at site preparatory to mobilisation of their erection establishment.

(ii) Submission of an unconditional Bank Guarantee for an equivalent amount, which shall be initially kept valid upto ninety (90) days beyond the schedule date for successful 'Completion of the Facilities' under the Package. However, in case of delay in completion of facilities the validity of this advance Bank Guarantee shall be extended by the period of such delay.

(iii) Acceptance of Notification of Award and Signing of Contract Agreement.
(iv) Submission of unconditional Bank Guarantees towards Contract Performance Securities for First, Second and Third Contracts (including the contracts entered into with the Contractor’s Assignee; if applicable in case of foreign Contractor), initially valid upto ninety (90) days after the end of scheduled Defect Liability Period of all the equipment covered under the Contract. The proforma of Bank Guarantee is enclosed in Section-VII Form of Performance Security.

(v) In case Joint Deed of Undertaking by the Contractor alongwith his Collaborator forms part of the contract then submission of an unconditional Bank guarantee from such Collaborator towards faithful performance of the Joint Deed of Undertaking for an amount specified in the deed and valid upto ninety (90) days after the end of Defect Liability Period of all equipment covered under the contract. The proforma of Bank Guarantee(s) shall be as enclosed in Section-VII.

(vi) Submission of a detailed PERT Network based on the work schedule stipulated in Appendix-4 to Form of the Contract Agreement and its approval by the Employer.

(II) The recovery of the interest component on the above advance amount shall be made from the progressive payments released to the contractor as per clause E(III) of Appendix-1, Part 2 of 2, Section-VII. The amount of interest to be recovered from a particular bill shall be calculated @ 12% per annum on the value of advance corresponding to the %age of total progressive payment being released the period for which the interest is to be calculated shall be reckoned from the date of release of the advance payment to the actual date of release of the said progressive payment or the expiry of the stipulated time frame for release of such progressive payments under the contract, whichever is earlier. The interest on the advance payment shall stand fully recovered on release of all the progressive payments. If the amount payable under any interim bill is not sufficient to cover all deductions to be made for interest on the advance payment and other sums deductible therefrom, the balance outstanding shall be recovered from the next payments immediately falling due.

(III) Seventy Five percent (75%) of the total installation services component of Equipments Price shall be paid against progressive erection of the equipments identified in Schedule-4 (Price Schedules) on certification by the Project Manager for the quantum of work completed and by the Project Manager’s field quality surveillance representative for the successful completion of quality check points involved in the quantum of erection work billed.
(IV) Five percent (5%) of the total Installation service component of Equipment Price will be paid on successful Completion of the Facilities and its Certification by the Project Manager.

(V) Ten percent (10%) of the total installation services component of Equipment Price will be paid on successful completion of Guarantee Tests of entire Coal Handling Plant Package and issuance of Operational Acceptance Certificate by the Project Manager.

F. Schedule No. 4 : Civil Works :

The foreign currency portion as well as Local Currency portion of the Civil Works Price Component of the Contract Price shall be paid as under:

(I) Ten percent (10%) of the total Civil works Price component of the Contract Price will be paid to the contractor as interest advance payment on:

(i) Establishment their office at site in preparatory to commencement of Civil Works.

(ii) Submission of an unconditional Bank Guarantee for an equivalent amount, which shall be initially kept valid upto ninety (90) days beyond the schedule date for successful 'Completion of the Facilities' under the Package. However, in case of delay in completion of facilities the validity of this advance Bank Guarantee shall be extended by the period of such delay.

(iii) Acceptance of Notification of Award and Signing of Contract Agreement.

(iv) Submission of an unconditional Bank Guarantee(s) towards Performance Security(s) in respect of First, Second and Third Contracts (including the Contracts entered into with the Contractor's Assignee, if applicable in case of foreign Contractor) and valid upto ninety (90) days after the end of Defects Liability Period of all the equipment covered under the contract. The proforma of Bank Guarantee is enclosed in Section - VII Form of Performance Security.

(v) In case Joint Deed of Undertaking by the Contractor alongwith his Collaborator forms part of the contract then submission of an unconditional Bank guarantee from such Collaborator towards faithful performance of the Joint Deed of Undertaking for an amount specified in the deed and valid upto ninety (90) days after the end of Defect Liability Period of all equipment covered under the contract. The proforma of Bank Guarantee(s) shall be as enclosed in Section-VII.
(vi) Submission of a detailed PERT Network based on the work schedule stipulated in Appendix-4 to Form of the Contract Agreement and its approval by the Employer.

(II) The recovery of the interest component on the above advance amount shall be made from the progressive payments released to the contractor as per clause F(III) of Appendix-1, Part 2 of 2, Section-VII. The amount of interest to be recovered from a particular bill shall be calculated @ 12% per annum on the value of advance corresponding to the %age of total progressive payment being released the period for which the interest is to be calculated shall be reckoned from the date of release of the advance payment to the actual date of release of the said progressive payment or the expiry of the stipulated time frame for release of such progressive payments under the contract, whichever is earlier. The interest on the advance payment shall stand fully recovered on release of all the progressive payments. If the amount payable under any interim bill is not sufficient to cover all deductions to be made for interest on the advance payment and other sums deductible therefrom, the balance outstanding shall be recovered from the next payments immediately falling due.

(III) Eighty percent (80%) of the total Civil Works Price Component of Contract Price shall be paid progressively an certification by the Project Manager for the quantum of work completed and by Project Manager's field quality surveillance representative for the successful completion of quality check points involved in the quantum of work billed.

(IV) Ten percent (10%) of total Civil Works Price component of Contract price shall be paid an successful completion of Guarantee Test of entire Coal Handling Plant package and issuance of Operational Acceptance Certificate by the Project Manager.

G. Schedule No. 1, 2 & 4 : Structural Works

The Foreign Currency portion as well as Local currency portion of the Structural Works Price Component of the Contract Price shall be paid as under:

(I) Ten Percent (10%) of the total Structural works Price component of the Contract Price will be paid to the Contractor as advance payment on:

   (i) Establishing their office at site in preparatory to commencement of structural works.
(ii) Submission of an unconditional Bank Guarantee for an equivalent amount, which shall be initially kept valid up to ninety (90) days beyond the schedule date for successful 'Completion of the Facilities' under the Package. However, in case of delay in completion of facilities the validity of this advance Bank Guarantee shall be extended by the period of such delay.

(iii) Acceptance of Notification of Award and Signing of Contract Agreement.

(iv) Submission of an unconditional Bank Guarantee(s) towards Performance Security(s) in respect of both First, Second and Third Contracts (including the Contracts entered into with the Contractor’s Assignee, if applicable in case of foreign Contractor) and valid up to ninety (90) days after the end of Defects Liability Period of all the equipment covered under the contract. The proforma of Bank Guarantee is enclosed in Section-VII Form of Performance Security.

(v) In case Joint Deed of Undertaking by the Contractor along with his Collaborator forms part of the contract then submission of an unconditional Bank guarantee from such Collaborator towards faithful performance of the Joint Deed of Undertaking for an amount specified in the deed and valid up to ninety (90) days after the end of Defects Liability Period of all the equipment covered under the contract. The proforma of Bank Guarantee(s) shall be as enclosed in Section-VII.

(vi) Submission of a detailed PERT Network based on the work schedule stipulated in Appendix-4 to Form of the Contract Agreement and its approval by the Employer.

(II) The recovery of the interest component on the above advance amount shall be made from the progressive payments released to the contractor as per clause G(III) to G(VI) of Appendix-1, Part 2 of 2, Section-VII. The amount of interest to be recovered from a particular bill shall be calculated @ 12% per annum on the value of advance corresponding to the %age of total progressive payment being released the period for which the interest is to be calculated shall be reckoned from the date of release of the advance payment to the actual date of release of the said progressive payment or the expiry of the stipulated time frame for release of such progressive payments under the contract, whichever is earlier. The interest on the advance payment shall stand fully recovered on release of all the progressive payments. If the amount payable under any interim bill is not sufficient to cover all deductions to be made for interest on the advance payment and other sums deductible therefrom, the balance outstanding shall be recovered from the next payments immediately falling due.
(III) Forty Percent (40%) of the total Structural Works Price component of Contract Price shall be paid prorata basis on receipt of material at site and physical verification and certification by the Project Manager for the material received and stored at site.

(IV) Eighteen Percent (18%) of the total Structural Works Price component of Contract Price shall be paid on pro-rata basis on fabrication of Structural Steel and certification by the Project Manager on the quantum of work performed and the Project Manager's field quality surveillance representative for successful completion of quality check points involved in the quantum of work.

(V) Twelve Percent (12%) of the total Structural Works Price component of Contract Price shall be paid on pro-rata basis on erection of Structural Steel and certification by the Project Manager on quantum of work performed and by the Project Manager's field quality surveillance representative for successful completion of quality check points involved in the quantum of work.

(VI) Ten percent (10%) of the total Structural Works price component of Contract Price shall be paid on pro-rata basis on final alignment, bolting or welding etc. including primer coats of painting on certification by the Project Manager on quantum of work performed and by the Project Manager field quality surveillance representative for successful completion of quality check points involved in the quantum of work.

(VII) Ten Percent (10%) of the total Structural Works Price Component of Contract Price shall be paid on successful completion of Guarantee Tests of entire Coal Handling Plant Package and issuance of Operational Acceptance Certificate by the Project Manager.

H. Payment terms for Price Adjustment Amount

Any addition due to adjustment to the Contract Price shall be payable in the similar manner as provided in the clauses A1, B, E, F & G above. The price adjustment amount corresponding to advance payment shall be clubbed with the first progressive payment of that equipment. Reduction to the Contract Price, if any, due to price adjustment provisions, shall be effected by recovering 100% of the reduction amount (including advance) from any of the Contractor's bills falling immediately due for payment.
I. Schedule - 7 : Payment Terms for Taxes & Duties

(i) Indian Custom Duties or levies including Stamp Duty and Import Licence Fee if imposed in future levied by the Government of India or any State Government in India on the Plant and Equipment covered in Schedule -1 supplied from abroad (and Schedule-6 when ordered) to be imported into India and which will become the property of the Employer shall be paid directly by the Employer to the Government of India or the concerned authorities. However, if the local laws require such payment of the custom duty to be made by the Contractor, the same shall be reimbursed to the Contractor on production of satisfactory evidence of having paid the custom duty amount to the concerned authorities.

(ii) Notwithstanding the above, if the Contractor chooses to ship the equipment in Shipper's Containers, then the custom duty levied on such Containers shall not be borne by the Employer and shall be payable by the Contractor himself.

(iii) 100% of applicable Taxes and Duties (other than the custom duty payable as in para (i) above) which are payable by the Employer under the Contract shall be reimbursed by the Employer to the Contractor upon receipt of equipment at site on production of satisfactory documentary evidence by the Contractor.

J. Schedule-8A/8B (as applicable) Payment Terms for Type Test Charge:

100% of each Type Test Charges shall be paid to the Contractor upon conductance of the corresponding Type Test and Certification by the Engineer thereon.
1. Payment Schedule/Price Break-up for Payments

1.1 The Contractor shall prepare and submit to the Project Manager for approval, a break-up of the Contract Price in the currencies of the Contract. It is expected that the Contractor shall indicate the price of a single item in one currency only. However, if the Contractor intends to receive payment for some items in more than one currency, the Contractor would be required to furnish a separate breakup and type payment for such items shall be made based on the agreed rates. The tonnage rate, wherever applicable, shall then be applicable for the balance items. The Contract Price break-up shall be interlinked with the agreed detailed PERT network of the Contract setting forth starting and completion dates for the various key phases of the Facilities. Any payment under the Contract, subsequent to Advance payment, shall be made only after the Contractor's price break-up is approved by the Employer. The aggregate sum of the Contractor's price break-up shall be equal to the total Contract Price.

2. Currency of Payment

2.1 The Contract Price shall be paid in the currency or currencies in which the various price components have been stated and as incorporated in the Contract.

3. Application for Payment

3.1 The Contractor shall submit application for the payment in the proforma enclosed. The Contractor shall submit to the Project Manager separate application for payment in different currencies whenever payment is to be made in more than one currency.

3.2 Each sum application shall state the amount claimed and shall set forth in details, the order of the Payment Schedule, particulars of the Facilities including the Facilities executed at Site and of the equipment shipped/brought on to the Site pursuant to the Contract up to the date mentioned in the application and for the period covered since the last preceding certificate, if any.
3.3 Every interim payment certificate shall certify the Contract Value of the Facilities executed up to the date mentioned in the application for the payment certificate, provided that no sum shall be included in any interim payment certificate in respect of the Facilities that according to the decision of the Project Manager, does not comply with the Contract, or has been performed, at the date of certificate prematurely.

4. Due Dates for Payment

4.1 The advance payment amount shall be payable after fulfillment of all the conditions laid down in the Terms of Payment (Appendix 1 to the Contract Agreement) and receipt of the Contractor's invoice along with all necessary supporting documents for such advance payment. Employer will make progressive payment as and when the payment is due as per the Terms of Payment set forth in Appendix 1 to the Contract Agreement. Progressive payment other than that under the letter of credit will become due and payable by the Project Manager within forty-five (45) days from the date of receipt of Contractor's bill/invoice/debit note by the Employer, provided the documents submitted are complete in all respects.

5. Mode of Payment

5.1 The Employer will establish an irrevocable Letter of Credit (L/C) in favour of the Contractor through the Employer's Bank in Employer's country for payments due, as per Terms of Payment, on despatch of equipment i.e. Ex-works/CIF despatch of equipment (including due payments towards ocean freight and marine insurance). The value of L/C will be as per payment schedule for each quarter and valid for a quarter. It will be the responsibility of the Contractor to utilise the L/C to the fullest extent. In case L/C has been established by the Employer and not utilised by the Contractor, for reasons of delay attributable to him, all reinstatement charges for the L/C for further period necessitated due to non-utilisation of L/C will be to the account of the Contractor.

5.2 The payment of the advance amount, Type Test Charges if any, price adjustment amounts, all other supply payments, taxes and duties (wherever admissible) inland transportation (including port handling if any) insurance and the Installation Portion of the Facilities shall be made direct to the Contractor by the Employer and no L/C shall be established by the Employer for such payments. Wherever technically feasible, such payments shall be made electrically only as per details of Bank Account indicated in the contract. In case of any changes to the bank account indicated in the contract, the contractor shall immediately inform the employer. The Contractor shall hold the employer harmless and employer shall not be liable for any direct, indirect or consequential loss or damage sustained by the bidder on account of any error in the information or change in Bank details provided to the employer in the prescribed form without information to employer duly acknowledged.
FORM OF APPLICATION FOR PAYMENTS

Project :                      Date :

Equipment Package :             Contract No. :

Name of Contractor :             Contract Name :

Contract Value :                 Applicable Serial
Unit Reference :                Number :

To.

..............................................................................*
                   (Name of Employer)

Dear Sir

APPLICATION FOR PAYMENT #

1. Pursuant to the above referred Contract Agreement dated.........................
   the undersigned hereby applies for payment of the sum of ..........................
   ................................................................(Specify amount and currency in which
   claim is made).

2. The above amount is on account of : (check whichever applicable)
   Advance payment (Schedule **)
   Interim payment as advance (Schedule **)
   Progressive payment against despatch of equipment (Schedule **)
   Progressive payment against receipt of equipment (Schedule **)
   Progressive payment against Installation (Schedule **)
   Ocean freight & marine insurance (Schedule **)
   Inland transportation (Schedule **)
Inland insurance

Price adjustment

Extra work not specified in contract
(Ref. Contract change order No....................................)

Others (specify)

Final payment (Schedule **) as detailed in the attached schedule(s) which form an integral part of this application.

3. The payment claimed is as per item(s) No.(s)...................................... of the payment schedule annexed to the above mentioned Contract.

4. The application consists of this page, a summary of claim statement (Schedule **), and the following signed schedules

1 ...........................................................

2 ...........................................................

3 ...........................................................

The following documents are also enclosed:

1 ...........................................................

2 ...........................................................

3 ...........................................................

Signature of Contractor/ authorised Signatory

* Application for payment will be made to 'Project Manager' as to be designated for this purpose at the time of Notification of Award.

# Prepare separate application for claims in different currencies.

** Proforma for the Schedules will be mutually discussed and agreed to during the finalisation of the Contract Agreement.
PRICE ADJUSTMENT

(i) The Contract price shall be subject to price adjustment during performance of the Contract to reflect changes in the cost of labour and material components etc. in accordance with the provisions described below:

(ii) The price adjustment provisions shall be applicable separately for price components relating to Equipment, Civil Works, Structural Works and Installation as per price break-up furnished by the Contractor in Schedule-1 / Schedule-2, Schedule-4.

(iii) Only following components of the Contract Price will be subject to Price adjustment:

   (a) Ex-Works prices for the plant and equipment excluding Civil Works, Structural works and Mandatory Spares supplied from Employer's country (covered in Schedule 2) and FOB price component for plant and equipment excluding Civil works, Structural Works and Mandatory Spares supplied from abroad (covered in Schedule 1). The price adjustment amount towards these price component shall be subject to a ceiling of twenty percent (20%) of Ex-Works/FOB price component of the contract price respectively.

   (b) Installation Price Component of Contract price (covered in Schedule 4).

   (c) Civil Works Price Component of Contract Price (Covered in Schedule 4). The Price Adjustment amount towards these price component shall be subject to ceiling of fifteen percent (15%) of civil works Price Component.

   (d) Structural Works Price Component of Contract Price (covered in Schedule 4). The Price adjustment amount towards these price component shall be subject to ceiling of fifteen percent (15%) of Structural Works Price component.

(iv) The indices for price adjustment shall be well established and nationally recognised in the country of manufacture. Preferably Government indices shall be used.

(v) Price Adjustment amounts towards aforesaid components of Contract Price shall be paid in the respective currencies of contract. Specified ceilings on amount of price adjustment shall be applicable for each of the Contract currencies separately.

(vi) The price adjustment formula for the components of the Contract Price, as mentioned at Sl.No. (iii) above shall be as stipulated hereinafter.
(vii) Ex-factory/FOB price component of the equipment:

It is understood that the price component for any shipment/despatch comprises a fixed portion (designated as 'F' and the value of which is specified hereunder) and variable portion linked with the indices for various materials and labour (description and co-efficients as enumerated below).

The amount of price adjustment towards variable portion payable / recoverable on each shipment/despatch shall be computed as under:

\[ EC = EC_1 - EC_0 \]

\[ EC_1 \] will be computed as follows:

\[ EC_1 = ECo \{ A1 \cdot f1 + B1 \cdot f2 + C1 \cdot f3 + \sum_{i=1}^{Lb} \frac{L1}{Ao} + \sum_{i=1}^{Lb} \frac{Lb}{Bo} \} \]

Where

- \( EC \) = Adjustment to Ex-Works/FOB price component expressed in the currency of the contract payable to the contractor for each shipment/despatch.
- \( EC_1 \) = Adjusted Amount of Ex-works/FOB price component expressed in the currency of the Contract payable to the Contractor for each shipment/despatch.
- \( ECo \) = Ex-works price for the equipment/materials of Indian origin and FOB price for equipment/material of non Indian origin in the currency of the Contract shipment/despatchwise.

- The fixed portion of the ex-factory/FOB component of the Contract price (F) shall be 0.20.
- a,b,c shall be co-efficients of major materials/items involved in the ex-factory/FOB Component of the Contract price. The sum of these co-efficients shall be between 0.50 to 0.60.
A, B, C etc. shall be published price indices of corresponding major materials/items. Such indices shall necessary be of the country of origin of goods.

'\( L_b \)' shall be co-efficient for labour component in the ex-factory/FOB Component of the Contract price which shall be between 0.20 to 0.30.

'\( L \)' shall be labour index.

Sum of all the material co-efficient and the labour co-efficient shall be 0.80.

\[
f_1, f_2, f_3, \text{etc.} = \frac{Z_0}{Z_1}
\]

where \( Z \) is the no. of units of the currency of the country of origin of the index, which is equivalent to one unit of the respective contract currency. The exchange rates to be used for calculation of factor 'f' shall be as per Bills Selling Exchange Rates established by the STATE BANK OF INDIA.

Subscript 'o' refers to indices as on 30 days prior to date set for opening of bids except in case of 'Zo'. For 'Zo' subscript 'o' refers to value as on the date of opening of bids.

Subscript '1' refers to indices as of :

(a) three months prior to the date of shipment/despatch for labour, and
(b) at the expiry of two third (2/3) period from the date of Notification of Award to the date of shipment/despatch of materials.

For the purpose of this clause the date of shipment/despatch shall mean the Contract date of shipment/despatch or actual date of shipment/despatch, whichever is earlier.

Price adjustment on Ex-factory prices for the Plant and Equipment of Indian origin (Schedule 2) and FOB price component for plant and equipment of non Indian origin (Schedule 1) shall be subject to a ceiling of 20% (twenty percent) of
cumulative Ex-Works and FOB price component of the contract price respectively. The actual payment of escalation at any stage shall not exceed 20% of cumulative Ex-Works and FOB price of Plant and Equipment already supplied. Any escalation at any stage exceeding the aforesaid actual payment in either the Ex-works Price Component/or the FOB price component shall be kept to the credit of the contractor and shall be released as and when the actual payment of escalation falls below 20% of cumulative Ex-works and / or FOB price of Plant and equipment already supplied, as the case may be. Any unadjusted credit shall however, lapse when the actual cumulative payments reach the ceiling amount of 20% of Ex-works and/or FOB price component of the contract respectively. The specified ceiling of 20% of the adjusted amount towards ex-works and/or FOB price of the plant and equipment shall be applicable for each of the contract currencies separately and shall be computed and payable in respective currencies.

In case of shipments/despatch which are delayed beyond the schedule date of shipment/despatch for reasons attributable to the Contractor the price adjustment provision shall not be applicable for the period of time between the schedule date of shipment/despatch and the actual date of shipment/despatch. For this purpose, the schedule date of shipment/despatch shall be as identified in line with provisions of Time Schedule, Appendix-IV to the form of Contract Agreement.

The above formula for price adjustment will be applicable if the currency in which the contract price is expressed is different from the currency of the country of origin of labour and material indices. In other case, formula shall be applied without the exchange rate correction factor ‘f’.

(viii) For Installation Price Component excluding Civil Works and Structural Works of the contract :

(a) It is understood that the price component for any erection work comprises a fixed portion and variable portion linked with the index of labour (description and co-efficients as enumerated).

The monthly price adjustment amount for the erection price component of the Contract Price will be computed separately for Indian currency and for foreign currency portion if any, related to expatriate supervision/labour as per the formula given below:

For Indian Rupee portion of the Installation Price

\[ ER = ER_i - ERo \]

\[ ER_i \] will be computed as follows:
ER₁ = ER₀ \left( \frac{0.15 + 0.85}{F₀} \right)

Where

ER = Adjustment to Installation Price component expressed in Indian Rupees payable to the contractor for each billing.

ER₁ = Adjusted amount payable to the Contractor of Installation price component for each billing.

ER₀ = Value of the Installation work done in the billing period, which shall be calculated as under:

For the purpose of computing ER₀, each installation bill (which is excluding initial Advance and amount payable on completion of Guarantee test) during the installation period upto the ‘Completion of the Facilities’ shall be divided by a factor as indicated below:

\[
\text{Installation Component of the Contract Price} = \frac{(\text{Initial Advance Amount} + \text{Installation component of the contract price payable after successful completion of Guarantee Test})}{\text{Installation component of the Contract Price}}
\]

The payment of price adjustment amount so computed (refer S.No. H, Appendix-1) shall be made against a separate invoice linking the corresponding invoice for Installation payment after retaining the pro-rata amount due on completion of Guarantee Test. The amount so retained shall be paid on successful completion of the Guarantee Test.

F = Indian field labour index = Namely, All India Consumer Price Index for Industrial Workers (All India average) as published by Labour Bureau., Simla, Government of India.

For Foreign Exchange portion of the Installation Price

\[\text{EE} = \text{EE}_₁ - \text{EE₀}\]

\text{EE}_₁ will be computed as follows:
$EE_1 = EEo \left(0.15 + 0.85 \frac{EF_i}{EFo}\right) x f$

Where

$EE$ = Adjustment to Installation Price component expressed in Foreign currency payable to the contractor for each billing.

$EE_i$ = Adjusted amount payable to the Contractor for the part of the Installation price component expressed in foreign currency for each billing.

$EEo$ = Value of foreign currency portion of the Installation work in the billing period, which shall be calculated as under:

For the purpose of computing $EEo$, each installation bill (which is excluding initial Advance and amount payable on completion of Guarantee test) during the installation period upto the 'Completion of the Facilities' shall be divided by a factor as indicated below:

\[
\frac{\text{Installation Component of the Contract Price}}{\text{(Initial Advance Amount + Installation component of the contract price payable after successful completion of Guarantee Test)}}
\]

The payment of price adjustment amount so computed (refer S.No. H, Appendix-1) shall be made against a separate invoice linking the corresponding invoice for Installation payment after retaining the prorata amount due on completion of Guarantee Test. The amount so retained shall be paid on successful completion of the Guarantee Test.

$EF$ = Index for Expartriate field labour component of the Installation work.

$f$ = Exchange rate correction factor for expatriate labour index with reference to currency of country of origin of the expatriate labour and the currency of payment, such that

\[
f = \frac{Zo}{Z1}
\]

where $Z$ is the no. of units of the currency of the country of origin of the index, which is equivalent to one unit of the respective contract currency.
Subscript 'o' refers to indices as on 30 days prior to date set for opening of bids except in case of 'Zo'. For 'Zo' subscript 'o' refers to value as on the date of opening of bids. The exchange rates to be used for calculation of factor 'f' shall be as per Bills Selling Exchange Rates established by the STATE BANK OF INDIA.

Subscript '1' will correspond to the billing period.

The above formula for foreign exchange portion of Erection Price shall be applicable if the currency in which the contract price has been expressed is different from the currency of country of origin of indices for foreign labour. In case other case, the formula shall be applied without exchange rate correction factor 'f'.

(b) The price adjustment on installation price component excluding Civil Works and Structural Works of the contract price shall be without any ceiling.

In case the billing period of installation work falls beyond the time period identified for Completion of Facilities as per the Contract for the reasons attributable to the Contractor, then the price adjustment provisions shall not be applicable for the period of time between such date identified in the contract for the Completion of Facilities and actual completion period.

(ix) Civil Works Price Component

It is understood that the Civil Works Price component comprises a fixed portion (designated as 'F' and the value of which is specified hereunder) and variable portion linked with the indices for various materials and labour (description and coefficients as enumerated below).

The amount of price adjustment towards variable portion payable/recoverable shall be computed as follows:

\[
ECW = ECW1 - ECWo
\]

ECW1 will be computed as follows:

\[
ECW1 = ECWo \ (F + a \ x \ A1 \ \ \ \ B1 \ \ \ \ C1 \ \ \ \ D1 \\
L1 \\
Lb \ \ \ \ \ \ x \ fLb \ )
\]

\[
ECW = ECW1 - ECWo
\]
Where,

\[ ECW = \text{Adjustment to Civil Works Price Component expressed in the currency of the Contract.} \]

\[ ECW1 = \text{Adjusted amount of Civil Works Price Component expressed in the currency of the Contract.} \]

\[ ECWo = \text{Civil Works Price Component expressed in the currency of the Contract.} \]

- The fixed portion of the Civil Works Price Component shall be 0.20.

- 'a, b, c & d shall be co-efficient of major materials/items involved in the Civil Works Price Component of the Contract Price.

- A, B, C, D shall be published price indices of corresponding major material/items.

- "Lb" shall be co-efficient for labour component in Civil Works Price Component of Contract Price, which shall be 0.15.

- L shall be labour index.

\[ f1, f2, \]

\[ f3, f4 = \text{Exchange rate correction factors for the respective materials and fLb is the exchange rate correction factor for labour with reference to the currency of the country of index and the respective contract currency, such that} \]

\[ f = \frac{Zo}{Z1} \]

where \( Z \) is the no. of units of the currency of the country of origin of the index, which is equivalent to one unit of the respective contract currency. The exchange rates to be used for calculation of factor \( f \) shall be as per Bills Selling Exchange Rates established by the STATE BANK OF INDIA.

Subscript 'o' refers to indices as on 7 days prior to date set for opening of bids except in case of 'Zo'. For Zo' subscript 'o' refers to value as on the date of opening of bids.
For the indices, subscript '1' refers to the indices as applicable for one month prior to the month of execution of the civil work. For the exchange rates, subscript '1' refers to the exchange rates as applicable on the last day of one month prior to the month of execution of the Civil work. For the purpose of this clause, month of execution of the civil work or actual month of execution of the civil work, whichever is earlier. The schedule date for completion shall be as identified in line with provisions of Time Schedule, Appendix-4 to the Contract Agreement.

Price Adjustment on Civil Works Price Component shall be subject to a ceiling of 15% (fifteen percent) of Civil Works Price Component. The actual payment of escalation at any stage shall not exceed 15% of cumulative Civil Works completed. Any escalation at any stage exceeding the aforesaid actual payment shall be kept to the credit of contractor and shall be released as and when the actual payment of escalation falls below 15% of cumulative Civil Works completed, as the case may be.

Any unadjusted credit shall however, lapse when the actual cumulative payments reach the ceiling amount of 15% of Civil Price Component of Contract Price. The specified ceiling of 15% of the adjusted amount towards Civil Price component shall be applicable for each of the contract currencies separately and shall be completed and payable in respective currencies.

For the purpose of computing ECWo, each Civil Works bill (which is excluding initial Advance and amount payable on completion of Guarantee test) during the Civil Works period up to the 'Completion of the Facilities' shall be divided by a factor as indicated below:

\[
\frac{\text{Civil Works Component of the contract price}}{\text{(Initial Advance + Civil Works Component of the contract price payable after successful completion of Guarantee Test)}}
\]

Civil Works Component of the Contract Price

The above formula for price adjustment will be applicable if the currency in which the contract price is expressed is different from the currency of the country of origin of labour and material indices. In other case, formula shall be applied without the exchange rate correction factor ‘f’.

In case of Civil works activities which are delayed beyond the schedule date for reasons attributable to the contractor, the price adjustment provision shall not be applicable for the period of time between the schedule date of completion and actual date of completion of the respective erection activity. For this purpose, the schedule date for completion of a particular erection activity shall be as given above.
(x) Structural Works Price Component

It is understood that the Structural Works Price Component comprises a fixed portion (designated as 'F' and the value of which is specified hereunder) and variable portion linked with the indices for various materials and variable portion linked with the indices for various materials and labour (description and coefficients as enumerated below).

The amount of price adjustment towards variable portion payable/recoverable shall be computed as follows:

\[ ESW = ESW_1 - ESW_o \]

\[ ESW_1 = ESW_o \left( F + \sum \frac{A_1}{A_0} x f_1 + \sum \frac{B_1}{B_0} x f_2 + \sum \frac{C_1}{C_0} x f_3 + \sum \frac{D_1}{D_0} x f_4 \right) \]

Where,

- \( ESW \) = Adjustment to Structural Works Price Component expressed in the currency of the Contract.
- \( ESW_1 \) = Adjusted amount of Structural Works Price Component expressed in the currency of the Contract.

For the purpose of computing \( ESW_o \), each structural bill (which is excluding initial advance and amount payable on completion of Guarantee test) during the structural period upto the completion of the facilities' shall be divided by a factor as indicated below:

\[
\frac{\text{Structural Component of the contract price} - \text{(Initial Advance amount + structural component of the contract price payable after successful completion of Guarantee Test)}}{\text{Structural Component of the Contract Price}}
\]

The fixed portion of the Structural Works Price Component shall be 0.20.
- a, b, c & d shall be co-efficient of major materials/items involved in the Structural Works Price Component of the Contract Price.

- A, B, C, D shall be published price indices of corresponding major material/items.

- "Lb" shall be co-efficient for labour component for Structural Works Price Component of Contract Price which shall be 0.15.

- L shall be labour index.

- Sum of all the material co-efficient and the labour coefficient shall be 0.80.

\[ f_1, f_2, f_3, \text{etc.} = \text{Exchange rate correction factors for the respective materials and } f_{Lb} \text{ is the exchange rate correction factor for labour with reference to the currency of the country of index and the respective contract currency such that} \]

\[ f = \frac{Z_0}{Z_1} \]

where Z is the no. of units of the currency of the country of origin of the index, which is equivalent to one unit of the respective contract currency. The exchange rates to be used for calculation of factor 'f' shall be as per Bills Selling Exchange Rates established by the STATE BANK OF INDIA.

Subscript '0' refers to indices as on 7 days prior to date set for opening of bids except in case of 'Z0'. For 'Z0' subscript '0' refers to value as on the date of opening of bids.

For the indices, subscript '1' refers to the indices as applicable for one month prior to the month of execution of the structural work except "Structural Steel". For structural steel the index, '1' refers to the indices as applicable for 90 days prior to the month of execution of the structural work for the exchange rates, subscript '1' refers to the exchange rates as applicable on the last day of one month prior to the month of execution of the structural work. For the purpose of this clause, month of execution of structural work shall mean the schedule month of execution of the structural work, whichever is earlier. The schedule date for completion shall be as identified in line with provisions of Time Schedule, Appendix-4 to the Contract Agreement.
Price Adjustment on Structural Works Price Component shall be subject to a ceiling of 15% (fifteen percent) of Structural Steel Price Component. The actual payment of escalation at any stage shall not exceed 15% of cumulative structural works completed. Any escalation at any stage exceeding the aforesaid actual payment shall be kept to the credit of contractor and shall be released as and when the actual payment of escalation falls below 15% of cumulative structural works completed, as the case may be.

Any unadjusted credit shall however, lapse when the actual cumulative payments reach the ceiling amount of 15% of Structural Price Component of Contract Price. The specified ceiling of 15% of the adjusted amount towards Structural Price component shall be applicable for each of the contract currencies separately and shall be completed and payable in respective currencies.

The above formula for price adjustment will be applicable if the currency in which the contract price is expressed is different from the currency of the country of origin of labour and material indices. In other case, formula shall be applied without the exchange rate correction factor ‘f’.

In case of Structural Works activities which are delayed beyond the schedule date for reasons attributable to the contractor, the price adjustment provision shall not be applicable for the period of time between the schedule date of completion and actual date of completion of the respective erection activity. For this purpose, the schedule date for completion of a particular erection activity shall be as given above.

(xi) The following components of the contract price shall not be subject to price adjustment and shall remain firm during the execution of the contract:

1. Ocean Freight and Marine Insurance for Plant & Equipment and Spare parts.
2. Local Transportation, Inland Transit Insurance (including port clearance & port charges for plant & equipment and Spare Parts).
3. Mandatory Spares and Recommended Spares.

(xii) The source of applicable indices and their base values for the purpose of computing price adjustment under the contract shall be as under: 
Ex-factory/FOB Price component of the equipment **

NAME OF CURRENCY *** : .............................................

A. Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Coefficient</th>
<th>Value of Coefficients</th>
<th>Source of Indices used</th>
<th>Base Date Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material :</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Steel Material (a)</td>
<td>0.31 to 0.37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Conveyor Belting (b)</td>
<td>0.06 to 0.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Any other major item/material (c)</td>
<td>0.13 to 0.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour :</td>
<td>$L_b$</td>
<td>0.20 to 0.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Installation Price Component ***

<table>
<thead>
<tr>
<th>Item</th>
<th>Coefficient</th>
<th>Source of Indices used</th>
<th>Base Date Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expatriate Labour (EF) :</td>
<td>0.85</td>
<td>All India Consumer Price Index for Industrial workers (All Indian average) published by Labour Bureau, Simla Govt. of India.</td>
<td></td>
</tr>
<tr>
<td>Indian Field Labour (F) :</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C. Civil Works

<table>
<thead>
<tr>
<th>Item</th>
<th>Coefficient</th>
<th>Value of Coefficients</th>
<th>Source of Indices used</th>
<th>Base Date Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Material other than reinforcement steel and cement</td>
<td>(a)</td>
<td>0.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Reinforcement steel</td>
<td>(b)</td>
<td>0.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Cement</td>
<td>(c)</td>
<td>0.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) High Speed Diesel Oil</td>
<td>(d)</td>
<td>0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>( L_b )</td>
<td>0.15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D. Structural Price Component

<table>
<thead>
<tr>
<th>Item</th>
<th>Coefficient</th>
<th>Value of Coefficients</th>
<th>Source of Indices used</th>
<th>Base Date Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Structural Steel</td>
<td>(a)</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Electrodes</td>
<td>(b)</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Oxygen gas</td>
<td>(c)</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Acetylene gas</td>
<td>(d)</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>( L_b )</td>
<td>0.15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The above information shall be filled in at the time of Contract Agreement signing based on price adjustment data offered by the successful bidder in Attachment 17 to Bid Form.

** Sheets of like size and format shall be annexed in case no. of currencies are more.
**INSURANCE REQUIREMENTS**

(1) **Insurance to be taken by the Contractor:**

In accordance with the provisions of GCC Clause 34, the Contractor shall at his expense take out and maintain in effect, or cause to be taken out and maintain in effect, during the performance of the Contract, the insurances set forth below in sums and with the deductibles and other conditions specified. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld.

<table>
<thead>
<tr>
<th>Insurance</th>
<th>Amount insured</th>
<th>Deductable</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Marine Cargo</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td>110% of CIF value in case of Plant &amp; Equipment (including all spares and Type Test Charges) to be supplied from abroad/110% of Ex-work Not applicable Value in case of plant &amp; equipment supplied from within Employer's Country.</td>
<td>(i) Employer to be named as coinsured (ii) Open policy (iii) All risk institute cargo clause 'A' (iv) War, SRCC, terrorism. (v) Institute replacement clause, special replacement clause (Air duty and deferred unpacking clause (vi) Insurers right of subrogation against all parties (excluding carrier) waived. (vii) Warehouse to warehouse basis</td>
<td></td>
</tr>
<tr>
<td>(ii)</td>
<td>Applicable taxes and duties including custom duty to be paid by Employer, if any</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iii)</td>
<td>Escalation 5% on (i) &amp; (ii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B. Installation all risk</strong></td>
<td>110% CIF value + 110% of ex-works value of Plant &amp; Equipment insurance policy</td>
<td>Minimum as per insurance policy</td>
<td>(i) Installation risk, RSMTD, (ii) Air freight cover. (iii) Extra charge cover. (iv) Maintenance cover (v) Contractor's plant &amp; machinery - Rs. 100 lakhs (vi) Cross liability. (vii) Additional custom duty for imported machine (if any) for adequate value. (viii) Employer &amp; Contractor's Sub-Contractor to be named as co-insured.</td>
</tr>
<tr>
<td>(i)</td>
<td></td>
<td>(ii)</td>
<td></td>
</tr>
<tr>
<td>(ii)</td>
<td>Applicable taxes &amp; Duties including custom duty to be paid by Employer, if any</td>
<td>(iii)</td>
<td></td>
</tr>
<tr>
<td>(iii)</td>
<td>Cost of indigenous procurement and free issue materials</td>
<td>(iv) 10% escalation (i) &amp; (iii)</td>
<td></td>
</tr>
<tr>
<td>(iv)</td>
<td>(i) &amp; (iii)</td>
<td>(v) Cost of erection (vi) Civil Engineering works</td>
<td></td>
</tr>
<tr>
<td><strong>C. Third Party liability</strong></td>
<td>For any one occurrence Nil Rs. 50.00 lakhs</td>
<td>(i) Contractors, sub-contractors to be named as co-insured.</td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>Amount insured</td>
<td>Deductable</td>
<td>Conditions</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------------</td>
<td>------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>D. Automobile liability</td>
<td></td>
<td></td>
<td>As per local M.V. Act.</td>
</tr>
<tr>
<td>(i) M.V. policy for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>motor vehicles, private</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cars &amp; commercial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vehicles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) CPM policy for</td>
<td>Anything above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>heavy construction</td>
<td>Rs.100 lakhs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>equipment</td>
<td>covered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>under erection all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>risk policy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Workmen's Compensation</td>
<td>As per statute</td>
<td>As per statute</td>
<td>Cumulative to workmen's compensation to cover liability not covered thereby.</td>
</tr>
<tr>
<td>F. Employer's liability</td>
<td>As per statute</td>
<td>As per statute</td>
<td>Cumulative to workmen's compensation to cover liability not covered thereby.</td>
</tr>
<tr>
<td>G. Group personal insurance,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for contractor's &amp; sub-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>contractor's employees.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

1. The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC 34.1 above. Except for Third Party Liability, Workman's Compensation and Employer's Liability Insurances and the Contractor's Sub-Contractors shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC Clause 34.1 above except for the Cargo, insurance during transport, Workman's Compensation and Employer's Liability Insurances. All insurers rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.

2. Notwithstanding the insurance requirements mentioned above, it would be the Contractor's responsibility to take adequate insurance cover as may be pertinent to protect his interest and interest of the Employer. If at any point of time during execution of the Contract, if it is found that the insurance policies are inadequate, the Contractor shall take fresh insurance policies meeting aforesaid requirements. The employer reserves the right to make suitable recovery from the Contractor, if any.

3. Any loss or damage to the plant and equipment during handling, transportation, storage, erection, putting the equipment into satisfactory operation and all activities to be performed till the "Completion of Facilities" shall be to the account of the
The contractor shall be responsible for preference of all claims and make good the damages or loss by way of repair and/or replacement of plant and equipment damaged or lost. Notwithstanding the extent of insurance cover and the amount of claim available from the underwriter, the contractor shall be liable to make good the full replacement/rectification of all the equipment/materials and to ensure their availability as per project requirement without additional financial liability to the Employer.

The insurance should be in freely convertible currency and insurance policy to be taken should be on replacement value basis and/or incorporating insurance clause.

The Contractor shall follow local acts and laws as may be prevalent for insurance.

II) Insurances to be taken by the Employer

The Employer shall take the insurance for its own employees, its stores and its machinery.
TIME SCHEDULE

The programme for furnishing and erecting (including testing and putting into satisfactory operation) the plant and equipment covered in the Contract shall be in the form of master Network identifying the keyphases in various areas of total works, like design, procurement, manufacture, field activities including civil construction works. In addition, key milestones dates (10 - 15 nos.) shall also be identified for the complete facilities under the subject Package. The Master Network shall conform to the following schedule date of completion:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Activity</th>
<th>Period in months from the date of NOA</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Basic Engg</td>
<td>0 - 2</td>
</tr>
<tr>
<td>02.</td>
<td>Detailed Engg</td>
<td>-- - 5</td>
</tr>
<tr>
<td>03.</td>
<td>Completion of BOI ordering</td>
<td>-- - 5</td>
</tr>
<tr>
<td>04.</td>
<td>Manufacturing</td>
<td>4 - 11</td>
</tr>
<tr>
<td>05.</td>
<td>Dispatch</td>
<td>6 - 11.5</td>
</tr>
<tr>
<td>06.</td>
<td>Site Mobilization</td>
<td>-- - 2</td>
</tr>
<tr>
<td>07.</td>
<td>Start/completion of civil works</td>
<td>3 - 12</td>
</tr>
<tr>
<td>08.</td>
<td>Start/completion of fabrication works</td>
<td>4 - 15</td>
</tr>
<tr>
<td>09.</td>
<td>Start/completion of erection job</td>
<td>5 - 16</td>
</tr>
<tr>
<td>10.</td>
<td>Start/completion of silo construction</td>
<td>3 - 12</td>
</tr>
<tr>
<td>11.</td>
<td>Commissioning / Trial run of one stream of conveyor upto Silo</td>
<td>12.5 - 14</td>
</tr>
<tr>
<td>12.</td>
<td>Coal feeding to Silo through 1st stream</td>
<td>-- - 14.5</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Activity</td>
<td>Period in months from the date of NOA</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start</td>
</tr>
<tr>
<td>13.</td>
<td>Trial run/commissioning of 2nd stream of conveyor up to silo</td>
<td>14</td>
</tr>
<tr>
<td>14.</td>
<td>Coal feeder to silo through 2nd stream</td>
<td>--</td>
</tr>
<tr>
<td>15.</td>
<td>Completion of all facilities</td>
<td>--</td>
</tr>
</tbody>
</table>

* Supply of mandatory spares needs to be ensured along with respective main equipment.

The Commissioning will commence any day within 30 days prior to the date of completion indicated above.

This master network and the key milestone dates will be discussed and agreed before the execution of Notification of Award. Engineering Drawing and Data Submission Schedule shall also be discussed and finalised before the issue of Notification of Award.

After the Notification of Award, the contractor shall plan the sequence of work of manufacture and erection to meet the above stated dates of successful completion of facilities and shall ensure all work, manufacture, shop testing, inspection and shipment of the equipment in accordance with the required construction/erection sequence.

Within one month of the Notification of Award, the Contractor shall submit to the Project Manager for his review and approval two copies (one reproducible and one print) of detailed network schedules with master network activities further exploded based on the Master Network mutually agreed by the Employer and Contractor, showing the logic and duration of the activities covered in both the First and Second Contracts in the following areas.

Engineering, procurement, manufacturing and supply, detailed Engineering, procurement (including brought out items), manufacturing, despatch, shipment, receipt at site and activities related to erection and commissioning and completion.
Detailed Manufacturing Programme

Detailed Manufacturing PERT Network for all the manufacturing activities at Contractor/sub-Contractors works shall also be furnished within 60 days of Notification of Award. The manufacturing network shall be supported by detailed procurement programme for critical bought out item/raw materials.

Pre-Erection Activity Programme

The erection network will be supported by detailed Pre-erection activity programme covering the following:

(A) Manpower Deployment

(B) T&P Mobilisation

(C) Detailed Site Mobilisation Plant

Any additional Tools & Plants (T&P) required for satisfactory execution of the Contract and to meet the time schedule specified in this Appendix-4 shall be mobilised by the Contractor as per direction of the Project Manager without any extra cost to the Employer. (The list of such essential Tools & Plants (T&P) to be deployed by the Contractor, if any finalised before Notification of Award, shall be enclosed as Appendix-4B to this Appendix-4).

Within one week of approval of the network schedule, the Contractor shall forward to the Project Manager, copies of the Computer Initial run-Data. The type of outputs and number of copies of each type to be supplied by the Contractor shall be determined by the Project Manager.

All the networks shall be updated every month or at a frequency mutually agreed upon. Within seven days following the Monthly Review, a progress meeting shall be held, whenever possible at the works, wherein the major items of the plant or equipment are being produced. The meeting will be attended by the Project Manager and responsible representative of Contractor that the Project Manager consider necessary for the meeting.

Access to the Contractor's and Sub-Contractor's work shall be granted to the Project Manager at all reasonable times for the purpose of ascertaining the progress.
MASTER NETWORK

[The Master Network as per para 1.0 of Appendix-4 shall be enclosed here as Appendix-4A to appendix-4]
LIST OF MINIMUM T&P TO BE DEPLOYED BY THE CONTRACTOR

A list of minimum no. of Major T&P required to be deployed necessarily by the bidder is furnished below. However, the actual deployment at site shall not be limited to these and additional T&P required to meet the work schedule shall be mobilised by the Contractor.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Major T&amp;P No.</th>
<th>Min. No. to be deployed</th>
<th>Period of Retention from NOA to NOA</th>
<th>Period of Retention from to (months) (months)</th>
</tr>
</thead>
</table>

The list of T&P alongwith the Schedule is to be duly filled up by the Bidder to ensure smooth execution of the works at site as per scope of the Contract.

(The list of T&P alongwith the schedule of their deployment, as finalised before Notification of Award shall be enclosed here as Appendix-4B to Appendix-4).
LIST OF SUB-CONTRACTORS

PART 1. Nominated Sub-Contractors

In the event that the employer wishes to nominate any particular Sub-Contractors for the undertaking of any part or parts of the Works, these shall be identified and named by the Employer in the following schedule prior to the issue of the Bidding Documents.

Full details shall be given of the part of the Works to be executed, and the names and addresses of the Sub-Contractors to whom the part of the Works is to be sub-contracted by the Bidder. Where more than one name is given for any part of the Work, the Bidder shall be free to select any of the named Sub-Contractors for that part.

The Employer shall be responsible for ensuring that any Nominated Sub-contractor complies with the requirements of ITB Clause 2.1 (Eligible Bidders), but the Bidder shall be responsible for ensuring that any work, Materials or Services to be provided by the Nominated Sub-Contractor comply with the requirements of ITB Clause 3 (Eligible Plant and Services).

<table>
<thead>
<tr>
<th>Item of Work</th>
<th>Nominated Sub-Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIL</td>
<td></td>
</tr>
</tbody>
</table>

PART 2 Approved Sub-Contractors

(Prior to award of Contract the following details shall be completed indicating those Sub-contractors proposed by the Bidder by Attachment to his Bid which are approved by the Employer for engagement by the Contractor during the performance of the Works).

The following Sub-Contractors are approved for carrying out the item of work indicated. Where more than one Sub-contractor is listed, the Contractor is free to choose between them but he must notify the Employer of his choice in good time prior to appointing any selected Sub-Contractor. In accordance with Clause GCC 19.1, the Contractor is free to submit proposals for additional Sub-Contractors from time to time. No Sub-Contracts shall be placed with any such additional Sub-Contractors until they have been approved in writing by the Employer and their names added to this list of Approved Sub-Contractors.

<table>
<thead>
<tr>
<th>Item of Work</th>
<th>Approved Sub-Contractors</th>
<th>Nationality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SCOPE OF WORKS AND SUPPLY BY THE EMPLOYER

The following facilities, works, supplies and personnel will be provided/supplied by the Employer and the provisions of GCC Clauses 10, 21 and 24 shall apply as appropriate.

All facilities, works, supplies and personnel as described herein will be provided by the Employer in good time so as not to delay the performance of the Contractor, in accordance with the approved Time Schedule and Programme of Performance pursuant to GCC Sub-Clause 18.2.

Unless otherwise indicated, all facilities, works, supplies and personnel will be provided free of charge to the Contractor for the purpose identified hereunder:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Facilities</th>
<th>Charges to Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td><strong>Space</strong>:&lt;br&gt;The Contractor shall advice the Employer within (30) days from the date of acceptance of the Notification of Award, about his exact requirement of space for his office, mess-room, storage area, preassembly and fabrication areas, labour and staff colony area, toilets etc. The above requirement shall be reviewed by the Project Manager and the space will be allotted to the Contractor for construction of his temporary structures like office, storage sheds, labour &amp; staff colony and other utilities etc. for his own use as well as his sub-Contractor's use. However, for the works to be executed outside the plant premises, Construction office, Store (Open &amp; Covered), Construction workshop material/field testing laboratory, construction power, construction &amp; drinking water, compressed service air, instrument air etc. needs to be arranged by the Contractor at their own initiative and cost.</td>
<td>Free of Charge</td>
</tr>
</tbody>
</table>
2.0 **Electricity**:

The Contractor shall submit to the Project Manager within thirty (30) days from the date of acceptance of the Notification of Award, his electrical power requirement, if any, to allow the planning of the temporary electrical distribution by the Employer. The Contractor shall be provided with supply of electricity for the purpose of contract only at One (1) point in the plant premises.

The Contractor shall make his own further distribution arrangement. All temporary wiring must comply with local regulations and will be subject to Project Manager's inspection & approval before connection to supply. Power supply for labour & staff colony shall be provided at one point, in the plant premises.

Notwithstanding anything mentioned elsewhere in any part of the Bidding Documents, the Contractor shall make all arrangements of electrical power for construction purposes and no power shall be supplied by the Employer to the Contractor for works outside the plant.

The supply of electricity for the purpose of Contract shall be free of charge.

The supply of electricity for labour & staff colony shall be on chargeable basis.

N.A.
3.0 **Personnel** :

For the purpose of commissioning and Guarantee tests to be performed by the Contractor, the Employer, as a part of his input, will provide operating personnel for operation of the equipment. During such operation, the Employer's operating personnel shall be under the direct supervision of the Contractor's/Manufacturer's representative, who in any case shall be responsible for safety and satisfactory performance of the activity/equipments. However, the operating personnel of the Employer shall be required to do only those duties which are normally assigned to such operational staff. All other required labour shall be arranged by the Contractor.

4.0 **Communication** :

The Employer will extend the telephone facilities, if available at Site, for purposes of Contract. The Contractor shall be charged at actuals for such facilities.
LIST OF DOCUMENTS FOR REVIEW AND APPROVAL

A. Approval

1.

2.

3.

B. Review

1.

2.

3.

Note: This list of documents required for approval/review by the Employer shall be as per attachment 12 to Bid Form, Section VII of bidding document and as finalised during the contract stage.
FUNCTIONAL GUARANTEES

1.00.00 GUARANTEES AND DEMONSTRATION PARAMETERS/CAPABILITIES

The Contractor shall guarantee that the equipment offered shall meet the ratings and performance requirements stipulated for various equipments covered in the specifications.

The specific performance guarantees, which attract liquidated damages, are detailed out in clause 1.01.00 of this Appendix-8. The Bidder shall furnish signed declarations in the manner prescribed in the bid proposal schedules for the guarantees.

Other parameters/capabilities as per clause 1.02.00 which do not attract liquidated damages shall be termed as demonstration parameters. These parameters/capabilities shall be demonstrated during guarantee tests of the respective system/equipment as per the detailed test procedure to be approved by the Employer.

The guaranteed parameters shall be without any tolerance values. All the margins required for instrument inaccuracies and all other uncertainties shall be deemed to be included in the guaranteed figures. No tolerances or allowance on the test results will be permitted for instrument inaccuracies, the method of testing or any other cause when comparing the tested performance with the guaranteed value. All costs associated with the tests shall be included in the bid price. The Contractor shall demonstrate all the guarantees covered herein during guarantee test. In case during tests it is found that the equipment/system has failed to meet the guarantees, the Contractor shall carry out all necessary modifications and/or replacements to make the equipment/system comply with the guaranteed requirements at no extra cost to the Employer. However, if the Contractor is not able to demonstrate the guarantees, even after the above modifications/replacements within ninety (90) days or a reasonable period allowed by the Project Manager of notification by the Employer, the Employer will have the right to reject the equipment/system and recover the payment already made or accept the equipment/system only after levying liquidated damages as identified in clause 3.00.00 of this Appendix-8.
1.01.00 The functional guarantees which attract Liquidated Damages are as follows:

A. Flow Path Capacity

The Contractor shall guarantee the capacity of conveyor system including the intermediate equipment for each of the two parallel conveyor streams separately or any combination thereof to be tested in the following flow path operations.

I. Flow Path IA :

Conveyor IA taking feed from incoming coal from MDO's conveyor at TP-1 and discharging on conveyor 2A and finally onto Silo-1 through cross country conveyors including all intermediate conveyors and equipment ..................Metric TPH

II. Flow Path IB :

Conveyor Ib taking feed from incoming coal from MDO's conveyor at TP-1 and discharging on conveyor 2B and finally onto Silo-1 through cross country conveyors including all intermediate conveyors and equipment ..................Metric TPH

B. Total Power Consumption :

The Contractor shall guarantee the total power consumption of various drive motors (when the plant is operating at guaranteed capacity) at the switchgear terminals. The drive motors to be considered for levying liquidated damages shall be path wise as brought at Attachment-10. The liquidated damages shall be levied separately and independently for individual paths i.e. path 1A & 1B. Description of flow paths is placed at clause 1.01.05, Sub-section-IIB-01, Technical Specifications, Section-VI.

1.02.00 The parameters/capabilities to be demonstrated for various systems/equipments are elaborated in the Guarantee tests procedure placed at Sub-Section-IIB-01, Technical Specification, Section-VI.
2.00.00 GUARANTEE TEST

2.01.00 In accordance with GTR at Part-C of Technical Specification, Section-VI, the plant shall be subject to guarantee tests on successful Completion of Facilities.

2.02.00 The guarantee test shall be conducted as per guideline procedure indicated at Sub-Section-IIIB-01, Technical Specification, Section-VI. However detailed procedure shall be submitted by vendor as per guidelines referred above for Employer's approval.

2.03.00 All costs associated with the tests shall be included in the bid price. Tools and tackles, thermowells (both screwed and welded) instruments/devices including flow devices, matching flanges, impulse piping & valves etc. and any special equipment, required for the successful completion of the tests, shall be provided by the Contractor free of cost.

2.04.00 The guarantee test shall be carried out as per the agreed procedure. After the conductance of guarantee test, the Contractor shall submit the test evaluation report of guarantee test results to Employer promptly but not later than two months from the date of conductance of guarantee test. However, a preliminary test report of atleast one test run shall be submitted immediately after the completion of the test to the Employer.

3.00.00 LIQUIDATED DAMAGES

3.01.00 If the guarantees specified are not achieved by the Contractor within 90 days or a reasonable period allowed by the Project Manager, of notification by the Employer, the Employer will have the right to reject the equipment/system and recover the payment already made or accept the equipment/system only after levying liquidated damages listed therein against the Contractor and such amounts shall be deducted from the Contract Price:
### A. Shortfall in Capacity

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Coal Handling System/ Equipment</th>
<th>Liquidated Damages for 1% or part thereof of Shortfall in Guaranteed capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>L.D. for short fall in <strong>conveyor capacity</strong> for deficiency of 1% or part thereof in guaranteed capacity</td>
<td>US $ 598,276</td>
</tr>
<tr>
<td>2.</td>
<td>LD for short fall in capacity of major equipment for deficiency of 1% or part thereof in guaranteed capacity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(a) Rapid loading silo</td>
<td>US $ 17955</td>
</tr>
<tr>
<td></td>
<td>(b) In motion weight bridge</td>
<td>US $ 344</td>
</tr>
</tbody>
</table>

The LD shall be assessed on the basis of conveyor stream in a flow path / equipment having the poorest performance. The L.D. for only one of the two streams (having poorest performance) shall be payable.

2. The contractor shall guarantee the total power consumption of various drive motors, (when the plant is operating at the guaranteed capacity) at the switchgear terminals, in the relevant schedule of Section-VII of Bidding Documents. The drive motors to be considered for the same shall be:

   (i) All conveyors corresponding to single stream

### B. Increase in guaranteed power consumption

If the total power consumption of drive motors identified at 1.01.00 (B) above exceed the guaranteed power consumption, liquidated damages at the rate of US $ 1069.00 (US Dollars One Thousand Sixty Nine only) per KW shall be deducted from the contract price.
3.02.00 If the Contract currency is other than US Dollars, then the Liquidated
Damages shall be an equivalent amount in Contract currency based on Bill
Selling Exchange rate of State Bank of India prevailing on the date of
Notification of Award. Such liquidated damages may be recovered by the
deduction from contract price or by enforcing the contract performance
guarantee or in any other manner deemed fit by Project Manager.

3.03.00 Contractors aggregate liability to pay liquidated damages for failure to attain
the functional guarantee shall not exceed twenty five (25%) percent of the
contract price and such amount shall be recoverable by operating the
performance Bank Guarantee of the Contractor or deduction from the
contract price, or otherwise.