



**ORISSA POWER TRANSMISSION CORPORATION LIMITED  
REGD. OFFICE, JANAPATH, BHUBANESWAR –751022  
ORISSA.**

## **NOTICE INVITING TENDER**

**Tender Notice No 05/2012**

**SUPPLY OF HVIC, RTV-I SILICONE COATING CONTAINING  
ATH (ALUMINA TRIHYDRATE) & APPLICATION OF RTV  
SILICON COATING ON INULATORS OF 220KV & 132 SWITCH  
YARD EQUIPMENTS AT 220/132/33 KV GRID SUBSTATION,  
PARADEEP.**

**Tender Specification Nos- Sr. G.M (CPC)-RTV Silicon Coating-  
05/2012**

**DATE OF OPENING: 17/04/2012  
COST OF TENDER PAPER-Rs.10,000/- +4% VAT**



**ORISSA POWER TRANSMISSION CORPORATION  
LIMITED  
REGD. OFFICE, JANAPATH, BHUBANESWAR –751022  
ORISSA.  
TENDER NOTICE NO 05 /2012**

For and on behalf of ORISSA POWER TRANSMISSION CORPORATION Limited, Sr. G.M. (C.P.C.) invites Tenders from reputed firms having adequate experience as prescribed in the tender specification for SUPPLY OF HVIC, RTV-I SILICONE COATING CONTAINING ATH (ALUMINA TRIHYDRATE) & APPLICATION OF RTV SILICON COATING ON INULATORS OF 220KV & 132 SWITCH YARD EQUIPMENTS AT 220/132/33 KV GRID SUBSTATION, PARADEEP.

. Tender papers shall be sold from **15/03/2012 to 17/04/2012**. Interested firms may visit OPTCL's official website <http://www.OPTCL.co.in> for detail specifications . The FIRMS are requested to visit the proposed work locations prior to the bidding, for better understanding of the work.

SR. GENERAL MANAGER [C.P.C.]

# NOTICE INVITING TENDER

ORISSA POWER TRANSMISSION CORPORATION LIMITED,  
REGD. OFFICE: JANPATH, BHUBANESWAR – 751 022,  
ORISSA, ORISSA.

## TENDER NOTICE NO. 05/2012

For and on behalf of the ORISSA POWER TRANSMISSION CORPORATION Limited, the undersigned invites bids under two-part bidding system in double-sealed cover for the works as mentioned below, duly superscribed with tender specification number and date of opening, from reputed firms having adequate experience as prescribed in the tender specification for **RTV SUPPLY & APPLICATION OF SILICON COATING ON INSULATORS OF 220KV & 132 SWITCH YARD EQUIPMENTS AT 220/132/33 KV GRID SUBSTATION PARADEEP.**

<i>Sl. No</i>	<i>Tender Specification No.</i>	<i>Description of materials</i>	<i>Quantity</i>	<i>Earnest Money Deposit (In Rs.)</i>	<i>Cost of Tender Paper.</i>	<i>Last date of receipt &amp; opening of tender</i>
1	<b>Sr. G.M. CPC- RTV Silicon Coating/05/2012</b>	SUPPLY OF HVIC, RTV-I SILICONE COATING CONTAINING ATH (ALUMINA TRIHYDRATE) As per enclosed annexure-III.	4000 KG	1,20,000.00	<b>Rs10,000/- +4% VAT</b>	17/04/2012at1.00 PM & 17/04/2012at 3.30 PM
2		APPLICATION OF SILICON COATING ON INULATORS OF 220KV & 132 SWITCH YARD EQUIPMENTS AT 220/132/33 KV GRID SUBSTATION PARADEEP. As per enclosed annexure-III.	4000 KG			

The tender specification documents can be had from the office of the undersigned on payment of non-refundable cost of tender specification documents in the shape of cash from 10 A .M. to 5 P.M. during **15/03/2012 to 17/04/2012** (both days inclusive) on any working day either in person or by remitting demand draft payable to Drawing & Disbursing Officer, ORISSA POWER TRANSMISSION CORPORATION Limited, Regd. Office: Janpath, Bhubaneswar- 751 022. No other mode of payment is acceptable. No tender documents will be sold on any other day except as indicated.

The specification can also be down loaded from OPTCL's official web site and the same may be submitted along with the cost of tender document by way of demand draft/ pay order payable to D.D.O ,OPTCL Ltd. Janpath, Bhubaneswar at the time of submission of tender document. Incase any deviation is found in the tender document submitted by the Tenderers from the content mentioned in our web site and/ or non submission of cost of tender documents, the tender shall liable to be rejected at any stage of the contract. The Tenderers has to indemnify OPTCL for any loss accruing due to such alternation in the terms and conditions of the tender document & / or for such alternation, resulting in the cancellation of the contract.

The intending bidders, who want to get a copy of the tender specification document by post, are required to deposit an additional amount of Rs.1000/- over and above the cost of the tender specification, mentioned under heading "Cost of tender specification". Complete bid for the works will be received upto 1 P.M of **17/04/2012**. only and the same will be opened at 3 P.M. on the on the same day. Date and time of opening of price bids in respect of two-part tenders shall be intimated to the techno-commercially responsive bidders only. In the event of any specified date for the sale, submission or opening of bids being declared a holiday for purchaser, the bids will be sold/ received/ opened upto the appointed times on the next working day. Only one representative of the bidder will be allowed to participate in the bid opening. OPTCL also reserves the right to accept or reject the tender without assigning any reasons thereof, if the situation so warrants. OPTCL shall not be responsible for any postal delay at any stage.

#### **Minimum qualification criteria of bidders for supply.**

- (a) The bidder should be manufacturer or representative of manufacturer & have supplied **RTV SILICON COATING containing ATH (ALUMINA TRIHYDRATE)**.
- (b) The bidder should have supplied at least 2000 Kg of above materials, during the last five years and must furnish the performance certificate from the users at least for two years in continuous operation .

#### **Minimum qualification criteria of bidders for application.**

- (a) The bidder should have experience in application of RTV SILICON COATING on insulators of 132 Kv or higher voltage switch yard equipments in operating switch yard. And should have successfully applied 2000Kg of application of RTV SILICON COATING on insulators during the last five years & must furnish the performance certificate from the users at least for two years in continuous operation.

**SR. GENERAL MANAGER (CPC)**

SECTION – I

***INSTRUCTIONS TO BIDDERS***

# **INSTRUCTIONS TO BIDDERS**

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## SECTION – INB

### ***INSTRUCTION TO BIDDERS***

### ***INTRODUCTION***

#### 1.0 GENERAL INSTRUCTIONS

#### **1.1 SUPPLY OF HVIC, RTV-I SILICON COATING CONTAINING ATH(ALUMINA TRIHYDRATE) & APPLICATION OF RTV SILICON COATING ON INULATORS OF 220KV & 132 SWITCH YARD EQUIPMENTS AT- 220/132/33 KV GRID SUB STATION PARADEEP**

#### 2.0 QUALIFYING REQUIREMENTS OF BIDDERS

2.1 This bidding is open to any experienced contractor for **SUPPLY & APPLICATION OF RTV SILICON COATING ON INULATORS OF 132KV OR HIGHER VOLTAGE SWITCH YARD EQUIPMENTS .**

- a) does not anticipate change in the ownership during the proposed period of work (if such a change is anticipated, the scope and effect thereof shall be defined);
- b) has adequate financial stability and status to meet the financial obligation pursuant to the scope of the works (the Bidders should submit at least 5 copies of their profit and loss account and balance sheet for the last Three years). Minimum Average Annual Turnover (MAAT) should not be less than 1(one) Crores for the last three years.
- c) has adequate plant and manufacturing capacity available to perform the works properly and expeditiously within the time period specified. The evidence shall consist of written details of the installed manufacturing capacities and present commitments (excluding the work under this specification) of the Bidder. If the present commitments are such that the installed capacity results in inadequacy of the manufacturing capacities to meet the requirement of equipment corresponding to this bid, then the details of alternative arrangements to be organized by the Bidder for this purpose and which shall meet the Owner's approval, shall also be furnished;
- d) has adequate field services organization and management services required to successfully erect, test and commission the equipment as required by the Specifications and Documents; and

- e) has established quality assurance systems and organization designed to achieve high levels of equipment reliability, both during his field installation activities.

## 2 COST OF BIDDING

- 3.1 The Bidder shall bear all costs and expenses associated with preparation and submission of its bid including pre and post-bid discussions, technical and other presentations etc., and the Owner will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

## **B. THE BIDDING DOCUMENTS**

### 4. CONTENTS OF BIDDING DOCUMENT

- 4.1 The goods and services required, bidding procedures and contract terms are prescribed in the Bidding Document.

In addition to the Invitation to Bids, the Bidding Document is a compilation of the following sections:

- a) Instructions to Bidders – Section INB (Vol.I)
- b) General Conditions of Contract – Section GCC (Vol.I)
- c) Erection Conditions of Contract – Section ECC (Vol.I)
  
- d) Bid Form and Price Schedules
- e) Technical Specifications
- f) Technical Data Sheets

### 5. UNDERSTANDING OF BID DOCUMENTS

- 5.1 A prospective Bidder is expected to examine all instructions, forms, terms and specifications in the Bid documents and fully inform himself as to all the conditions and matters which may in any way affect the scope of work or the cost thereof. Failure to furnish all information required by the Bid documents or submission of a Bid not substantially responsive to the Bid document in every respect will be at the Bidder's risk and may result in the rejection of its bid.

### 6. CLARIFICATIONS ON BID DOCUMENTS

- 6.1 If the prospective Bidder finds discrepancies or omissions, in specifications and document or is in doubt as to the true meaning of any part, he shall at once make a request, in writing, for an interpretation/clarification, to the Owner in triplicate. The Owner, then, will issue interpretation(s) and clarification(s) as he may think fit in writing. After receipt of such interpretation(s) and clarification(s), the Bidder may submit his bid but within the time and date as specified in the Invitation to Bid. All such interpretations and clarifications shall form a part of the Bidding Document and shall accompany the Bidder's

Proposal. A prospective Bidder requiring any clarification on Bidding Document may notify the Owner in writing. The Owner will respond in writing to any request for such clarification of the Bidding Document which it receives not later than fifteen (15) days prior to the deadline for submission of bids prescribed by the Owner. Written copies of the Owner's response (including an explanation of the query but without identifying its source) will be sent to all prospective Bidders who have received the Bidding Document.

- 6.2 Verbal clarification and information given by the Owner or his employee(s) or his representative(s) shall not in any way be binding on the Owner.

7.

#### AMENDMENT TO BIDDING DOCUMENT

- 7.1 At any time prior to the deadline for submission of bids, the Owner may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Document by amendment(s).
- 7.2 The amendment will be notified in writing or by telex or cable to all prospective Bidders, which have received the Bidding Document at the address contained in the letter of request for issue of Bidding Document from the Bidders. Owner will bear no responsibility or liability arising out of non-receipt of the same in time or otherwise.
- 7.3 In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the Owner may, at its discretion, extend the deadline for the submission of bids.
- 7.4 Such amendments, clarifications, etc. shall be binding on the Bidders and will be given due consideration by the Bidders while they submit their bids and invariably enclose such documents as a part of the bid.

### **C. PREPARATION OF BIDS**

#### LANGUAGE OF BID

- 8.1 The bid prepared by the Bidder and all correspondences and documents relating to the bid, exchanged by the Bidder and the Owner shall be written in the English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation of its pertinent passages. Failure to comply with this may disqualify a bid. For purposes of interpretation of the bid, the English translation shall govern.

#### LOCAL CONDITIONS

- 9.1 It will be imperative on each Bidder to fully inform himself of all local conditions and factors which may have any effect on the execution of the Contract covered under these documents and specifications. The owner shall

not entertain any request for clarifications from the Bidders, regarding such local conditions.

- 9.2 It must be understood and agreed that such factors have properly been investigated and considered while submitting the Proposals. No claim for financial adjustment to the Contract awarded under these specifications and documents will be entertained by the Owner. Neither any change in the time schedule of the Contract nor any financial adjustments arising thereof shall be permitted by the Owner, which are based on the lack of such clear information or its effect on the cost of the Works to the Bidder.

#### 10.0 DOCUMENTS COMPRISING THE BID

- 10.1 The Bidder shall complete the Bid Form inclusive of Price Schedules, Technical Data Requirements etc. furnished in the Bidding Documents, indicating for the goods to be supplied and services to be rendered, a brief description of goods and services, quantity and prices.

- 10.2 The Bidder shall also submit documentary evidence to establish that the Bidder meets the Qualification Requirements as detailed in Clause 2.0 above including the minimum qualification as stipulated and accompanying Special Conditions of Contract.

- 10.3 The Bid Guarantee shall be furnished in a separate cover in accordance with clause 24.0 of Section INB.

#### 11. SCOPE OF THE PROPOSAL

- 11.1 The scope of the Proposal shall be on the basis of a single Bidder's responsibility, completely covering all the work and equipment specified under the accompanying Technical Specifications. It will include the following -

- a) providing Engineering drawing, data, operational manual, etc. for the Owner's approval;
- b) packing and transportation from the manufacturer's works to the site;
- c) receipt, storage, preservation and conservation of equipment at the site;
- d) pre-application preparation, if any, cleaning, application, testing and commissioning of all the equipment;
- e) Performance and guarantee tests on completion of application; and
- f) Cleaning of insulator & application procedure
- g) Cleaning of insulator & application programme.

- 11.2 Bids containing deviations from provisions relating to the following clauses will be considered as non-responsive:

- a) Price Basis and Payments & Price Adjustment: Clause 14 & 16, Section INB, Vol.I, Conditions of Contract.
- b) Bid Guarantee: Clause 24.0, Section INB, Vol.I, Conditions of Contract.

- c) Contract Performance Guarantee: Clause 43.0, Section INB, Vol.I, Conditions of Contract.
- d) Penalty:- Clause 14.0, Section GCC, Vol.I, Conditions of Contract.
- e) Guarantee: Clause 15.0, Section GCC, Vol.I, Conditions of Contract.
- f) Payment: Clause 34.0, Section GCC, Vol.I, Conditions of Contract.

However, the Bidders, wishing to propose deviations to any of the above provisions, must provide in the Commercial Deviations schedule of Bid Proposal Sheet in their bid, the cost of withdrawal of such deviations. If the deviation to any of these provisions is not priced, the bid will be rejected. The evaluated cost of the bid shall include, in addition to the costs described in INB Clause 37, the cost of withdrawal of the deviations from the above provisions to make the bid fully compliant with these provisions.

At the time of Award of Contract, if so desired by the Owner, the Bidder shall withdraw these deviations listed in Commercial Deviation Schedule of Bid Proposal Sheet in their Bid at the cost of withdrawal stated by him in the bid. In case the Bidder does not withdraw the deviations proposed by him, if any, at the cost of withdrawal stated by him in the bid, his bid will be rejected and his bid security forfeited.

The Owner's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

- 11.3 Bids not covering the above entire scope of Works may be treated as incomplete and hence rejected.

**12. BID PRICE- The quoted price shall be FIRM. Firms not quoting firm price shall be out rightly rejected**

- 12.1 The Bidder shall quote in the appropriate schedule of Bid Form annexed, the unit cost and total cost as per the schedule of quantity. the unit rates of the goods it proposes to supply under the Contract on a base price with Firm Price basis, unless otherwise specified in the Special Conditions of Contract.

- 12.2 The Bidder shall also furnish the price break down in the appropriate schedules of Bid Form to indicate the following:

- i) Ex-works price of the equipment/materials(including tools and tackles etc.)
- ii) Charges for inland transportation (including port handling) and insurance for delivery of the equipment/materials upto their final destinations.
- iii) Lump sum charges towards unloading, storage, insurance, erection, testing and commissioning.
- iv) Price break up for spares in line with Clause 18.0 of this Section.
- v) Sales Tax /VAT and any other levies legally payable on the transactions between the Owner and the Bidder.
  - a. Any other charges as per the requirement of Technical Specifications.
  - b. Unit erection and commissioning charges as per the schedule.

### 13. ALTERNATIVE PROPOSALS

- 13.1 Based on their experience, capabilities, patented research, and development works etc., the Bidder may, in addition to a base Proposal, offer alternate Proposal(s), for reasons of economy or better performance. But in all such cases, the base Proposal shall be strictly in line with the requirements as stipulated in the Bidding Documents and only such base Proposal shall be considered for the purposes of evaluation of the Proposals. Should the bid by the successful Bidder contain such alternate Proposal then the Owner at its discretion may accept the same at the time of award of Contract.

### 14. PRICE BASIS AND PAYMENTS

- 14.1 The Bidders shall quote in their proposals the **FIRM** price in per unit basis as per annexed schedule. Any excess quantity to be executed shall be billed as per the unit rate quoted by the firm. **The price shall remain firm for the entire period and the entire work until final handing over to the owner.**
- 14.2 Bidder shall indicate bid prices in Indian Rupees only.

### 15. TAXES AND DUTIES

- 15.1 All customs duties, excise duties, sales taxes, service taxes and other levies payable by the Bidders in respect of the transaction between the Bidders and their vendors/sub-suppliers while procuring raw materials, erection cost shall be included in the bid price and no claim on this behalf will be entertained by the Owner.

However, entry tax as applicable for destination site/state on all items of supply including bought out finished items (as identified in the Contract), which shall be dispatched directly from the sub-vendors' works to Owner's site (sale-in-transit) shall not be included in the bid price. The applicable entry tax in respect of the said items of supply would be reimbursed to the Contractor separately by the Owner subject to furnishing of documentary proof/evidence.

- 15.2 **VAT**, Sales tax, excise duties, local taxes and other levies should be clearly mentioned in the price schedule.

Whenever ex-works price is quoted exclusive of Excise Duty applicable on the transaction between the Owner and the Contractor, then the due credit under the MODVAT (modified Value Added Tax), scheme as per the relevant Government policies wherever applicable, shall be taken into account by the Bidder while quoting bid price.

- 15.3 In respect of transactions solely between the owner and the contractor (for dispatches made from the contractor's works under the Supply Contract), Sales Tax, Excise Duties, local taxes and other levies shall be paid/reimbursed by the owner at the applicable rate at the time of despatch, scheduled or actual, whichever is lower. However, in case of advancement of supplies solely at the

request of the owner, taxes and duties prevailing at the time of dispatch, shall be payable by the owner.

15.4 Concessional Sales Tax declaration forms, as admissible, would be issued to the contractor, on request, for all items, identified in the price schedule of the bid) to be supplied directly by the contractor as well as for the items to be supplied by the sub-suppliers as sale in transit.

15.5 Sales Tax on goods incorporated in the Works:

The Bidder shall include the Sales Tax on Works Contract, Turnover Tax or any other similar taxes under the Sales Tax Act, as applicable in their quoted bid price and OPTCL would not bear any liability on this account. OPTCL shall, however, deduct such taxes at source as per the rules and issue TDS Certificate to the Contractor.

15.6 For payment/reimbursement of Sales Tax, in respect of dispatches made directly from contractor's works, invoices raised by the contractor shall be accepted as documentary evidence. Similarly, pre-numbered invoices duly signed by authorized signatory will be considered as evidence for payment of Excise Duty.

15.7 As regards the Income Tax, surcharge on Income Tax and other corporate taxes the Bidder shall be responsible for such payment to the concerned authorities.

16. Price Adjustment:- Not applicable as price is **Firm**

#### 17. TIME SCHEDULE

17.1 The basic consideration and the essence of the contract shall be strict adherence to the time schedule for performing the specified works i.e **SIX MONTH** from the date of placement of the order..

17.2 The owner's requirement of completion schedule for the works is six month

17.3 The completion schedule as stated in the Conditions of Contract shall be one of the major factors in consideration of the bids.

17.4 The owner reserves the right to request for a change in the work schedule during pre-award discussions with successful Bidder.

17.5 The successful Bidder will be required to prepare detailed PERTG network and finalise the same with the owner as per the requirement of Clause 12.0, Section GCC.

18. **SPARE PARTS:-** Not applicable

#### 19.0 **CONTRACT QUALITY ASSURANCE**

19.1 The Bidder shall include in his Proposal the Quality Assurance Programme containing the overall quality management and procedures which he proposes

to follow in the performance of the works during various phases as detailed in relevant clause of the General Technical Conditions.

- 19.2 At the time of Award of Contract, the detailed Quality Assurance Programme to be followed for the execution of the contract will be mutually discussed and agreed to and such agreed programme shall form a part of the contract.

## 20.0 INSURANCE

The Bidder's insurance liabilities pertaining to the scope of works are detailed out in clauses titled 'Insurance' in General Terms and Conditions of Contract and in Erection Conditions of Contract of this specification. Bidder's attention is specifically invited to these clauses. Bid price shall include all the cost in pursuance of fulfilling all the insurance liabilities under the Contract.

## 21.0 MAINTENANCE TOOLS AND TACKLES

The proposal shall include all special tools and tackles required for the operation and maintenance of the equipment in each equipment package. The Bidder shall indicate all the above items in the proposal sheets in the form of a schedule given therein and the description and the quantity of each item. The lump sum price to be quoted by the Bidder shall include prices of these tools and tackles. These tools and tackles shall be delivered at site along with the last consignment of equipment and in no case earlier than this, unless otherwise specified in the Special Conditions of Contract and/or Technical Specifications, Vol.II.

## 22.0 ERECTION TOOLS & TACKLES

The Bidder, under a separate schedule, in his proposal shall include a list of all special equipment, tools and tackles etc. which he proposes to bring to site for the purpose of erection, handling, testing and commissioning including performance and guarantee tests of the equipment. If any such equipment is listed anywhere else in the proposal and not specially mentioned in the above schedule, it shall be deemed to have been included in the Bidder's proposed scope of supply.

## 23.0 BRAND NAMES

- 23.1 The specific reference in these specifications and documents to any material/equipment by brand name, make or catalogue number shall be construed as establishing standards of quality and performance and not as limiting competition. However, Bidders may offer other similar material/equipment provided they meet the specified standard, design and performance requirements. The Bidder shall furnish adequate technical information about such alternative material/equipment to enable the owner to determine its acceptability. The owner shall be the sole judge on the acceptability or otherwise of such alternative material/equipment.



23.2 The Bidder shall note that standards for workmanship, material and equipment and reference to brand names or catalogue numbers designated by the owner in its Technical Specifications are intended to be descriptive only and not restrictive. The bidder may substitute alternative standards, branch name and/or catalogue numbers in its bid, provide that it demonstrates to the owner's satisfaction that the substitutions are substantially equivalent or superior to those designed in the Technical Specifications.

#### 24.0 **BID GUARANTEE**

24.1 The Bidder shall furnish, as part of its bid, bid guarantee for an amount as specified in the tender. The bid guarantee shall be valid for a period of 240 days from the date of opening of bids.

24.2 The bid security is required to protect the owner against the risk of Bidder's conduct, which would warrant the guarantee forfeiture, pursuant to Clause 24.7. The bid guarantee shall be made payable to the owner without any condition whatsoever.

24.3 The bid guarantee shall be denominated in Indian Rupees only and shall be in one of the following forms:

24.4 Any bid not secured in accordance with paras 24.1 and 24.3 above will be rejected by the owner as non-responsive.

24.5 Unsuccessful Bidder's bid guarantee will be discharged/returned as promptly as possible but not later than 60 days after the expiration of the period of bid validity prescribed by the owner.

24.6 The successful Bidder's bid guarantee will be discharged upon the Bidder's executing the contract and furnishing the Performance Guarantee pursuant to Clause 43.0

24.7 The bid guarantee may be forfeited:

- a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or
- b) In case of a successful Bidder, if the Bidder fails:
  - i) to sign the contract; or
  - ii) to furnish the Performance Guarantee.

24.8 The bid guarantee shall be submitted along with the bid in separate sealed envelope in one original and two copies. Any bid not accompanied by the required bid security in accordance with provisions of this clause will be rejected by the owner and shall not be opened.

24.9 No interest shall be payable by the owner on the above bid security.

25.0 **PERIOD OF VALIDITY OF BIDS**

25.1 **Bids shall remain valid for 180 days after the date of bid opening** prescribed by the owner unless otherwise specified. A bid valid for a shorter period will be rejected by the owner as non-responsive.

25.2 In exceptional circumstances the owner may solicit the bidder's consent to an extension of the period of validity. The request and the response thereto shall be made in writing (including FAX). The bid security provided under clause 24.0 shall also be extended by the same period as the extension in the validity of the bid. A bidder may refuse the request without forfeiting his bid security. A bidder granting the request will not be required or permitted to modify its bid.

**D. SUBMISSION OF BIDS**

26.0 **FORMAT OF BID**

26.1 The bidder shall prepare five copies of the bid, clearly marking each "Original Bid" and "Copy of bid", as appropriate. In the event of any discrepancy between them, the original shall govern.

26.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. The letter of authorization shall be indicated by written Power of Attorney accompanying the bid. All pages of the bid, except for un-amended printed literature, shall be initialed by the person or persons signing the bid.

26.3 The Bidder's must submit the qualifying data in five copies, as required in this Instruction to Bidders in a separate envelope sealed and enclosed in the envelope submitting proposals, superscribed as under:

**QUALIFYING DATA FOR THE SUPPLY AND ERECTION OF**

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(Name of the Package)

---

(Specification Number)

26.4 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

26.5 Price bid shall be sealed in a separate cover duly marked as Price Bid which shall only be opened, once the bidder is found to be techno commercially suitable.

26.6 The Bid Security to be separately submitted in the tender with sealed envelope marked as **BID SECURITY**.

**26.7 All the technical literatures and all the annexure for technical and commercial specification shall be duly filled up as per the most advanced technology available for equipment and to be submitted as the techno commercial bid in the tender**

**27.0 SIGNATURE OF BIDS**

27.1 The bid must contain the name, residence and place of business of the person or persons making the bid and must be signed and sealed by the bidder with his usual signature. The names of all persons signing should also be typed or printed below the signature.

27.2 Bid by a partnership must be furnished with full names of all partners and be signed with the partnership name, followed by the signature(s) and designation(s) of the authorized partner(s) or other authorized representative(s).

27.3 Bids by Corporation/Company must be signed with the legal name of the Corporation/Company by the President, Managing Director or by the Secretary or other person or persons authorized to bid on behalf of such Corporation/Company in the matter.

27.4 A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his principal will be rejected.

27.5 Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the bid.

27.6 The Bidder's name stated on the proposal shall be the exact legal name of the firm.

27.7 Bids not conforming to the above requirements of signing may be disqualified.

**28.0 SEALING AND MARKING OF BIDS**

28.1 The Bidders shall seal the original and each copy of the bid in an inner and an outer envelope, duly marking the envelopes "Original" and "Copy".

28.2 The inner and outer envelopes shall:

(a) be addressed to the Owner at the following address:

**Senior General Manager, Central Procurement Cell, At/ PO- Bhoi Nagar, Bhubaneswar**

(b) bear the name of package, the specification number, and the words "DO NOT OPEN BEFORE....."

- 28.3 The inner envelope shall indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared “late” or “rejected”.
- 28.4 If the outer envelope is not sealed and marked as required by para 28.2 above, the owner will assume no responsibility for the bid’s misplacement or premature opening.
- 28.5 The Bid Guarantee must be submitted in a separate sealed envelope.

#### **29.0 DEADLINE FOR SUBMISSION OF BIDS**

- 29.1 The Bidders have the option of sending the bid by registered post or submitting the bid in person. Bids submitted by telex/telegram will not be accepted. No request from any Bidder to the owner to collect the proposals from airlines, cargo agents etc. shall be entertained by the owner.
- 29.2 Bids must be received by the owner at the address specified under para 28.2, not later than the time and date mentioned in the Invitation to Bid.
- 29.3 The owner may, at its discretion, extend this deadline for the submission of bids by amending the Bidding Document, in which case all rights and obligations of the owner and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

#### **30.0 LATE BIDS**

- 30.1 Any bid received by the owner after the time and date fixed or extended for submission of bids prescribed by the owner, will be rejected and/or returned unopened to the Bidder.

#### **31.0 MODIFICATION AND WITHDRAWAL OF BIDS**

- 31.1 The Bidder may modify or withdraw its bid after the bid’s submission provided that written notice of the modification or withdrawal is received by the owner prior to the deadline prescribed for submission of bids.
- 31.2 The Bidder’s modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of Clause 28.0.
- 31.3 No bid may be modified subsequent to the deadline for submission of bids.
- 31.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form. Withdrawal/modification of a bid during this interval may result in the Bidder’s forfeiture of its bid security.

#### **32.0 INFORMATION REQUIRED WITH THE PROPOSAL**

- 32.1 The bids must clearly indicate the name of the manufacturer, the type of model of each principal item of equipment proposed to be furnished and erected. The bid should also contain drawings and descriptive materials indicating general

dimensions, materials from which the parts are manufactured, principles of operation, the extent of pre-assembly involved, major construction equipment proposed to be deployed, method of erection and the proposed erection organizational structure.

- 32.2 The above information shall be provided by the Bidder in the form of separate sheets, drawings, catalogues, etc. in five copies.
- 32.3 Any bid not containing sufficient descriptive material to describe accurately the equipment proposed may be treated as incomplete and hence rejected. Such descriptive materials and drawings submitted by the Bidder will be retained by the owner. Any major departure from these drawings and descriptive material submitted will not be permitted during the execution of the contract without specific written permission of the owner.
- 32.4 Oral statements made by the Bidder at any time regarding quality, quantity or arrangement of the equipment or any other matter will not be considered.
- 32.5 Standard catalogue pages and other documents of the Bidder may be used in the bid to provide additional information and data as deemed necessary by the Bidder.
- 32.6 The Bidder, along with his proposal, shall submit a list of recommended erection equipment and materials which will be required for the purpose of erection of equipment and materials supplied under the contract.
- 32.7 In case the 'Proposal' information contradicts specification requirements, the specification requirements will govern, unless otherwise brought out clearly in the Technical/Commercial Deviations Schedule.

## **E. BID OPENING AND EVALUATION**

### **33.0 OPENING OF BIDS BY OWNER**

- 33.1 The owner will open bids in the presence of Bidders' representatives (upto 2 persons) who choose to attend at the date and time for opening of bids in the Invitation to Bid or in case any extension has been given thereto, on the extended bid opening date and time notified to all the Bidders who have purchased the Bidding Document. The Bidders' representatives who are present shall sign in a register evidencing their attendance.
- 33.2 The Bidders' names, bid prices, modifications, bid withdrawals and the presence or absence of the requisite bid guarantee and such other details as the owner, at its discretion, may consider appropriate will be announced at the opening.
- 33.3 No electronic recording devices will be permitted during bid opening.

### **34.0 CLARIFICATION OF BIDS**

34.1 To assist in the examination, evaluation and comparison of bids of owner may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

### 35.0 **PRELIMINARY EXAMINATION**

35.1 The owner will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

#### 35.2 **Arithmetical errors will be rectified on the following basis:**

If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail. If the Bidder does not accept the correction of the errors as above, his Bid will be rejected and the amount of Bid guarantee forfeited.

The Bidder should ensure that the prices furnished in various price schedules are consistent with each other. In case of any inconsistency in the prices furnished in the specified price schedules to be identified in Bid Form for this purpose, the owner shall be entitled to consider the highest price for the purpose of evaluation and for the purpose of award of the contract use the lowest of the prices in these schedules.

35.3 Prior to the detailed evaluation, the owner will determine the substantial responsiveness of each bid to the Bidding Document. For purpose of this clause, a substantially responsive bid is one which conforms to all the terms and conditions of the Bidding Document without material deviations. A material deviation is one which affects in any way the prices, quality, quantity or delivery period of the equipment or which limits in any way the responsibilities or liabilities of the Bidder of any right of the owner as required in these specifications and documents. The owner's determination of a bid's responsiveness shall be based on the contents of the bid itself without recourse to extrinsic evidence.

35.4 A bid determined is not substantially responsive will be rejected by the owner and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

35.5 The owner may waive any minor informality or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

### 36.0 **DEFINITIONS AND MEANINGS**

For the purpose of evaluation and comparison of bids, the following meanings and definitions will apply:-

- a) **‘Bid Price’** shall mean the base price quoted by each Bidder in his proposal for the complete scope of works.
- b) **‘Differential Price’** shall mean the summation of the equalizing elements of price for parameter differential or deficiencies in the equipment and services determined from the Bidder’s Proposal.
- c) **‘Cost Compensation for Deviations’** shall mean the Rupee value of deviations from the Bidding Documents as determined from the Bidder’s Proposal.
- d) **‘Evaluated Bid Price’** shall be the summation of ‘Bid Price’, ‘Differential Price’ and ‘Cost Compensation for deviations’.

36.1 Calculation of Differential Price and Cost Compensation for Deviations.

36.1.1 The Differential Price to be added to the Bid Price of each bid during evaluation and comparison shall be derived as under:

Differential Price (DP) =  $n_1F_1 + n_2F_2 + \dots + n_nF_n$  where  $F_1, F_2, \dots, F_n$  are the various factors in Indian Rupees per unit of parameter differential or deficiency in the equipment and services offered as stipulated in these specifications;  $n_1, n_2, \dots, n_n$  are the respective parameter differential or deficiency in the corresponding units to be determined from the Bidder’s Proposal. The above factors and corresponding units of parameter differential are brought out in the technical Specifications and/or Special Conditions of Contract.

36.1.2 Deviations from the Bidding Documents in so far as practicable, will be converted to Rupee value (D) and added to the bid price to compensate for the deviation from the Bidding Document while evaluating the bids. In determining the Rupee value of the deviations the owner will use parameters consistent with those specified in the specifications and documents and/or other information as necessary and available to the owner.

37.0 **COMPARISON OF BIDS**

37.1 The bids shall be compared on the basis of total price taking into account the unit cost and the schedule of quantities.

37.2 For comparison purposes all the evaluated bid prices shall be in Indian Rupees as under:-

$$W = M + DP + D$$

Where

$$W = \text{Total Comparison Price}$$

- M = Bid price in Indian Rupees (Ex-works value of equipment + components of erection cost + mandatory spares, and other components, if any).
- DP = Differential price in Indian Rupees calculated according to para 36.1.1 above.
- D = Cost compensation for deviations calculated according to para 36.1.2 above.

37.3 All evaluated bid prices of all the Bidders shall be compared among themselves to determine the lowest evaluated bid and, as a result of this comparison, the lowest Bid will be selected for the award of the Contract.

### 38.0 CONTACTING THE OWNER

Bids shall be deemed to be under consideration immediately after they are opened and until such time official intimation of award/rejection is made by the owner to the Bidders. While the bids are under consideration, Bidders and/or their representatives or other interested parties are advised to refrain from contacting by any means, the owner and/or his employees/representatives on matters related to the bids under consideration. The owner, if necessary, will obtain clarifications on the bids by requesting for such information from any or all the Bidders, either in writing or through personal contacts as may be necessary. Bidders will not be permitted to change the substance of the bids after the bids have been opened.

### 39.0 AWARD CRITERIA

39.1 The owner will award the contract to the successful bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily. The owner shall be the sole judge in this regard.

39.2 In case of Supply Contract, the award shall be on the basis of FOR destination (site) basis.

39.3 Further, the owner reserves the right to award separate contracts to two or more parties in line with the terms and conditions specified in the accompanying Technical Specifications for both supply and erection.

### 40.0 PROCEDURE FOR EVALUATION OF THE PRICE BID

#### Procedure for evaluation of price bid (If)

(a) An item of the BOQ or any additional new items specified through subsequent Corrigendum for quoting has been reflected in the Price Bid but No Price is quoted against the item- either left blank or marked '-'. .



**OPTCL shall do** - to load the highest quoted price without considering discount, if any, of the said item from amongst the participating Firms to fix the relative position of the Bidders for evaluation purpose only. Such item(s) is/are to be executed, by the Firm, free of cost to OPTCL, irrespective of the amount of financial involvement. Further, No discount will be allowed to the Firm on the loaded price for the purpose of evaluation.

**(b) An item(s) content of the BoQ has/have been reflected in the Price Bid but not quoted any price against the item- instead have mentioned –NIL or ZERO or Free of Cost.**

**OPTCL shall do** - the price bid is to be evaluated on the total quoted price only as furnished by the Firm in the Price bid. No price loading will be done against such item(s) and the Firm have to execute the work free of cost as indicated in the price bid of the Firm.

**(c) Few items in the price bid are found to be partially deviated/ partially omitted from the original specification against the items.**

**OPTCL shall do** - the item(s) that/those is/are partially deviated (minor deviations in the Statement/Unit/Qty) from the original specification and does not constitute a material deviation and that does not prejudice or affect the relative ranking of any bidder as a result of the technical and commercial evaluation, that such irregularities are not to be considered as out right rejection. However, the price quoted by the Firm will be presumed to be price of the complete item as per bid specification.

**(d) Some items in the Price Bids, either from the specified BoQ or from additional new items specified through subsequent Corrigendum for quoting, are found to be completely missed/omitted or completely replaced with another irrelevant content.**

**OPTCL shall do** -to load the highest quoted price without considering discount, if any, of the said item from amongst the participating Firms to fix the relative position of the Bidders for evaluation purpose only. Such item(s) is/are to be executed, by the Firm, free of cost to OPTCL, irrespective of the amount of financial involvement. No discount will be allowed to the Firm on the loaded price for the purpose of evaluation.

**(e)** The participant Firms shall **submit an undertaking (FORM-XVII)** along with the price bid to the effect that any items missing/not quoted in the price bid, shall be executed free of cost by them without any financial liability to OPTCL and that the said undertaking shall cover all the evaluation criterion as recommended above. A copy of the same shall also be enclosed in the techno-commercial documents for confirmation.

#### **41.0 OWNER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS**

41.1 **The owner reserves the right to accept or reject any bid, and to annual the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the owner's action.**

#### 42.0 **NOTIFICATION OF AWARD**

42.1 Prior to the expiration of the period of bid validity and extended validity period, if any, the owner will notify the successful Bidder in writing by registered letter or by cable or fax, to be confirmed in writing by registered letter, that its bid has been accepted.

42.2 The notification of award will constitute the formation of the Contract.

42.3 Upon the successful Bidder's furnishing of contract performance guarantee pursuant to clause 43.0 the owner will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to clause 24.0.

#### 43.0 **SIGNING OF CONTRACT**

43.1 At the same time as the owner notifies the successful bidder that its bid has been accepted, the owner will send the bidder the detailed Letter of Award, incorporating all agreements between the parties.

43.2 Within 15 days of receipt of the detailed Letter of Award, the successful Bidder shall sign and date the same and return it to the owner.

43.2.1 The Bidder will prepare the Contract Agreement as per the proforma to be supplied by OPTCL while awarding the and the same will be signed within 20(Twenty) days of Notification of Award.

#### 44.0 **CONTRACT PERFORMANCE GUARANTEE**

44.1 As a Contract Performance Security, the successful Bidder, to whom the work is awarded, shall be required to furnish a Performance Guarantee from (a) a Public Sector Bank or b) a Scheduled Indian Bank having paid up capital (net of any accumulated losses) or Rs.100 crores or above (the latest annual report of the Bank should support compliance of capital adequacy ratio requirement) or (c) any foreign Bank or subsidiary of a foreign Bank with overall international corporate rating or rating of long term debt not less than A-(A minus) or equivalent by reputed rating agency, in the form attached as Annexure in favour of the owner. The guarantee amount shall be equal to ten percent (10%) of the Contract Price and it shall guarantee the faithful performance of the Contract in accordance with the terms and conditions specified in these documents and specifications. The guarantee shall be valid upto 90 days after the end of Warranty Period and shall be furnished within 30 days of issuance of the LOI.

44.2 The Performance Guarantee shall cover additionally the following guarantees to the owner:

- a) The successful Bidder guarantees the successful and satisfactory operation of the equipment furnished and erected under the contract, as per the specifications and documents including the erection work.
- b) The successful Bidder further guarantees that the equipment provided/ and erection work done and installed by him shall be free from all defects in design, material and workmanship and shall upon written notice from the owner fully remedy free of expenses to the owner such defects as developed under the normal use of the said equipment within the period of guarantee specified in the relevant clause of the General Terms and Conditions in this Vol.I/Special Conditions of Contract.

44.3 The Contract Performance Guarantee is intended to secure the performance of the entire Contract. However, it is not to be construed as limiting the damages under clause entitled "Equipment and erection Performance Guarantee" in Technical Specifications, Vol.II and damages stipulated in other clauses in the Bid documents.

44.4 The Performance Guarantee will be returned to the Contractor without any interest at the end of guarantee period, unless otherwise specified in the Conditions of Contract.

**END OF SECTION – INB**

**SECTION – GCC**

**GENERAL TERMS AND  
CONDITIONS OF CONTRACT**

# **GENERAL TERMS & CONDITIONS OF CONTRACT**

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# **SPECIAL TERMS AND CONDITIONS OF THE CONTRACT**

## **SPECIAL TERMS AND CONDITIONS OF THE BID**

- (1) Mobilization advance of 10 % value of the contract value erection portion shall be paid against equivalent amount of BG from any nationalized bank having Branch at Bhubaneswar. The mobilization advance shall be recovered proportionately from each running bills of the contractor by OPTCL and if OPTCL feels, shall recover the same at a time. 10% simple interest shall be charged on the mobilization advance paid to the firm.
- (2) The extra quantities, if any, to be executed by the firm, shall be billed as per the unit price quoted by the firm.
- (3) The price unit quoted by the firm shall be Firm for all items.

## **(4) PAYMENT TERMS**

(a) payment against Supply of equipment and materials shall be effected as follows-

(i) 50 % of cost of the material shall be paid on receipt of the material at site against production of Lorry Receipt.

(ii) 10% cost of material shall be paid after verification by the consignee.

(iii) 30% cost of the material shall be paid after application of the material at site



(iv) Balance 10 % cost of material shall be paid after successful commissioning of the Sub-Station or Line and handing over to OPTCL

(b) Payment for application and commissioning work

(i) 90% cost of application shall be paid as running bill on production of the bill to the engineer in charge and verification thereof after completion of a sizeable amount of erection work.

(ii) Balance 10 % cost of the erection shall be paid only after satisfactory commissioning of the project and handing over to OPTCL

(5) OPTCL shall invite a pre-bid discussion for which the contractors should contact the Sr. G.M., Central Procurement Cell, Head Qrs. Office, OPTCL, Bhubaneswar.

(6) The firms should include the work contract Taxes in their quoted price and the Entry Tax shall be reimbursable to them.

(7) Service Tax as per prevailing rates shall be reimbursed against production of documentary evidence.

(8) Penalty to be recovered from the contractor shall be at the rate of 0.5% per week of delay subject to maximum of 5% of the total contract price. Service Tax should not be included in the quoted prices.

(9) Bids of the Firms not complying the minimum qualification criterion, not furnishing bid security, furnishing incomplete data's /price bid, not furnishing firm price shall be out rightly rejected.

(10) The contractor shall have to solve all the Right of Way problem at his own cost

(11) The Contractor shall have to engage his own security at his own cost till final handing over of the entire work to OPTCL

(12) Penalty:- Penalty for delay in supply & delay in completion of project, shall be levied at the @ 0.5% per week of delay subject to maximum of 5% on the total contract price.

# SECTION – GCC

## GENERAL TERMS & CONDITIONS OF CONTRACT

### A. INTRODUCTION

#### 1.0 DEFINITION OF TERMS

- 1.1 The ‘Contract’ means the agreement entered into between the owner and the Contractor as per the Contract Agreement signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.2 ‘Owner’ shall mean the ORISSA POWER TRANSMISSION CORPORATION Ltd Bhubaneswar and shall include its legal representatives, successors and assigns.
- 1.3 ‘Contractor’ or ‘Manufacturer’ shall mean the Bidder whose bid will be accepted by the owner for the award of the works and shall include such successful Bidder’s legal representatives, successors and permitted assigns.
- 1.4 ‘Sub-Contractor’ shall mean the person named in the Contract for any part of the works or any person to whom any part of the contract has been sublet by the Contractor with the consent in writing of the Engineer and will include the legal representatives, successors and permitted assigns of such person
- 1.5 ‘Engineer’ shall mean the officer appointed in writing by the owner to act as Engineer from time to time for the purpose of the Contract **.For this tenders Senior General manager,(Transmission Project) OPTCL or their authorized representatives are the Engineer in Charge.**
- 1.6 ‘Consulting Engineer’/’Consultant’ shall mean any firm or person duly appointed as such from time to time by the owner.
- 1.7 The terms ‘Equipment’, ‘Stores’ and ‘Materials’ shall mean and include equipment, stores and materials to be provided by the Contractor under the Contract.

- 1.8 'Works' shall mean and include the furnishing of equipment, labour and services, as per the Specifications and complete erection, testing and putting into satisfactory operation including all transportation, handling, unloading and storage at the Site as defined in the contract.
- 1.9 'Specifications' shall mean the Specifications and Bidding Document forming a part of the Contract and such other schedules and drawings as may be mutually agreed upon.
- 1.10 'Site' shall mean and include the land and other places on, into or through which the works and the related facilities are to be erected or installed and any adjacent land, paths, street or reservoir which may be allocated or used by the owner or contractor in the performance of the contract.
- 1.11 The term 'Contract Price' shall mean the lump sum price quoted by the contractor in his bid with additions and/or deletions as may be agreed and incorporated in the Letter of Award, for the entire scope of works.
- 1.12 The term 'Equipment Portion' of the contract price shall mean the ex-works value of the equipment.
- 1.13 The term 'Erection Portion' of the contract price shall mean the value of field activities of the works including erection, testing and putting into satisfactory operation including successful completion of performance and guarantee tests to be performed at Site by the Contractor including cost of insurances.
- 1.14 'Manufacturer's Works' or 'Contractor's Works', shall mean the place of work used by the manufacturer, the Contractor, their collaborators/associates or Sub-Contractors for the performance of the Contract.
- 1.15 'Inspector' shall mean the owner or any person nominated by the owner from time to time, to inspect the equipment; stores or works under the contract and/or the duly authorized representative of the owner.
- 1.16 'Notice of Award of Contract'/'Letter of Award'/'Telex of Award' shall mean the official notice issued by the owner notifying the contractor that his bid has been accepted.
- 1.17 'Date of Contract' shall mean the date on which Notice of Award of Contract/Letter of Award has been issued.
- 1.18 'Month' shall mean the calendar month. 'Day' or 'Days' unless herein otherwise expressly defined shall mean calendar day or days of 24 hours each.
- A 'Week' shall mean continuous period of seven(7) days.
- 1.19 'Writing' shall include any manuscript, type written or printed statement, under or over signature and/or seal as the case may be.
- 1.20 When the words 'Approved', 'Subject to Approval', 'Satisfactory', 'Equal to', 'Proper', 'Requested', 'As Directed', 'Where Directed', 'When Directed',

‘Determined by’, ‘Accepted’, ‘Permitted’, or words and phrases of like importance are used the approval, judgement, direction etc. is understood to be a function of the Owner/Engineer.

- 1.21 test on completion shall mean such tests as prescribed in the Contract to be performed by the Contractor before the work is taken over by the owner.
- 1.22 ‘Start up’ shall mean that time period required to bring the equipment covered under the Contract from an inactive condition, when construction is essentially complete, to the state ready for trial operation. The start up period shall include preliminary inspection and check out of equipment and supporting sub-system, initial operation of the complete equipment covered under the Contract to obtain necessary pre-trial operation data, perform calibration and corrective action, shut down, inspection and adjustment prior to the trial operation period.
- 1.23 ‘Initial Operation’ shall mean the first integral operation of the complete equipment covered under the Contract with the sub-system and supporting equipment in service or available for service.
- 1.24 ‘Trial Operation’, ‘Reliability Test’, ‘Trial Run’, ‘Completion Test’, shall mean the extended period of time after the start up period. During this trial operation period the unit shall be operated over the full load range. The length of trial operation shall be as determined by the Engineer, unless otherwise specified elsewhere in the Contract.
- 1.25 ‘Performance and Guarantee Tests’ shall mean all operational checks and tests required to determine and demonstrate capacity, efficiency, and operating characteristics as specified in the Contract Documents.
- 1.26 The term ‘Final Acceptance’/‘Taking Over’ shall mean the Owner’s written acceptance of the works performed under the contract, after successful commissioning/completion of performance and guarantee tests, as specified in the accompanying Technical Specifications or otherwise agreed in the contract.
- 1.27 ‘Commercial Operation’ shall mean the condition of operation in which the complete equipment covered under the Contract is officially declared by the owner to be available for continuous operation at different loads upto and including rated capacity. Such declaration by the owner, however, shall not relieve or prejudice the Contractor of any of his obligations under the Contract.
- 1.28 ‘Guarantee Period’/‘Maintenance Period’ shall mean the period during which the Contractor shall remain liable for repair or replacement of any defective part of the works performed under the Contract.
- 1.29 ‘Latent Defects’ shall mean such defects caused by faulty designs, materials or workmanship which cannot be detected during inspection, testing etc. based on the technology available for carrying out such tests.

- 1.30 'Drawing', 'Plans' shall mean all:
- a) Drawings furnished by the owner/consultant as a basis of Bid/Proposals.
  - b) Supplementary drawings furnished by the owner/consultant to clarify and to define in greater detail the intent of the contract.
  - c) Drawings submitted by the contractor with his bid provided such drawings are acceptable to the owner/consultant.
  - d) Drawings furnished by the owner/consultant to the contractor during the progress of the work; and
  - e) Engineering data and drawings submitted by the contractor during the progress of the work provided such drawings are acceptable to the Engineer/Owner.
- 1.31 'Codes' shall mean the following including the latest amendments and/or replacements, if any:
- a) Indian Electricity Act, 1905 and Rules and Regulations made thereunder.
  - b) Indian Factory Act, 1948 and Rules and Regulations made thereunder.
  - c) Indian Explosives Act, 1884 and Rules and Regulations made thereunder.
  - d) Indian Petroleum Act, 1934 and Rules and Regulations made thereunder.
  - e) ASME Test Codes.
  - f) AIEE Test Codes
  - g) American Society of Materials Testing Codes.
  - h) Standards of the Indian Standards Institution.
  - i) Other Internationally approved standards and/or rules and regulations touching the subject matter of the contract.
- 1.32 Words imparting the singular only shall also include the plural and vice-versa where the context so requires.
- 1.33 Words imparting 'Person' shall include firms, companies, corporations and associations or bodies of individuals, whether incorporated or not.
- 1.34 Terms and expressions not herein defined shall have the same meaning as are assigned to them in the Indian Sale of Goods Act (1930), failing that in the

Indian Contract Act (1872) and failing that in the General Clauses Act (1897) including amendments thereof, if any.

The various Acts and Regulations are normally available for sale from the following addresses:

- i) Deputy Controller  
Publication Department  
Government of INDIA  
Civil Lines,  
DELHI-110 006.
  
- ii) Deptt. of Publication  
Government of INDIA  
Kitab Mahal  
Unit No.21, Emporia Building,  
Baba Kharak Singh Marg,  
NEW DELHI-110 001.

OR

With leading authorized Government of INDIA Book – Sellers.

1.35 In addition to the above the following definitions shall also apply.

- a) ‘All equipment and materials’ to be supplied shall also mean ‘Goods’.
- b) ‘Constructed’ shall also mean ‘erected and installed’.
- c) ‘Contract Performance Guarantee’ shall also mean ‘Contract Performance Security’.

## 2.0 APPLICATION

These General Conditions shall apply to the extent that they are not superceded by provisions in other parts of the Contract.

## 3.0 STANDARDS

The goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the goods and such standards shall be the latest issued by the concerned institution.

## 4.0 LANGUAGE AND MEASURES

All documents pertaining to the contract including specifications, schedules, notices, correspondences, operating and maintenance instructions, drawings or any other writing shall be written in English language. The Metric System of measurement shall be used exclusively in the contract.

## 5.0 **CONTRACT DOCUMENTS**

5.1 The term Contract Documents shall mean and include the following which shall be deemed to form an integral part of the Contract:

- a) Invitation to Bid including letter forwarding the Bidding Documents, Instructions to Bidders, General Terms and Conditions of Contract and all other documents included and the Special Conditions of Contract.
- b) Specifications of the equipment to be furnished and erected under the contract as brought out in the accompanying Technical Specifications.
- c) Contractor's Bid Proposal and the documents attached there to including the letters of clarifications thereto between the Contractor and the Owner/Consultant prior to the Award of Contract except to the extent of repugnancy.
- d) All the materials, literature, data and information of any sort given by the Contractor along with his bid, subject to the approval of the owner/consultant.
- e) Letter of Award and any agreed variations of the conditions of the documents and special terms and conditions of contract, if any.

5.2 In the event of any conflict between the above-mentioned documents the matter shall be referred to the Engineer whose decision shall be considered as final and binding upon the parties.

## 6.0 **USE OF CONTRACT DOCUMENTS AND INFORMATION**

6.1 The contractor shall not, without the owner's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the owner in connection therewith, to any person other than a person employed by the contractor in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for the purpose of such performance.

6.2 The contractor shall not, without the owner's prior written consent, make use of any document or information enumerated in various contract documents except for the purpose of performing the contract.

6.3 The contractor shall not communicate or use in advertising, publicity, sales releases or in any other medium, photographs or other reproduction of the works under this contract, or descriptions of the site, dimensions, quantity, quality or other information, concerning the works unless prior written permission has been obtained from the owner.

6.4 Any document, other than the contract itself, enumerated in various contract documents shall remain the property of the owner and shall be returned (in all

copies) to the owner on completion of the contractor's performance under the contract if so required by the owner.

## **7.0 CONSTRUCTION OF THE CONTRACT**

7.1 Notwithstanding anything stated elsewhere in the bid documents, the contract to be entered into will be treated as a divisible supply and erection contract.

Award shall be placed on the successful bidder as follows:

- i) First Contract: For supply of all equipment and materials.
- ii) Second Contract: For providing all other services like installation, testing and commissioning including performance testing in respect of all the equipment supplied under the "First Contract" and any other services specified in the Bid Documents.

7.2 In case of divisible supply and erection contract, or where the owner hands over his equipment to the contractor for executing, then the contractor shall at the time of taking delivery of the equipment/dispatch documents be required to execute an Indemnity Bond in favour of the owner in the form acceptable to OPTCL for keeping the equipment in safe custody and to utilize the same exclusively for the purpose of the said contract. Samples of proformae for the Indemnity Bond are enclosed as Annexure-VII & VIII to this Vol.I.

7.3 The contract shall in all respects be construed and governed according to Indian Laws.

## **8.0 JURISDICTION OF CONTRACT**

8.1 The laws applicable to the contract shall be the laws in force in ORISSA. The courts of Cuttack/ Bhubaneswar shall have exclusive jurisdiction in all matters arising under this contract.

## **9.0 MANNER OF EXECUTION OF CONTRACT**

9.1 The owner, after the issue of the Letter of Award to the Contractor, will send one copy of the final agreement to the Contractor for his scrutiny and approval.

9.2 The Agreement, unless otherwise agreed to, shall be signed within 60 days of the acceptance of the Letter of Award, at the office of the owner at Bhubaneswar, on a date and time to be mutually agreed. The contractor shall provide for signing of the contract, performance guarantee in six copies, appropriate power of attorney and other requisite materials. In case the contract is to be signed beyond the stipulated time, the bid guarantee submitted with the proposal will have to be extended accordingly.

9.3 The Agreement will be signed in six originals and the contractor shall be provided with one signed original and the rest will be retained by the owner.



9.4 The contractor shall provide free of cost to the owner all the Engineering data, drawings, and descriptive materials submitted with the bid, in at least six(6) copies to form a part of the contract immediately after issue of Letter of Award.

9.5 Subsequent to signing of the contract, the contractor at his own cost shall provide the owner with at least thirty(30) true copies of agreement within thirty(30) days after the signing of the contract.

#### 10.0 ENFORCEMENT OF TERMS

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

#### 11.0 COMPLETION OF CONTRACT

11.1 Unless otherwise terminated under the provisions of any other relevant clause, this contract shall be deemed to have been completed on the expiry of the guarantee period as provided for under the clause entitled 'Guarantee' in this section.

#### (B) GUARANTEE & LIABILITIES.

#### 12.0 TIME - THE ESSENCE OF CONTRACT

12.1 The time and the date of completion of the contract as stipulated in the contract by the owner without or with modifications, if any, and so incorporated in the Letter of Award, shall be deemed to be the essence of the contract. The contractor shall so organize his resources and perform his work as to complete it not later than the date agreed to. **The entire scope of the work shall be completed within six months from the date of issue of LOA positively.**

12.2 The contractor shall submit a detailed PERT network/bar chart within the time frame agreed consisting of adequate number of activities covering various key phases of the work such as design, procurement, manufacturing, shipment and field erection activities within fifteen (15) days of the date of Notification of Award. This network shall also indicate the interface facilities to be provided by the owner and the dates by which such facilities are needed. The contractor shall discuss the network so submitted with the owner and the agreed network shall form part of the contract documents. As provided in the clause of Terms of Payment in this Section, finalisation of the network/bar charts will be pre-condition to release of any initial advance to the contractor. During the performance of the contract, if in the opinion of the Engineer, proper progress is not maintained, suitable changes shall be made in the contractor's

operations to ensure proper progress without any cost implication to the owner. The interface facilities to be provided by the owner in accordance with the agreed network shall also be review while reviewing the progress of the contractor.

- 12.3 Based on the above agreed network/bar chart fortnightly reports shall be submitted by the contractor as directed by the Engineer.
- 12.4 Subsequent to the finalisation of the network, the contractor shall make available to the Engineer a detailed manufacturing programme in line with the agreed contract network. Such manufacturing programme shall be reviewed, updated and submitted to the Engineer once every two months thereafter.
- 12.5 The above bar charts/manufacturing programme shall be compatible with the owner's computer environment and furnished to the owner on such media as may be desired by the owner.

### 13.0 **EFFECTIVENESS OF CONTRACT**

The contract shall be considered as having come into force from the date of the notification of award unless otherwise provided in the notification of award.

### 14.0 **PENALTY**

#### 14.1 **For Equipment Portion**

- 14.1.1 If the contractor fails to successfully complete the commissioning within the time fixed under the contract, the contractor shall pay to the owner as penalty a sum specified for each specified period of delay. The details of such penalty are brought out in the accompanying Special Conditions of Contract.
- 14.1.2 Equipment and materials will be deemed to have been delivered only when all its components, parts are also delivered. If certain components are not delivered in time the equipment and materials will be considered as delayed until such time the missing parts are also delivered.
- 14.1.3 The total amount of penalty for delay under the contract will be subject to a maximum of 5% of the contract price.

#### 14.2 **For Spares**

- 14.2.1 Unless otherwise specified in the Special Conditions of Contract, the penalty for delay in supply of spares, beyond the dates stipulated under Clause 36.2, Section GCC shall be ½% (half per cent) of the price of undelivered spares, per week or part thereof.
- 14.2.2 The total amount of penalty for delay under the contract will be subject to a maximum of ten per cent (10%) of the value of spares ordered unless otherwise specifically mentioned in special Conditions of Contract.

14.3 Penalty for not meeting performance guarantee during the performance and guarantee tests shall be assessed and recovered from the contractor as detailed in Technical Specifications/Special Conditions of Contract. Such liquidated damages shall be without any limitation whatsoever and shall be in addition to damages, if any, payable under any other clause of Conditions of Contract.

14.4 **For Erection:-** If the contractor fails to **successfully complete the erection & commissioning within the time fixed under the contract, the contractor shall pay to the owner as penalty @ 0.5% for each calendar week of delay or part thereof, subject to a max. of 5%, for uncompleted portion of the work**

#### 15.0 **GUARANTEE**

15.1 The contractor shall warrant that the equipment will be new, unused and in accordance with the contract documents and free from defects in material and workmanship for a period of twelve(12) calendar months commencing immediately upon the satisfactory commissioning. The contractor's liability shall be limited to the replacement of any defective parts in the equipment of his own manufacture or those of his Sub-Contractors under normal use and arising solely from faulty design, materials and/or workmanship provided always that such defective parts are repairable at the site and are not in meantime essential in the commercial use of the equipment. Such replaced/defective parts shall be returned to the contractor unless otherwise arranged. No repairs or replacement shall normally be carried out by the Engineer when the equipment is under the supervision of the contractor's supervisory Engineer.

15.2 In the event of any emergency where in the judgement of the Engineer, delay would cause serious loss or damages, repairs or adjustment may be made by the Engineer or a third party chosen by the Engineer without advance notice to the contractor and the cost of such work shall be paid by the contractor. In the event such action is taken by the Engineer, the contractor will be notified promptly and he shall assist wherever possible in making necessary corrections. This shall not relieve the contractor of his liabilities under the terms and conditions of the contract.

15.3 If it becomes necessary for the contractor to replace or renew any defective portions of the works the provision of this clause shall apply to portion of the works so replaced or renewed until the expiry of twelve(12) months from the date of such replacement or renewal. If any defects are not remedied within a reasonable time, the Engineer may proceed to do the work at the contractor's risk and cost but without prejudice to any other rights which the owner may have against the contractor in respect of such defects.

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

- 15.5 The cost of any special or general overhaul rendered necessary during the maintenance period due to defects in the equipment or defective work carried out by the contractor, the same shall be borne by the contractor.
- 15.6 The acceptance of the equipment by the Engineer shall in no way relieve the contractor of his obligations under this clause.
- 15.7 In the case of those defective parts, which are not repairable at site but are essential for the commercial operation of the equipment, the contractor and the Engineer shall mutually agree to a programme of replacement or renewal, which will minimize interruption to the maximum extent in the operation of the equipment.
- 15.8 At the end of the guarantee period, the contractor's liability ceases except for latent defects. For latent defects, the contractor's liability as mentioned in Clause Nos. 15.1 through 15.7 above, shall remain till the end of 5 years from the date of completion of guarantee period.

In respect of goods supplied by Sub-Contractors to the Contractor where a longer guarantee (more than 12 months) is provided by such Sub-Contractor, the owner shall be entitled to the benefits of such longer guarantee.

- 15.9 The provisions contained in this clause will not be applicable.
- a) If the owner has not used the equipment according to generally approved industrial practice and in accordance with the conditions of operations specified and in accordance with operating manuals, if any.
- b) In cases of normal wear and tear of the parts to be specifically mentioned by the contractor in the offer.
- 15.10 The Contractor shall not stand guaranteed for the materials supplied by OPTCL but shall stand guarantor for the execution of the materials

#### **16.0 TAXES, PERMITS & LICENCES**

The contractor shall be liable and pay all non-Indian taxes, duties, levies lawfully assessed against the owner or the contractor in pursuance of the contract. In addition the contractor shall be responsible for payment of all Indian duties, levies and taxes lawfully assessed against the contractor for his personal income and property only. This clause shall be read in conjunction with Clause 15.0 of Section INB of this Vol.I.

#### **17.0 REPLACEMENT OF DEFECTIVE PARTS AND MATERIALS**

- 17.1 If during the performance of the contract, the Engineer shall decide and inform in writing to the contractor that the contractor has manufactured any equipment, material or part of equipment unsound and imperfect or has furnished any equipment inferior to the quality specified, the contractor on receiving details of such defects or deficiencies shall at his own expense within seven (7) days of his receiving the notice, or otherwise, within such time as may be reasonably

necessary for making it good, proceed to alter, reconstruct or remove such works and furnish fresh equipment/materials upto the standards of the specifications. In case, the contractor fails to do so, the Engineer may on giving the contractor seven (7) days notice in writing of his intentions to do so, proceed to remove the portion of the works so complained of and at the cost of the contractor perform all such works or furnish all such equipment/material provided that nothing in this clause shall be deemed to deprive the owner of or affect any rights under the contract which the owner may otherwise have in respect of such defects and deficiencies.

- 17.2 The contractor's full and extreme liability under this clause shall be satisfied by the payment to the owner of extra cost, of such replacement procured including erection as provided for in the contract, such extra cost being the ascertained difference between the price paid by the owner for such replacements and the contract price by portion for such defective equipment/materials/works and repayments of any sum paid by the owner to the contractor in respect of such defective equipment/material. Should the owner not so replace the defective equipment/materials the contractor's extreme liability under this clause shall be limited to repayment of all sums paid by the owner under the contract for such defective equipment/materials.

#### **18.0 PATENT RIGHTS AND ROYALTIES**

Royalties and fees for patents covering materials, articles, apparatus, devices, equipment or processes used in the works shall be deemed to have been included in the Contract Price. The contractor shall satisfy all demands that may be made at any time for such royalties or fees and he alone shall be liable for any damages or claims for patent infringements and shall keep the owner indemnified in that regard. The contractor shall, alleged infringement of any patents involved in the works, and, in case of an award of damages, the contractor shall pay for such award. In the event of any suit or other proceedings instituted against the owner, the same shall be defended at the cost and expense of the contractor who shall also satisfy/comply with any decree, order or award made against the owner. But it shall be understood that no such machine, plant, work, material or thing has been used by the owner for any purpose or any manner other than that for which they have been furnished and installed by the contractor and specified under these specifications. Final payment to the contractor by the owner will not be equipment, or any part thereof furnished by the contractor, is in such suit or proceedings held to constitute infringement, and its use is enjoined, the contractor shall at his option and at his own expense, either procure for the owner, the right to continue the use of said apparatus, equipment or part thereof, replace it with non-infringing apparatus or equipment or modify it, so it becomes non-infringing.

#### **19.0 DEFENCE OF SUITS**

If any action in court is brought against the owner or Engineer or an officer or agent of the owner, for the failure, omission or neglect on the part of the contractor to perform any acts, matters, covenants or things under the contract, or for damage or injury caused by the alleged omission or negligence on the

part of the contractor, his agents, representatives or his Sub-Contractors, or in connection with any claim based on lawful demands of sub-contractors, workmen, suppliers or employees, the contractor shall in all such cases indemnify and keep the owner, and the Engineer and/or his representative, harmless from all losses, damages, expenses or decrees arising of such action.

## **20.0 LIMITATION OF LIABILITIES**

The final payment by the owner in pursuance of the contract shall mean the release of the contractor from all his liabilities under the contract. Such final payment shall be made only at the end of the Guarantee/Warranty period, and till such time as the contractual liabilities and responsibilities of the contractor, shall prevail. All other payments made under the contract shall be treated as on-account payments.

## **21.0 ENGINEER'S DECISION**

21.1 In respect of all matters which are left to the decision of the Engineer including the granting or with-holding of the certificates, the Engineer shall, if required to do so by the contractor, give in writing a decision thereon.

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

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

## **22 POWER TO VARY OR OMIT WORK**

22.1 No alterations, amendments, omissions, suspensions or variations of the works (hereafter referred to as 'variation') under the contract as detailed in the Contract Documents, shall be made by the contractor except as directed in writing by the Engineer, but the Engineer shall have full powers subject to the provisions hereafter contained, from time to time during the execution of the contract, by notice in writing to instruct the contract to make such variation without prejudice to the contract. The contractor shall carry out such variation and be bound by the same conditions as far as applicable as though the said variations occurred in the Contract Documents. If any suggested variations would, in the opinion of the contractor, if carried out, prevent him from fulfilling any of his obligations or guarantees under the contract, he shall notify the Engineer thereof in writing and the Engineer shall decide forthwith whether or not, the same shall be carried out and if the Engineer confirms his instructions, the contractor's obligations and guarantees shall be modified to such an extent as may be mutually agreed. Any agreed difference in cost

occasioned by any such variation shall be added to or deducted from the contract price as the case may be.

- 22.2 In the event of Engineer requiring any variation, a reasonable and proper notice shall be given to the contractor to enable him to work his arrangement accordingly, and in cases where goods or materials are already prepared or any design, drawings or pattern made or work done requires to be altered, a reasonable and agreed sum in respect thereof shall be paid to the contractor.
- 22.3 In any case in which the contractor has received instructions from the Engineer as to the requirement of carrying out the alterations or additional or substituted work which either then or later on, will in the opinion of the contractor, involve a claim for additional payment, the contractor shall immediately and in no case later than thirty(30) days, after receipt of the instructions aforesaid and before carrying out the instructions, advise the Engineer to that effect. But the Engineer shall not become liable for payment of any charges in respect of any such variations, unless the instructions for the performance of the same shall be confirmed in writing by the Engineer.
- 22.4 If any variation in the works results in reduction of contract price, the parties shall agree, in writing, so to the extent of any change in the price, before the contractor proceeds with the change.
- 22.5 In all the above cases, in the event of a disagreement as to the reasonableness of the said sum, the decision of the Engineer shall prevail.
- 22.6 Notwithstanding anything stated above in this clause, the Engineer shall have the full power to instruct the contractor, in writing, during the execution of the contract to vary the quantities of the items or groups of items in accordance with the provisions of clause entitled 'Change of Quantity' in section GCC of this Vol.I. The contractor shall carry out such variations and be bound by the same conditions as though the said variations occurred in the Contract Documents. However, the contract price shall be adjusted at the rates and the prices provided for the original quantities in the Contract.

### **23.0 ASSIGNMENT AND SUB-LETTING OF CONTRACT**

- 23.1 The contractor may, after informing the Engineer and getting his written approval, assign or sub-let the contract or any part thereof other than for raw material, for minor details or for any part of the plant for which makes are identified in the contract. Suppliers of the equipment not identified in the contract or any change in the identified suppliers shall be subjected to approval by the Engineer. The experience list of equipment vendors under consideration by the contractor for this contract shall be furnished to the Engineer for approval prior to procurement of all such items/equipment. Such assignment/sub-letting shall not relieve the contractor of any obligation, duty or responsibility under the contract. Any assignment as above, without prior written approval of Engineer, shall be void.
- 23.2 For components/equipment procured by the contractor for the purposes of the contract, after obtaining the written approval of the owner, the contractor's

purchase specifications and enquiries shall call for quality plan to be submitted by the suppliers along with their proposals. The quality plans called for from the vendors shall set out, during the various stages of manufacture and installation, the quality practices and procedures followed by the vendors' quality control organization, the relevant reference document/standard used, acceptance level, inspection documentation raised, etc. Such quality plans of the successful vendors shall be discussed and finalized in consultation with the Engineer and shall form a part of the Purchase Order/Contract between the Contractor and the Vendor. Within three weeks of the release of the Purchase Orders/Contracts for such bought out items/components a copy of the same without price details but together with detailed purchase specifications, quality plans and delivery conditions shall be furnished to the Engineer by the Contractor.

#### **24. CHANGE OF QUALITY**

- 24.1 During the execution of the contract, the owner reserves the right to increase or decrease the quantities of items under the contract but without any change in unit price or other terms and conditions. Such variations unless otherwise specified in the accompanying Special Conditions of Contract and/or technical Specifications, shall not be subjected to any limitation for the individual items but the total variations in all such items under the contract shall be limited to a percentage of the contract price as specified in the Special Conditions of Contract.
- 24.2 The contract price shall accordingly be adjusted based on the unit rates available in the contract for the change in quantities as above. The base unit rates, as identified in the contract shall however remain constant during the currency of the contract, except as provided for in Clause 33.0 below. In case the unit rates are not available for the change in quantity, the same shall be subjected to mutual agreement.

#### **25.0 PACKING, FORWARDING AND SHIPMENT**

- 25.1 The contractor, wherever applicable, shall after proper painting, pack and crate all equipment in such a manner as to protect them from deterioration and damage during rail and road transportation to the site and storage at the site till the time of erection. The contractor shall be held responsible for all damages due to improper packing.
- 25.2 The contractor shall notify the owner of the date of each shipment from his works, and the expected date of arrival at the site for the information of the owner.
- 25.3 The contractor shall also give all shipping information concerning the weight, size and content of each packing including any other information the owner may require.
- 25.4 The following documents shall be sent by registered post to the owner within three days from the date of shipment, to enable the owner to make progressive payments to the contractor:



Application for payment in the standard format of the owner ( 3 copies)

In voice (6 copies)

Packing list (6 copies)

Pre-despatch clearance certificate, if any ( 3 copies)

Test Certificate, wherever applicable ( 3 copies)

Insurance certificate (3 copies)

- 25.5 The contractor shall prepare detailed packing list of all packages and containers, bundles and loose materials forming each and every consignment dispatched to site.

The contractor shall further be responsible for making all necessary arrangements for loading, unloading, storing and other handling right from his works upto the site and also till the equipment is erected, tested and commissioned. He shall be solely responsible for proper storage and safe custody with security arrangement of all equipment till final commissioning and handing over to OPTCL.

## **26.0 COOPERATION WITH OTHER CONTRACTORS**

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

## **27.0 NO WAIVER OF RIGHTS**

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

## **28.0 CERTIFICATE NOT TO AFFECT RIGHT OF OWNER AND LIABILITY OF THE CONTRACTOR**

No interim payment certificate of the Engineer, nor any sum paid on account by the owner, nor any extension of time for execution of the works granted by the Engineer shall affect or prejudice the rights of the owner against the contractor or relieve the contractor of his obligation for the due performance of the contract, or be interpreted as approval of the works done or of the equipment furnished and no certificate shall create liability for the owner to

pay for alterations, amendments, variations or additional works not ordered, in writing, by the Engineer or discharge the liability of the contractor for the payment of damages whether due, ascertained, or certified or not or any sum against the payment of which he is bound to indemnify the owner, nor shall any such certificate nor the acceptance by him of any sum paid on account or otherwise affect or prejudice the rights of the owner against the contractor.

## **29.0 TRAINING OF OWNER'S PERSONNEL**

- 29.1 The contractor shall undertake to train free of cost, Engineering personnel selected and sent by the owner at the works of the contractor unless otherwise specified in the Technical Specifications. The period and the nature of training for the individual personnel shall be agreed upon mutually between the contractor and the owner. These Engineering personnel shall be given special training in the shops, where the equipment will be manufactured and/or in their Collaborator's works and where possible, in any other plant where equipment manufactured by the contractor or his collaborator is under installation, operation, or testing to enable those personnel to become familiar with the equipment being furnished by the contractor. The details of the number of persons to be trained, period of training, nature of training etc. shall be as outlined in accompanying Technical Specifications/Special Conditions of Contract.
- 29.2 All traveling and living expenses for the Engineering personnel to be trained during the total period of training will be borne by the owner. These Engineering personnel, while undergoing training, shall be responsible to the contractor for discipline.
- 29.3 The owner shall not be entitled for any rebate, whatsoever, on any account in the event of his failing to avail of the training facilities, for any reason.

## **30.0 PROGRESS REPORTS AND PHOTOGRAPHS**

During the various stages of the work in pursuance of the contract, the contractor shall at his own cost submit periodic progress reports as may be reasonably required by the Engineer with such materials as, charts, net-works, photographs, test certificates, etc. Such progress reports shall be in the form and size as may be required by the Engineer and shall be submitted in at least three (3) copies.

## **31.0 TAKING OVER**

Upon successful completion of all the tests to be performed at site on equipment furnished and erected by the contractor, the Engineer shall issue to the contractor a Taking Over Certificate as proof of the final acceptance of the equipment. Such certificate shall not unreasonably be withheld nor will the Engineer delay the issuance thereof on account of minor omissions or defects,

which do not affect the commercial operation and/or cause any serious risk to the equipment. Such certificate shall not relieve the contractor of any of his obligations which otherwise survive, by the terms and conditions of the contract after issue of such certificate.

## **CONTRACT SECURITY AND PAYMENTS**

### **32.0 CONTRACT PERFORMANCE GUARANTEE**

The contractor shall furnish Contract Performance Guarantee(s) for the proper fulfillment of the contract in the prescribed form within thirty(30) days of “Notice of Award of Contract”. The performance guarantee(s) shall be as per terms prescribed in Section INB, Conditions of Contract Vol.I and/or Special Conditions of Contract.

### **33.0 CONTRACT PRICE ADJUSTMENT-To be done as per the standard practice of OPTCL.**

### **34.0 PAYMENT**

34.1 The payment to the contractor for the performance of the works under the contract will be made by the owner as per the guidelines and **as specified in the Special terms and conditions**. All payments made during the contract shall be on account payments only. The final payment will be made on completion of all works and on fulfillment by the contractor of all his liabilities under the contract.

#### **34.2 Currency of Payment**

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

#### **34.3 Due Dates for Payments**

The initial advance amount shall be payable after fulfillment of all the conditions laid down in the special Conditions of Contract, and receipt of the contractor’s invoice along with all necessary supporting documents for such advance payment. The price component of the initial advance amount will become due for payment within thirty (30) days of receipt of the contractor’s invoice. Owner will make progressive payment as and when the payment is due as per the terms of payment set forth in the accompanying Special Conditions of Contract. Progressive payments other than those under the letter of credit will become due and payable by the owner within thirty (30) days of the date of receipt of contractor’s bill/invoice/debit note by the owner provided the documents submitted are complete in all respects.

#### **34.4 Payment Schedule**

The contractor shall prepare and submit to the Engineer for approval, a break up of the contract price. This contract price break up shall be interlinked with the agreed detailed PERT network of the contractor setting forth his starting and completion dates for the various key phases of works prepared as per conditions in clause 12.0 of this Section GCC of Vol.I. Any payment under the contract shall be made only after the contractor's price break up is approved by the Engineer. The aggregate sum of the contractor's price break up shall be equal to the lump sum contract price. A price break up over valuing those items of supply which will be shipped first will not be accepted.

#### 34.5 Application for Payment

34.5.1 The Contractor shall submit application for the payment in the prescribed proforma of the owner.

34.5.2 Each such application shall state the amount claimed and shall set forth in detail, in the order of the Payment schedule, particulars of the works including the works executed at site and of the equipment shipped/brought on to the site pursuant to the contract upto the date mentioned in the application and for the period covered since the last preceding certificate, if any.

34.5.3 Every interim payment certificate shall certify the contract value of the works executed upto 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 works that, according to the decision of the engineer, does not comply with the contract or has been performed, at the date of certificate prematurely.

#### 34.6 Mode of Payment

34.6.1 Payment due on dispatch of equipment shall be made by the owner through owner's Bank or directly to the contractor as per the payment schedule.

34.6.2 The payment of the advance, test charges, if any, price adjustment, any other supply payment, taxes and duties (whenever admissible) inland transportation (including port handling), insurance and the erection portion of the works shall be made direct to the contractor by the owner.

#### 34.7 Terms of Payment

The terms of payments for various activities under the contract are as under.

##### 34.7.1 Ex-works Price and Erection

The terms of payments for ex-works price components of the equipment and erection are detailed in Special Conditions of Contract, for each equipment package. Mobilisation advance on both supply and erection cost shall be paid as per special terms and conditions .

i) For ex-works price component of equipment

- a) Acknowledgement of Letter of Award.
- b) Submission of an unconditional Bank Guarantee from (a) a Public Sector Bank or (b) a scheduled Indian Bank having paid up capital (net of any accumulated losses) of Rs.100 crores or above (the latest annual report of the Bank should support compliance of capital adequacy ratio requirement) or (c) any foreign Bank or subsidiary of a foreign Bank with overall international corporate rating or rating of long term debt not less than A-(A minus) or equivalent by reputed rating agency, covering the advance amount which shall be initially kept valid till 90 days after the schedule date for successful completion of commissioning. The proforma of Bank Guarantee for advance is enclosed as Annexure-VI of Vol.I. The value of the Bank Guarantee for advance shall be allowed to be reduced every six months after the first running account bill/stage payment under the contract if the validity of the bank guarantee is more than one year. The cumulative amount of reduction at any point of time shall not exceed 75% of the advance corresponding the cumulative value of supplies work completed as per a certificate to be issued by the Engineer-in-charge. It should be clearly understood that the reduction in the value of the advance Bank guarantee or other security as above shall not in any way dilute the contractor's responsibilities and liabilities under the contract including in respect of supplies/work for which the reduction in the value of the bank guarantee is allowed.
- c) Submission of an unconditional bank guarantee towards contract performance guarantee valid upto ninety(90) days after the end of the warranty period, in accordance with clause 43.0 of Section INB of this Vol.I.
- d) Submission of a detailed PERT network/bar chart based on the work schedule stipulated in the Letter of Award and its approval by the owner.

#### 34.7.2 Inland Transportation and Insurance

Inland transportation (including port handling) and inland insurance charges shall be paid to the contractor on prorata to the value of the equipment received at site and on production of the invoices by the contractor. However, wherever equipment wise inland transportation charges have been called for in the 'Bid Proposal Sheets' and have been furnished by the contractor, the payment of inland transportation charges shall be made after receipt of equipment at site based on the charges thus identified by the contractor in his Proposal and incorporated in the contract. The aggregate of all such prorata payments shall however not exceed the total amount quoted by the Bidder in his bid and incorporated in the contract.

## 35.0 DEDUCTIONS FROM CONTRACT PRICE

All costs, damages or expenses which the owner may have paid, for which under the contract contractor is liable, will be claimed by the owner. All such claims shall be billed by the owner to the contractor regularly as and when they fall due. Such bills shall be supported by appropriate and certified vouchers or explanations, to enable the contractor to properly identify such claims. Such claims shall be paid by the contractor within thirty(30) days of the receipt of the corresponding bills and if not paid by the contractor within the said period, the owner may then deduct the amount, from any monies due or becoming due by him to the contractor under the contract or may be recovered by actions of Law or otherwise.

## D. SPARES

### 36.0 SPARES

- 36.1 All the spares for the equipment under the contract will, strictly, conform to the specification and documents and will be identical to the corresponding main equipment/components supplied under the contract and shall be fully interchangeable.
- 36.2 All the mandatory spares covered under the contract shall be produced along with the main equipment as a continuous operation and the delivery of the spares will be affected along with the main equipment 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 has been placed with the contractor prior to commencement of manufacture of the main equipment.
- 36.3 The quality plan and the inspection requirement finalized for the main equipment will also be applicable for the corresponding spares.
- 36.4 The contractor will provide the owner with the manufacturing drawings, catalogues, assembly drawings and any other document required by the owner so as to enable the owner to identify the recommended spares. Such details will be furnished to the owner 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.
- 36.5 The contractor will provide the owner 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 owner, if so desires, will have the right to place order(s) for spares directly on them on mutually agreed terms based on offers of such vendors.
- 36.6 Warranty for spares

The contractor shall warrant that all spares supplied will be new and in accordance with contract documents and will be free from defects in design, materials and workmanship and shall further guarantee as under:

36.6.1 a) For any item of spares ordered or to be ordered by the owner for 3 years operational requirement of the plant which are manufactured as a continuous operation together with the corresponding main equipment/component, the warranty will be 12 months from the scheduled date of commercial operation of the last unit of main equipment under the contract. In case of any failure in the original component/equipment due to faulty designs, materials and workmanship, the corresponding spare parts, if any, supplied will be replaced without any extra cost to the owner unless a joint examination and analysis by the owner 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 warranty 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/to be ordered by the owner for 3 years operational requirement of the equipment, which with the written approval of the owner, are not manufactured as a continuous operation together with the manufacture of the corresponding main equipment/component, will be warranted for 6000 hrs. of trouble free operation if used within a period of 18 months(reckoned from the date of delivery at site). However, if such spare parts are put to use after 18 months of the delivery at site then the guarantee of such spares will stand valid till the expiry of 36 months from the scheduled date of the completion of commissioning of the last unit of equipment or 6000 hrs. of trouble free operation after such spares are put in service, whichever is earlier.

c) For long term requirement.

For items of spares that may be ordered by the owner to cover requirements beyond 3 years of initial operation of the plant, the warranty will be till the expiry of 6000 hrs. of trouble free operation if used within a period of 18 months from the date of delivery at site. For items of spares that may be used after 18 months from the date of delivery at site, the warranty period will be 12 months from the date they are put to use or 6000 hrs. of trouble free operation, whichever is earlier.

36.6.2 The warranty of spares that are not used within 18 months from the respective dates of the delivery at site covered in Para (b) & (c) above will, however, be subject to the condition that all such spares have been

stored/maintained/preserved in accordance with contractor's standard recommended practice, if any, and the same have been furnished to the owner.

- 36.7 To enable the owner to finalise the requirement of recommended spares which are ordered subsequent to placement of order for main equipment in addition to necessary technical details catalogue and such other information brought out here-in-above, 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 price quoted by the contractor to the owner are not higher than those charged by them from other customers in the same period.
- 36.8 In addition to the spares recommended by the contractor, if the owner further identifies certain particular items of spares, the contractor will submit the prices and delivery quotations for such spares within 30 days of receipt of such request with validity period for 6 months for consideration by the owner and placement of order for additional spares if owner so desires.
- 36.9 The contractor shall guarantee the long term availability of spares to the owner 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, he shall give the owner at least twelve (12) months advance notice so that the latter may order his bulk requirement of spares, if he so desires. The same provision will also be applicable to Sub-Contractor of any spares by the contractor or his Sub-Contractors. Further, in case of discontinuance of manufacture of any spares by the contractor or his Sub-Contractors, the contractor will provide the owner, two years in advance, full manufacturing drawings, material specifications and technical information required by the owner for the purpose of manufacture of such items.
- 36.10 Further in case of discontinuance of supply of spares by the contractor or his Sub-Contractors, the Contractor will provide the Owner with full information for replacement of such spares with other equivalent makes, if so required by the Owner.
- 36.11 The prices of all future requirements of items 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 owner as part of mandatory spares or recommended spares. 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 successful completion of trial operation 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 long term requirement of spares by the owner shall remain valid for a period of 5 years from successful completion of commissioning of last unit of equipment.
- 36.12 The contractor will indicate in advance the delivery period of the items of spares, which the owner may procure in accordance with above sub-clause. In case of emergency requirements of spares, the contractor would make every



effort to expedite the manufacture and delivery of such spares on the basis of mutually agreed time schedule.

- 36.13 In case the contractor fails to supply the mandatory, recommended or long term spares in accordance with the terms stipulated above, the owner shall be entitled to purchase the same from alternate sources at the risk and the cost of the contractor and recover from the contractor, the excess amount paid by the owner over the rates worked out on the above basis. In the event of such risk purchase by the owner, the purchases will be as per the works and procurement policy of the owner prevalent at the time of such purchases and the owner at his option may include a representative of the contractor in finalizing the purchases.
- 36.14 It is expressly understood that the final settlement between the parties in terms of the relevant clauses of the Bidding Documents shall not relieve the contractor of any of his obligations under the provision of long term availability of spares unless otherwise discharged in writing by the owner.

## **E. RISK DISTRIBUTION**

### **37.0 TRANSFER OF TITLE**

- 37.1 Transfer of title in respect of equipment and materials supplied by the contractor to OPTCL pursuant to the terms of the contract shall pass on to OPTCL with negotiation of dispatch documents.
- 37.2 This Transfer of Title shall not be construed to mean the acceptance and the consequent “Taking Over” of equipment and materials. The contractor shall continue to be responsible for the quality and performance of such equipment and materials and for their compliance with the specifications until “Taking Over” and the fulfillment of guarantee provisions of this contract.
- 37.3 This Transfer of Title shall not relieve the contractor from the responsibility for all risks of loss or damage to the equipment and materials as specified under the clause entitled “Insurance” of this Section.

### **38.0 INSURANCE**

- 38.1 The contractor at his cost shall arrange, secure and maintain all insurance as may be pertinent to the works and obligatory in terms of law to protect his interest and interests of the owner against all perils detailed herein. The form and the limit of such insurance as defined herein together with the under-writer in each case shall be acceptable to the owner. However, irrespective of such acceptance, the responsibility to maintain adequate insurance coverage at all time during the period of contract shall be of contractor alone. The contractor’s failure in this regard shall not relieve him of any of his contractual responsibilities and obligations. The insurance covers to be taken by the contractor shall be in the joint name of the owner and the

contractor. The contractor shall, however, be authorized to deal directly with Insurance Company or Companies and shall be responsible in regard to maintenance of all insurance covers. Further the insurance should be in freely convertible currency.

- 38.2 Any loss or damage to the equipment during handling, transportation, storage, erection, putting into satisfactory operation and all activities to be performed till the successful completion of commissioning of the equipment shall be to the account of the contractor. The contractor shall be responsible for preference of all claims and make good the damages or loss by way of repairs and/or replacement of the equipment, damaged or lost. The transfer of title shall not in any way relieve the contractor of the above responsibilities during the period of contract. The contractor shall provide the owner with copy of all insurance policies and documents taken out by him in pursuance of the contract. Such copies of documents shall be submitted to the owner immediately after such insurance coverage. The contractor shall also inform the owner in writing at least sixty(60) days in advance regarding the expiry/cancellation and/or change in any of such documents and ensure revalidation, renewal etc. as may be necessary well in time.
- 38.3 The perils required to be covered under the insurance shall include, but not be limited to fire and allied risks, miscellaneous accidents (erection risks) workman compensation risks, loss or damage in transit, theft, pilferage, riot and strikes and malicious damages, civil commotion, weather conditions, accidents of all kinds etc. The scope of such insurance shall be adequate to cover the replacement/ reinstatement cost of the equipment for all risks upto and including delivery of goods and other costs till the equipment is delivered at site. The insurance policies to be taken should be on replacement value basis and/or incorporating escalation clause. Notwithstanding the extent of insurance cover and the amount of claim available from the underwriters, the contractor shall be liable to make good the full replacement/rectification value of all equipment/materials and to ensure their availability as per project requirements.
- 38.4 All costs on account of insurance liabilities covered under the contract will be on contractor's account and will be included in contract price. However, the owner may from time to time, during the pendency of the contract, ask the contractor in writing to limit the insurance coverage, risks and in such a case, the parties to the contract will agree for a mutual settlement, for reduction in contract price to the extent of reduced premia amount. The contractor, while arranging the insurance shall ensure to obtain all discounts on premia which may be available for higher volume or for reason of financing arrangement of the project.
- 38.5 The clause entitled 'insurance' under the section ECC of this Vol.I, covers the additional insurance requirements for the portion of the works to be performed at the site.

### **39.0 LIABILITY FOR ACCIDENTS AND DAMAGES**

Under the contract, the contractor shall be responsible for loss or damage to the plant until the successful completion of commissioning as defined elsewhere in the Bid Document.

### **40.0 DELAYS BY OWNER OR HIS AUTHORISED AGENTS**

40.1 In case the contractor's performance is delayed due to any act of omission on the part of the owner or his authorized agents, then the contractor shall be given due extension of time for the completion of the works, to the extent such omission on the part of the owner has caused delay in the contractor's performance of the contract.

Regarding reasonableness or otherwise of the extension of time, the decision of the Engineer shall be final.

40.2 In addition, the contractor shall be entitled to claim demonstrable and reasonable compensation if such delays have resulted in any increase in cost. The owner shall examine the justification for such a request for claim and if satisfied, the extent of compensation shall be mutually agreed depending upon the circumstances at the time of such an occurrence.

### **41.0 DEMURRAGE, WHARFAGE ETC.**

All demurrage, wharf age and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the contractor.

### **42.0 FORCE MAJEURE**

42.1 Force majeure is herein defined as any cause which is beyond the control of the contractor or the owner as the case may be, which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affects the performance of the contract, such as:

- a) Natural phenomena, including but not limited to floods, droughts, earthquakes and epidemics;
- b) Acts of any Government, domestic or foreign, including but not limited to war, declared or undeclared, priorities, guarantees, embargoes.

Provided either party shall within fifteen(15) days from the occurrence of such a cause notify the other in writing of such causes.

42.2 The contractor or the owner shall not be liable for delays in performing his obligations resulting from any force majeure cause as referred to and/or defined above.

The date of completion will, subject to hereinafter provided, be extended by a reasonable time even though such cause may occur after contractor's performance of obligation has been delayed due to other causes.

### **43.0 SUSPENSION OF WORK**

- 43.1 The owner reserves the right to suspend and reinstate execution of the whole or any part of the works without invalidating the provisions of the contract. Orders for suspension or reinstatement of the works will be issued by the Engineer to the contractor in writing. The time for completion of the works will be extended for a period equal to duration of the suspension.
- 43.2 Any necessary and demonstrable cost incurred by the contractor as a result of such suspension of the works will be paid by the owner, provided such costs are substantiated to the satisfaction of the Engineer. The owner shall not be responsible for any liabilities if suspension or delay is due to some default on the part of the contractor or his sub-contractor.

### **44.0 CONTRACTOR'S DEFAULT**

- 44.1 If the contractor shall neglect to execute the works with due diligence and expedition or shall refuse or neglect to comply with any reasonable order given to him, in writing by the Engineer in connection with the works or shall contravene the provisions of the contract, the owner may give notice in writing to the contractor to make good the failure, neglect or contravention complained of. Should the contractor fail to comply with the notice within thirty (30) days from the date of serving the notice, then and in such case the owner shall be at liberty to employ other workmen and forthwith execute such part of the works as the contractor may have neglected to do or if the owner shall think fit, without prejudice to any other right he may have under the contract to take the work wholly or in part out of the contractor's hands and re-contract with any other person or persons to complete the works or any part thereof and in that event the owner shall have free use of all contractors equipment that may have been at the time on the site in connection with the works without being responsible to the contractor for fair wear and tear thereof and to the exclusion of any right of the contractor over the same, and the owner shall be entitled to retain and apply any balance which may otherwise be due on the contract by him to the contractor, or such part thereof as may be necessary, to the payment of the cost of executing the said part of the works or of completing the works as the case may be. If the cost of completing of works or executing part thereof as aforesaid shall exceed the balance due to the contractor, the contractor shall pay such excess. Such payment of excess amount shall be independent of the liquidated damages for delay which the contractor shall have to pay if the completion of works is delayed.
- 44.2 In addition, such action by the owner as aforesaid shall not relieve the contractor of his liability to pay liquidated damages for delay in completion of works as defined in clause 14.0 of this Section.
- 44.3 Such action by the owner as aforesaid the termination of the contract under this clause shall not entitle the contractor to reduce the value of the contract performance guarantee nor the time thereof. The contract performance

guarantee shall be valid for the full value and for the full period of the contract including guarantee period.

#### **45.0 TERMINATION OF CONTRACT ON OWNER'S INITIATIVE**

45.1 The owner reserves the right to terminate the contract either in part or in full due to reasons other than those mentioned under clause entitled 'Contractor's Default'. The owner shall in such an event give fifteen (15) days notice in writing to the contractor of his decision to do so.

45.2 The contractor upon receipt of such notice shall discontinue the work on the date and to the extent specified in the notice, make all reasonable efforts to obtain cancellation of all orders and contracts to the extent they are related to the work terminated and terms satisfactory to the owner, stop all further sub-contracting or purchasing activity related to the work terminated, and assist owner in maintenance, protection, and disposition of the works acquired under the contract by the owner.

In the event of such a termination the contractor shall be paid compensation, equitable and reasonable, dictated by the circumstances prevalent at the time of termination.

45.3 If the contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the contractor is a partnership concern and one of the partners dies then unless the owner is satisfied that the legal representatives of the individual contractor or of the proprietor of the propriety concern and in the case of partnership, the surviving partners, are capable of carrying out and completing the contract the owner shall be entitled to cancel the contract as to its incompleting part without being in any way liable to payment of any compensation to the estate of deceased contractor and/or to the surviving partners of the contractor's firm on account of the cancellation of the contract. The decision of the owner that the legal representatives of the deceased the contract shall be final and binding on the parties. In the event of such cancellation the owner shall not hold the estate of the deceased contractor and/or the surviving partners of the estate of the deceased contractor and/or the surviving partners of the contractor's firm liable to damages for not completing the contract.

#### **46.0 FRUSTRATION OF CONTRACT**

46.1 In the event of frustration of the contract because of supervening impossibility in terms of section 56 of the Indian Contract Act, parties shall be absolved of their responsibility to perform the balance portion of the contract, subject to provisions contained in sub-clause 46.3 below.

46.2 In the event of non-availability or suspension of funds for any reasons, whatsoever (except for reason of willful or flagrant breach by the owner) and/or contractor then the works under the contract shall be suspended.

Furthermore, if the owner is unable to make satisfactory alternative arrangements for financing to the contractor in accordance with the terms of

the contract within three months of the event, the parties hereto shall be relieved from carrying out further obligations under the contract treating it as frustration of the contract.

- 46.3 In the event referred to in sub-clauses 46.1 and 46.2 above the parties shall mutually discuss to arrive at reasonable settlement on all issues including amounts due to either party for the work already done on “Quantum merit” basis which shall be determined by mutual agreement between the parties.

**47.0 GRAFTS AND COMMISSIONS ETC.**

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

**F. RESOLUTION OF DISPUTES**

**48.0 SETTLEMENT OF DISPUTES**

- 48.1 Any dispute(s) or difference(s) arising out of or in connection with the contract shall, to the extent possible, be settled amicably between the parties.
- 48.2 If any dispute or difference of any kind, whatsoever, shall arise between the owner and the contractor arising out of the contract for the performance of the works whether during the progress of the works or after its completion or whether before or after the termination, abandonment or breach of the contract, it shall, in the first place, be referred to and settled by the Engineer, who, within a period of thirty(30) days after being requested by either party to do so, shall give written notice of his decision to the owner and the contractor.
- 48.3 Save as hereinafter provided, such decision in respect of every matters so referred shall be final and binding upon the parties until the completion of the works and shall forthwith be given effect to by the contractor who shall proceed with the works with all due diligence, whether he or the owner requires arbitration as hereinafter provided or not.
- 48.4 If after the Engineer has given written notice of his decision to the parties, no claim to arbitration has been communicated to him by either party within thirty(30) days from the receipt of such notice, the said decision shall become final and binding on the parties.
- 48.5 In the event of the Engineer failing to notify his decision as aforesaid within thirty(30) days after being requested as aforesaid, or in the event of either the owner or the contractor being dissatisfied with any such decision, or within thirty(30) days after the expiry of the first mentioned period of thirty days, as

the case may be, either party may require that the matters in dispute be referred to arbitration as hereinafter provided.

#### **49.0 ARBITRATION**

49.1 All disputes or differences in respect of which the decision, if any, of the Engineer has not become final or binding as aforesaid shall be settled by arbitration in the manner hereinafter provided.

49.1.1 The arbitration shall be conducted by three arbitrators, one each to be nominated by the contractor and the owner and the third to be appointed as an umpire by both the arbitrators in accordance with the Indian Arbitration Act. If either of the parties fails to appoint its arbitrator within sixty (60) days after receipt of a notice from the other party invoking the Arbitration clause, the arbitrator appointed by the party invoking the arbitration clause shall become the sole arbitrator to conduct the arbitration.

49.1.2 The arbitration shall be conducted in accordance with the provisions of the Indian Arbitration Act, 1940 or any statutory modification thereof. The venue of arbitration shall be Bhubaneswar of ORISSA state.

49.2 The decision of the majority of the arbitrators shall be final and binding upon the parties. The arbitrators may, from time to time with the consent of all the parties enlarge the time for making the award. In the event of any of the aforesaid arbitrators dying, neglecting, resigning or being unable to act for any reason, it will be lawful for the party concerned to nominate another arbitrator in place of the outgoing arbitrator.

49.3 The arbitrator shall have full powers to review and/or revise any decision, opinion, direction, certification or valuation of the Engineer in accordance with the contract, and neither party shall be limited in the proceedings before such arbitrators to the evidence or arguments put before the Engineer for the purpose of obtaining the said decision.

49.4 No decision given by the Engineer in accordance with the foregoing provisions shall disqualify him as being called as a witness or giving evidence before the arbitrators on any matter whatsoever relevant to the dispute or difference referred to the arbitrators as aforesaid.

49.5 During settlement of disputes and arbitration proceedings, both parties shall be obliged to carry out their respective obligations under the contract.

#### **50.0 RECONCILIATION OF ACCOUNTS**

The contractor shall prepare and submit every six months, a statement covering payments claimed and the payments received vis-à-vis the works executed, for reconciliation of accounts with the owner. The contractor shall also prepare and submit a detailed account of Owner Issue materials received and utilized by him for reconciliation purpose in a format to be discussed and finalized with the owner before the award of contract.

51.0 All other disputes shall come under **HIGH COURT OF ORISSA.**

**END OF SECTION – GCC**

**SCHEDULE OF FORMATS TO BE UTILISED BY THE FIRMS  
AND TO BE SUBMITTED WITH THE BID WHERE REQUIRED**

**ANNEXURE –I**

**FORMAT FOR BANK GUARANTEE FORM FOR EARNEST MONEY**

Ref:-  
Date:-  
Bank Guarantee No

1. In according with invitation to Bid No..... of ORISSA POWER TRANSMISSION CORPORATION Limited (hereinafter referred to as the OPTCL) for the purpose of .....

..... Ms. or  
Mr.....  
..... Address  
.....  
.....  
.....  
.....  
.....  
.....

Director(s)  
.....  
.....

Wish/wishes to participate in the said tender and as a Bank Guarantee for the sum of Rs..... valid for a period of ..... days ..... )  
is required to be submitted by the tenderer, we the  
\_\_\_\_\_ )

[indicate the name of the bank]  
(hereinafter referred to as “Bank”) at the request of Ms/  
Shri..... (hereinafter referred to as “Contractor(s)”) do hereby  
unequivocally and unconditionally guarantee and undertake to pay during the above  
said period on written request by the



TRANSMISSION CORPORATION Ltd.

[indicate the designation of purchaser]

an amount not exceeding Rs..... To the said OPTCL without any reservation. The guarantee would remain valid upto 04.00 PM of \_\_\_\_\_ (date) and if any further extension to this is required, the same will be extended on receiving instruction from the \_\_\_\_\_ on whose behalf this guarantee has been issued.

*Note for tenderers :* [Not to be typed in Bank Guarantee]

To be furnished in non-judicial stamp paper of Rs.50/-  
Applicable as per ORISSA Stamp Duty Act, from any  
Nationalised/Scheduled Bank.

2. We, the \_\_\_\_\_ do hereby further undertake to pay the \_\_\_\_\_  
[indicate the name of the Bank]  
amounts due and payable under this guarantee without any demur, merely on demand from OPTCL stating that the amount claimed is due by way of loss or damage caused to or would caused to or suffered by reason of any breach by the said contractor(s) or any of the terms or conditions and failure to perform said Bid. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....
3. We undertake to pay to OPTCL any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding instituted/pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge or our liability for payment thereunder and the contractor(s) shall have no claim against us for making such payment.
4. We, the \_\_\_\_\_ further agree that the guarantee herein \_\_\_\_\_  
[indicate the name of the Bank]  
contained shall remain in full force and effect during the aforesaid period of \_\_\_\_\_ days \_\_\_\_\_ m days and it shall continue to be so enforceable till all the dues of the Grtidco under or by virtue of the said Bid have been fully paid and its claims satisfied or discharged or till Chairman and Managing Director, ORISSA POWER TRANSMISSION CORPORATION Ltd. Certifies that the terms and conditions of the said Bid have been fully and properly carried out by the said contractor(s) and accordingly discharge this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before \_\_\_\_\_ we shall be discharged from all liability under this guarantee thereafter.
5. We the \_\_\_\_\_ further agree with the OPTCL that OPTCL \_\_\_\_\_  
[indicate the name of the Bank]  
shall have be fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of

the said Bid or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time only of the powers exercisable by OPTCL against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Bid and we shall not be relieved from our liability by reason or any such variation postponement or extension granted to the contractor(s) or for any forbearance, act or omission on the part of OPTCL or any indulgence by OPTCL to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6 This guarantee will not be discharged due to the change in the name, style and constitution of the Bank of the 'Contractor(s).

7. We \_\_\_\_\_ lastly undertake not to revoke this guarantee  
[indicate the name of Bank]  
during its currency except with the previous consent of OPTCL in writing .

8. We the \_\_\_\_\_ Bank further agree that this guarantee shall also be invocable at our place of business at Bhubaneswar in the state of Orissa.

Date at \_\_\_\_\_ the, \_\_\_\_\_ day of  
\_\_\_\_\_ Two thousand \_\_\_\_\_

For

\_\_\_\_\_  
[Indicate the name of the bank]

Witness: [Signature with Name and address)

1.

2.

## ANNEXURE –II

### PROFORMA FOR PERFORMANCE BANK GUARANTEE

1. In consideration of the Chairman & Managing Director, ORISSA POWER TRANSMISSION CORPORATION Ltd. (hereinafter called “OPTCL”) having agreed to exempt M/s .....

..... (hereinafter called the said contractors” from the demand under the terms and conditions of an agreement No. \_\_\_\_\_ dated \_\_\_\_\_ made \_\_\_\_\_ between \_\_\_\_\_ and \_\_\_\_\_ for \_\_\_\_\_

\_\_\_\_\_ (hereinafter called “the said agreement”) of security deposit for satisfactory performance of materials (as detailed in the said agreement) and for the due fulfillment by the said contractor(s) of the terms and conditions contained in the said agreement, on production of a Bank Guarantee for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) only, we \_\_\_\_\_ ( \_\_\_\_\_

\_\_\_\_\_ [indicate bank] bank (hereinafter referred to as “the bank”) at the request of \_\_\_\_\_ contractor(s) do hereby undertake to pay to OPTCL, an amount not exceeding Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) only against any loss or damage caused to or suffered or would be caused to or suffered or would be caused to or suffered by OPTCL by reason of any breach by the said contractor(s) of any of the terms or conditions contained in the said agreement.

2. We \_\_\_\_\_ Bank do hereby undertake to pay the amounts due \_\_\_\_\_

[indicate the name of the Bank] and payable under this guarantee without any demur, merely on a demand from OPTCL stating that the amount claimed is due by way of loss or damage caused to or would cause to or suffered by OPTCL by reason of any breach by the said

contractor(s) of any of the terms or conditions contained in the said agreement or by reasons of the contractor(s)

*NOTE FOR TENDERERS:* [Not to be typed in the Bank Guarantee]  
To be furnished in on-judicial stamp paper of Rs. \_\_\_\_\_  
Applicable as per ORISSA Stamp Duty Act from any  
Nationalized/Scheduled Bank.

3. We, the \_\_\_\_\_ do hereby further undertake to pay the

[indicate the name of the Bank]

amounts due and payable under this guarantee without any demur, merely on demand from OPTCL stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by OPTCL by reason of any breach by the said contractor(s) of any of the terms or conditions and failure to perform said Bid. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_.

4. We undertake to pay to OPTCL any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding instituted/pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the contractor(s) shall have no claim against us for making such payment.

5. We, the \_\_\_\_\_ further agree that the guarantee herein

[indicate the name of the bank]

contained shall remain in full force and effect during the aforesaid period of \_\_\_\_\_ days \_\_\_\_\_ and it shall continue to be so enforceable till all the dues of OPTCL under or by virtue of the said Bid have been fully paid and its claims satisfied or discharges or till Chairman and Managing Director, ORISSA POWER TRANSMISSION CORPORATION Limited certifies that the terms and conditions of the said Bid have been fully and properly carried out by the said contractor(s) and accordingly discharge this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the \_\_\_\_\_ we shall be discharged from all liability under this guarantee thereafter.

6. We, the \_\_\_\_\_ further agree with the Board that OPTCL

[indicate the name of the bank]

shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Bid or to extend time or performance by the said contractor(s) from time to time or to postpone for any time or from time to time only of the powers exercisable by OPTCL against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Bid and we shall not be relieved from our liability by reason of any such variation postponement or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of OPTCL or any indulgence by OPTCL

to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

7. This guarantee will not be discharged due to the change in the name, style or constitution of the Bank of the contractor(s).

8. We \_\_\_\_\_ lastly undertake not to revoke this guarantee

[indicate the name of the bank]

during its currency except with the previous consent of OPTCL in writing.

9. We the \_\_\_\_\_ Bank further agree that this guarantee shall also be invocable at our place of business at Bhubaneswar in the state of Orissa.

Dated, the \_\_\_\_\_ day of \_\_\_\_\_

WITNESS: (SIGNATURE WITH NAME AND ADDRESS)

1.

2.

For \_\_\_\_\_  
[indicate name of Bank]

## ANNEXURE-III

FORM OF POWER OF ATTORNEY FOR JOINT VENTURE / CONSORTIUM  
(On Non –Judicial Stamp Paper of Rs100.00 value  
to be Purchased in the Name of Joint venture/ consortium)

KNOW ALL MEN BY THESE RESENTS THAT WE, the Partners whose details are given hereunder.....have formed a joint venture/consortium under the laws of .....and having our Registered Office (s)/Head Office (s) at .....(hereinafter called the ‘Joint venture/consortium’ which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators and assign(s) acting through M/s.....being the Partner in-charge do hereby constitute, nominate and appoint M/s.....a company incorporated under the laws of .....and having its Registered/Head Office at .....as our duly constituted lawful Attorney (hereinafter called “Attorney” or “Authorised Representative” or “Partner in Charge”) to exercise all or any of the powers for and on behalf of the joint venture/consortium in regard to specification No.....for construction of .....Package of ORISSA POWER TRANSMISSION CORPORATION LIMITED ( hereinafter called the “Owner”) and the bids for which have been invited by the Owner, to undertake the following acts

- (i) To submit proposal and participate in the aforesaid Bid – Specification of the Owner on behalf of the “Joint venture/consortium”.
- (ii) To-negotiate with Owner the terms and conditions for award of the contract pursuant to the aforesaid Bid and to sign the contract with the owner for and on behalf of the “Joint venture/consortium”.
- (iii) To do any other act or submit any document related to the above.
- (iv) To receive, accept and execute the contract for and on behalf of the “Joint venture/consortium”.

It is clearly understood that the Partner in –charge (Load Partner) shall ensure performance of the contracts (s) and if one or more Partner fail to perform their respective portion of the contracts (s), the same shall be deemed to be a default by all the partners.

It is expressly understood that this power of Attorney shall remain valid binding and irrevocable till completion of the Defect of liability period in terms of the contract.

The joint venture/ consortium hereby agrees and undertakes to ratify and confirm all the whatsoever the said Attorney/ Authorised Representative / Partner in-charge quotes in the bid, negotiates and signs the Contract with the Owner and / or proposes to act on behalf of the Joint venture/ consortium by virtue of this Power of Attorney and the same shall bind the Joint venture/ consortium as if done by itself.

IN WITNESS THEREOF the Partners Constituting the Joint venture/ consortium as aforesaid have executed these presents on this .....day of .....under the Common Seal (s) of their Companies.

for and on behalf of  
the Partners of Joint venture/ consortiums  
.....  
.....  
.....

The Common Seal of the above Partners of the Joint venture/ consortium:

The Common Seal has been affixed there unto in the presence of:

**WITNESS**

1.           Signature .....
- Name .....
- Designation.....
- Occupation.....
  
2.           Signature .....
- Name .....
- Designation.....
- Occupation.....



**FORM OF JOINT VENTURE / CONSORTIUM AGREEMENT**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE TO BE PURCHASED IN THE NAME OF JOINT VENTURE/ CONSORTIUM)

PERFORMA OF JOINT VENTURE/ CONSORTIUM AGREEMENT BETWEEN .....AND .....FOR BID SPECIFICATION NO.....OF CESU.

THIS Joint venture / consortium Agreement executed on this .....day of .....Two thousand and .....between M/s..... a company incorporated under the laws of ..... and having its Registered Office at..... (hereinafter called the “Lead Partner” which expression shall include its successors, executors and permitted assigns) and M/s..... a company incorporated under the laws of ..... and having its Registered Office at (hereinafter called the “Other Partner” which expression shall include its successors, executors and permitted assigns) for the purpose of making a bid and entering into a contract (in case of award) against the Specification No.: ..... of OPTCL, agovt of orissa Undertaking, having its. Registered Office at OPTCL Office, Jnaphath, Bhubaneswar (hereinafter called the “Owner”).

WHEREAS the Owner invited bids as per the above mentioned Specification for the design manufacture, supply and erection, testing and commissioning of Equipment Materials stipulated in the bidding documents under subject Package for-

AND WHEREAS Annexure – A (Qualification Requirement of the Bidder), Section-----, forming art of the biding documents, stipulates that a Joint venture/ consortium of two or more qualified firms as partners, meeting the requirement of minimum qualification for the bid as applicable may bid, provided the Joint venture/ consortium fulfills all other requirements of minimum qualification and in such a case, the BID shall be signed by all the partners so as to legally bind all the Partners of the Joint venture/ consortium, who will be jointly and severally liable to perform the Contract and all obligations hereunder.

The above clause further states that the Joint venture/ consortium agreement shall be attached to the bid and the contract performance guarantee will be as per the format enclosed with the bidding document without any restriction or liability for either party.

AND WHEREAS the bid has been submitted to the Owner vide proposal No dated by Lead Partner based on the Joint venture/ consortium agreement between all the Partners under these presents and the bid in accordance with the requirements of Annexure-A (Qualification Requirement of the Bidders), Section -SSC has been signed by all the partners.

NOW THIS INDENTURE WITNESSETH AS UNDER:

In consideration of the above premises and agreement all the Partners to this Joint venture/ consortium do hereby now agree as follows:

1. In consideration of the award of the Contract by the Owner to the Joint venture/ consortium partners, we, the Partners to the Joint venture/ consortium agreement do hereby agree that M/s..... shall act as Lead Partner and further declare and confirm that we shall jointly and severally be bound unto the Owner for the successful performance of the Contract and shall be fully responsible for the design, manufacture, supply, and successful performance of the equipment in accordance with the Contract.
2. In case of any breach of the said Contract by the Lead Partner or other Partner(s) do hereby agree to be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.
3. Further, if the Owner suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the equipment in meeting the performance guaranteed as per the specification in terms of the Contract, the Partner(s) of these presents undertake to promptly make good such loss or damages caused to the Owner, on its demand without any demur. It shall not be necessary or obligatory for the Owner to proceed against Lead Partner to these presents before proceeding against or dealing with the Partner(s).
4. The financial liability of the Partners of this Joint venture/ consortium agreement to the Owner, with respect to any of the claims arising out of the performance of non-performance of the obligation set forth in the said Joint venture/ consortium agreement, read in conjunction with the relevant conditions of the Contract shall, however, not be limited in any way so as to restrict or limit the liabilities of any of the Partners of the Joint venture/ consortium agreement.
5. It is expressly understood and agreed between the Partners to this Joint venture/ consortium agreement that the responsibilities and obligation of each of the Partners shall be as delineated in Appendix-I (\*To be incorporated suitably by the Partners that the above sharing of responsibilities of the Partners under this Contract.
6. This Joint venture/ consortium agreement shall be construed and interpreted in accordance with the laws of India and the courts of Cuttack/ Bhubaneswar shall have the exclusive jurisdiction in all matters arising there under.
7. In case of an award of Contract, We the Partners to the Joint venture/ consortium agreement do hereby agree that we shall be jointly and severally responsible for furnishing a contract performance security from a bank in favour of the Owner in the forms acceptable to purchaser for value of 10% of the Contract Price in the currency/currencies of the Contract.
8. It is further agreed that the Joint venture/ consortium agreement shall be irrevocable and shall form an integral art of the Contract, and shall continue to be enforceable till the Owner discharge the same. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF. the Partners to the Joint venture/ consortium agreement have through their authorized representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above

For Lead Partner

(Signature of authorised resolution representative )

Name.....

Designation.....

Common Seal of the company

.....

1. Common Seal of .....For the Partners

has been affixed in my/our presence

Pursuant to the Board of Director's  
resolution dated

(Signature of authorised  
representative)

Signature.....

Name.....

Name.....

Designation.....

Designation.....

Common Seal of the company

.....

WITNESSES:

1. ....

(Signature)

Name..... (official  
address)

2. ....

(Signature)

(Official address)

.....

**ANNEXURE-IV**

**PERFORMANCE SECURITY FORM**

***Bank Guarantee- Unconditional***

.....  
(Name of the Contract)

To

Date.....  
Loan No.....  
Contract No.....

(Name and address of the Employer)

Dear Ladies and/or Gentlemen,

We refer to the Contract (“the Contract”) signed on .....between you and .....(“the Contractor”) concerning design, execution and completion of (Brief description of the Facilities).

By this letter we, the undersigned.....(Name of the Bank), a bank organized under the laws of .....and having its registered/principal office at .....do hereby jointly and severally with the Contractor irrevocably guarantee payment to you up to the sum of .....equivalent to ten percent (10%) of the Contract Price until twelve (12) months after the last date of Operational Acceptance.

Were, it is agreed between you and the Contractor that the Facilities are to be accepted in parts, and thus where there are separate Operational Acceptance Certificates for each part, this Letter of Guarantee shall be apportioned to the value of such part and shall reduce on expiry of twelve (12) months after the date of Operational Acceptance of the part. However, such reduction shall be effected once in one calendar year and the aggregate of such reduction shall be up to a limit of fifty percent (50%) of the value of Performance Security which shall remain valid until twelve (12) months after the last date of Operational Acceptance.

We undertake to make payment under this Letter of Guarantee upon receipt by us of your first written demand signed by your duly authorized officer declaring the Contractor to be in default under the Contract and without cavil or argument any sum or sums within the above named limits, without your need to prove or show grounds or reasons for your demand and without the right of the Contractor to dispute or question such demand.

Our liability under this Letter of Guarantee shall be to pay to you whichever is the lesser of the sum so requested or the amount then guaranteed hereunder in respect of any demand duly made hereunder prior to expiry of this Letter of Guarantee (date) without being entitled to inquire whether or not this payment is lawfully demanded.

This letter of Guarantee shall be valid from the date of issue until twelve (12) months after the last date of Operational Acceptance of the Facilities, i.e. up to and inclusive of .....(Year, month and date) whichever comes first.

Except for the documents herein specified, no other documents or other action shall be required notwithstanding any applicable law or regulation.

If the Defect Liability Period is extended with respect to any part of the Facilities in accordance with the Contract, the validity of this Letter of Guarantee shall be extended with respect to ten percent (10%) of the Contract Price of that part until expiry of such extended Defect Liability Period.

Our liability under this Letter of Guarantee shall become null and void immediately upon its expiry, whether it is returned or not, and no claim may be made hereunder after such expiry or after the aggregate of the sums paid by us to you shall equal the sums guaranteed hereunder, whichever is earlier.

All notices to be given hereunder shall be given by registered (airmail) post to the addressee at the address herein set out or as otherwise advise by and between the parties hereto.

We hereby agree that any part of the Contract may be amended, renewed, extended, modified, compromised, released or discharged by mutual agreement between you and the Contractor, and this security may be exchanged or surrendered without in any way impairing or affecting our liabilities hereunder without notice to us and without the necessity for any additional endorsement, consent or guarantee by us, provided, however, that the sum guaranteed shall not be increased or decreased.

No action, event or condition which by any applicable law should operate to discharge us from liability hereunder shall have any effect and we hereby waive any right we may have to apply such law so that in all respects our liability shall be irrevocable and, except as stated herein, unconditional in all respect.

Yours truly,

Name of the Bank

Authorized signature

Signature of witness \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

Note:

1. The non-judicial stamp papers of appropriate value shall be purchased in the name of the Bank who issues the “Bank Guarantee”.
2. Performance security is to be provided by the successful bidder in the form of a bank guarantee, which should be issued either:
  - (a) by a reputed bank located in the country of the Employer and acceptable to the Employer or
  - (b) by a foreign bank confirmed by either its correspondent bank located in the country of the Employer which should be reputed and acceptable to the Employer, or a Public Sector Bank in the country of the Employer.

***ANNEXURE-V***

**BANK GUARANTEE FOR ADVANCE PAYMENT**

.....  
(Name of the Contract)

To

Date.....  
Loan No.....  
Contract No.....

(Name and address of the Employer)

Dear Ladies and/or Gentlemen,

We refer to the Contract (“the Contract”) signed on .....between you and ..... (“the Contractor”) concerning design, execution and completion of (Brief description of the Facilities).

Whereas in accordance with the terms of the said Contract, the Employer has agreed to pay or cause to be paid to the Contractor an Advance payment in the amount of

\_\_\_\_\_   
\_ (amount of foreign currency in words)   
\_\_\_\_\_ ( \_\_\_\_\_ )   
 (Amount in Figures)

and   
\_\_\_\_\_   
(Amount of local currency in words)   
\_\_\_\_\_ ( \_\_\_\_\_ )   
\_ )   
 (Amount in figures)

By this letter we, the undersigned.....(Name of the Bank), a bank organized under the laws of .....and having its registered/principal office at .....do hereby jointly and severally with the Contractor irrevocably argument in the event that the contractor fails to commence or fulfill its obligations under the terms of the said advance payment to the Employer.

Provided always that the Bank's obligation shall be limited to an amount equal to the outstanding balance of the advance payment, taking into account such amounts that have been repaid by the contractor from time to time in accordance with the terms of payment of the said contract as evidenced by appropriate payment certificates.

This guarantee shall remain in full force from the date of upon which the said advance payment is received by the contractor until the date upon which the contractor has fully repaid the amount so advanced to the employer in accordance with the terms of the contract. At the time at which the outstanding amount is NIL, this Guarantee shall become null and void, whether the original is returned to us or not.

Any claims to be made under this Guarantee must be received by the Bank during its period of validity i.e. on or before \_\_\_\_\_\*(year, month, date).

We the \_\_\_\_\_ Bank further agree that this guarantee shall also be invokable at our place of business at Bhubaneswar in the state of Orissa.

Yours truly,  
Name of the Bank  
Authorized  
signature

Signature of witness \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

Signature of witness \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

- The date shall be three (3) months after the date of operational acceptance by the Employer.

Note:



1. The non-judicial stamp papers of appropriate value shall be purchased in the name of the Bank who issues the “Bank Guarantee”.
2. Performance security is to be provided by the successful bidder in the form of a bank guarantee, which should be issued either:
  - (c) by a reputed bank located in the country of the Employer and acceptable to the Employer or
  - (d) by a foreign bank confirmed by either its correspondent bank located in the country of the Employer which should be reputed and acceptable to the Employer, or a Public Sector Bank in the country of the Employer.

# ANNEXURE-VI

## FORM OF COMPLETION CERTIFICATE

.....  
(Name of the Contract)

To

Date.....  
Loan No.....  
Contract No.....

(Name and address of the Employer)

Dear Ladies and/or Gentlemen,

Pursuant to GCC 24 (Completion of the Facilities) of the General Conditions of the Contract entered into between yourselves and the Employer dated .....relating to the .....(brief description of the Facilities), we hereby notify you that the following part (s) of the Facilities was (were) complete on the date specified below, and that, in accordance with the terms of the Contract, the Employer hereby takes over the said part (s) of the Facilities, together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below

1 .Description of the Facilities or part or part thereof

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

2. Date of Completion:

.....

However, you are required to complete the outstanding items listed in the attachment hereto as soon as practicable.

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor your obligations during the Defects Liability Period.

Very truly yours,

Title  
(Project Manager)

# ANNEXURE-VII

## FORM OF OPERATIONAL ACCEPTANCE CERTIFICATE

(Name of the Contract) \_\_\_\_\_

To

Date.....

Loan

No.....

Contract No.....

(Name and address of the Employer)

Dear Ladies and/or Gentlemen,

Pursuant to GCC 25.3 (Operational Acceptance) of the General Conditions of the Contract entered into between yourselves and the Employer dated .....relating to the .....(brief description of the Facilities), we hereby notify you that the following part (s) of the Facilities was (were) complete on the date specified below, and that, in accordance with the terms of the Contract, the Employer hereby takes over the said part (s) of the Facilities, together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below

1. Description of the Facilities.....

2. Date of Operational Acceptance:.....

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor your obligations during the Defects Liability Period.

Very truly yours,

Title

(Project Manager)

## ANNEXURE – VIII

### ***GENERAL INFORMATION***

The bidder shall furnish general information in the following format.

1. Name of the Firm:

2. Head office address:

3. Contact persons:

Telephone No.

Office:

Residence:

4. Fax No.

Telex:

5. Place of incorporation/Regn.

Year of incorporation/Regn.

# **ANNEXURE – IX** **DECLARATION FORM**

Tender Specification No. \_\_\_\_\_ /

To

Sir,

1. Having examined the above specification together with tender conditions referred to therein, I/We undersigned hereby offer to execute the work contract covered therein complete in all respect as per the specification and general conditions, at the rates entered in the attached contract schedule of prices in the tender. Our offer is valid upto 180 days from the date of tender opening and the prices which are on firm basis will remain valid for two years from the date of opening of tender.

2. I/We hereby undertake to have the works completed within the time specified in the tender.

3. I/We certify to have purchased a copy of the specification by remitting cash demand draft and this has been acknowledged by you in your letter No dated

4. In the event of work order being decided in my/our favour, I/We agree to furnish the Bank Guarantee in the manner acceptable to ORISSA POWER TRANSMISSION CORPORATION Limited and for the sum as applicable to me/us as provided in the general conditions of contract (Section-II) of this specification within 30 days of issue of work order, failing which I/We clearly understand that the said work order will be liable to be withdrawn by OPTCL.

Signed this ..... day of .....2004.

Yours faithfully,

Signature with designation &

Seal of Tenderer.

(This form should be duly filled in by the tenderer and submitted along with the original copy of tender)

## ANNEXURE – X

### ABSTRACT OF TERMS AND CONDITIONS

1. Earnest Money furnished
  - (a) Cash
  - (b) Bank Guarantee
  - (c) Bank Draft
  - (d) Proof of support of EPM  
Regn/DGS&D/NSIC
2. Validity-180 days
3. Price-FIRM
4. Rate of Sales Tax
5. Rate of other taxes/levies/duties
6. Nature of price: Firm
7. Testing charges, if any.
8. Supervision charges per day for  
Engineer/Supervisor:
9. Terms of payment :                      Whether agreeable to OPTCL's              Yes/No  
terms or not?
10. Schedule date of completion      Whether agreeable to OPTCL's              Yes/No  
of work:                                      terms.
11. Guarantee:                              Whether agreeable to OPTCL's              Yes/No  
terms.
12. Penalty:                                      Whether agreeable to OPTCL's              Yes/No  
terms.
13. Whether agreed to furnish 10% composite bank guarantee (in              Yes/No  
case of outside state firms [@ 8.5% of contract value in case of  
State SSI units] in case his tender becomes successful:
14. Whether agreed to Technical Specifications and drawings:              Yes/No
15. Contractor's name & address:

SIGNATURE OF TENDERER

NAME: &  
DESIGNATION:

## **ANNEXURE – XI**

### **PERSONNEL CAPABILITIES**

**Name of Applicant:**

**Details of persons available with necessary qualifications and experience in erection of transmission Bay extensions, both managerial supervisory & workmen with necessary license/workman permit issued by the Electrical Licensing Board, Orissa shall be furnished in the following formats.**

**A) PERSONNEL IN MANAGERIAL POSITION:**

Sl. No.	Name of person with designation	Educational/ Tech. Qualification	Year of experience	Details of License from ELB (O)
---------	---------------------------------	----------------------------------	--------------------	---------------------------------

**B) PERSONNEL IN SUPERVISORY POSITION:**

Sl. No.	Name of person with designation	Educational/ Tech. Qualification	Year of experience	Details of Licence from ELB(O)
---------	---------------------------------	----------------------------------	--------------------	--------------------------------

**C) PERSONNEL IN WORKMEN CATEGORY:**

Sl. No.	Name of person with designation	Educational/ Tech. Qualification	Year of experience	Details of Licence from ELB(O)
---------	---------------------------------	----------------------------------	--------------------	--------------------------------

## ANNEXURE – XII

### EQUIPMENT CAPABILITIES

**Name of the Applicant:**

The bidder shall provide as the capability to meet the requirements for each and all items of equipment in their possession, for manufacturing, erection and testing in the following format:

**(A) Erection**

Sl. No.	Description of equipment	Model/ Power rating	Capacity	Year of manufacture
---------	--------------------------	------------------------	----------	---------------------

**(B) Testing:**

Sl. No.	Description of equipment	Model/ Power rating	Capacity	Year of manufacture
---------	--------------------------	------------------------	----------	---------------------

**(C) Concreting (Foundation Casting)**



## ANNEXURE – XIII

### FINANCIAL CAPABILITY

6. ANNUAL TURNOVER:

**Name of the bidder:**

(The bidder is requested to complete the information in this Annexure. The information supplied should be the annual turnover duly audited by the Chartered Accountant for preceding three years for work in progress or completed).

ANNUAL TURNOVER DATA:

YEAR	TURNOVER	INDIAN RUPEES

7. The bidder shall also furnish the following information:

- a. Name of Banker:
- b. Address of Banker:
- c. Telephone:
- d. Contact Name and Title:
- e. Fax No-

Financial information In Rupees	Actual previous three years	Projected: Next two Years:
	1.      2.      3.	4.      5.

1. Total assets:
2. Current assets:
3. Total liabilities:
4. Current liabilities
5. Profit before taxes:

**( C ) Proposed sources of financing:**

Sources of financing

Amount (Rs.)

- 1.
- 2.
- 3.

Attach audited financial statements for the last three years.

## ANNEXURE - XIV

### EXPERIENCE RECORD

The bidder shall furnish details of work orders for similar nature of erection work received during the last three years and already completed and under execution.

Sl. No.	Work order/ No. & Date	Name & address of the owner	Value of contract	Scheduled date of delivery/completion of work	Slippage with	Remarks
---------	------------------------	-----------------------------	-------------------	---	---------------	---------

## ANNEXURE – XV

### DEPARTURE FROM SPECIFICATION)

(A) Tenderer shall enter below particulars of his alternative proposals for deviation from the specification, if any.

Sl. No.	Clause No. of Specification	Particulars of deviation	Price
---------	-----------------------------	--------------------------	-------

Date:

Place:

SIGNATURE OF TENDERER  
NAME:  
DESIGNATION:  
(SEAL)

(B) Departure from the condition of contract (commercial)

The tenderer shall enter below, departure if any, from the conditions of contract as herein.

Date:

Place:

SIGNATURE OF TENDERER  
NAME:  
DESIGNATION:  
(SEAL)

## ANNEXURE – XVI

### LITIGATION HISTORY

Name of the Bidder:

Bidder should provide information on any history of litigation or arbitration resulting from contracts executed in the last five years or currently under execution. **Furnishing False declaration may liable for rejection of the Tender**

Year.	Award for or against bidder	Name of client, cause of litigation and matter in dispute	Disputed amount (current value in Rs.)
-------	-----------------------------	---	--

# **ANNEXURE – XVII**

## **FORM OF UNDER TAKING**

(To be submitted along with the Price Bid & a copy of the same in the  
Techno-Commercial Bid)

To

**The Sr. G.M (CPC)  
OPTCL, Bhubaneswar**

Ref: (i) Tender Notice No. ....  
(ii) Tender Specification No. ....

Having read the Clause No.40 (a to d) procedure for evaluation of the price bid of instruction to Bidders, I/we understand & hereby declared and undertake that

- (i) any item/ items, which is/are completely missed / omitted / replaced with an irrelevant content or left blank (price not quoted) in our price bid, the same shall be evaluated by incorporating the highest quoted price of said item from amongst all other qualified bidders. The bid price so evaluated shall fix the relative position of the bidders for evaluation purpose only. AND
- (ii) the said item/ items which is/are completely missed / omitted / replaced with an irrelevant content or left blank (price not quoted) in our price bid, shall be supplied /erected & installed by us, free of cost, in the event, the contract is awarded in our favour, irrespective of any financial involvement on us and without any financial liability to OPTCL.

I/we further undertake that we shall abide by this declaration/ undertaking & shall not raise any dispute whatsoever, in future, as regards our price and the basis of evaluation of our price bid.

I/we hereby declare that this under taking is given at my / our free will and volition without being influenced, coerced or persuaded any manner.

Date:

.....

(Signature)

Place:

.....

(Printed Name) .....

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**(Common Seal)**

**TECHNICAL SPECIFICATIONS  
OF  
SUPPLY & APPLICATION OF RTV  
SILICON COATING ON INULATORS  
OF 220KV & 132 SWITCH YARD  
EQUIPMENTS AT 220/132/33 KV  
GRID SUBSTATION.**

## **The Technical specification of Silicon High Voltage Insulator Coating(HVIC),RTV-I.**

### **Silicone Rubber Coating should be as follows.**

#### **1.1 SUPPLY OF HVIC, RTV-I SILICONE COATING CONTAINING ATH (ALUMINA TRIHYDRATE)**

Product must be Silicone, Other materials do not have the long-term UV resistance or adhesion characteristics of a properly formulated Silicone.

- i) Vendor should indicate the product type i.e. RTV Type I silicon. RTV Type I (also written as RTV-I) silicone refers to a silicone that is 1-component and does not require the addition of catalyst or other chemicals during the application process in order to cure the product.
- ii) Product must contain Alumina Tri-Hydrate (ATH) in the formulation larger grain size ATH is preferable (vendor should indicate the grain size of ATH)
- iii) Product must not peel or chalk, product must not crack or craze, product must not blister or bubble.
  - a. Product must have strong adhesion to porcelain, glass or non-ceramic insulators.
  - b. Product must NOT require use of primers in order to achieve adhesion.
  - c. Application must be performed by adequately trained and certified applicators.
- ii) Product must never develop tracking marks longer than 100 millimeters.
- iii) Product must never erode in areas greater than 500 sq. millimeters.
- iv) Product must retain hydrophobicity performance equal to or better than Class HC3 as per the STRI Guide 92/1.
- v) Product must eliminate appreciable leakage current over the long term: This performance characteristic can be qualitatively and quantitatively measured through.
  - The elimination of audible noise due to surface discharges.
  - The elimination of visible discharges (under nightfall),
  - The elimination of hotspots (as indicated through infrared thermal imaging, **and**

#### **1.2 As supplied” (i.e. specifications of the material in its liquid form**



Material properties	Requirement	To be filled by vendor.
Basic components	HVIC, RTV-I silicone coating containing ATH (alumina tri hydrate)	
ATH (alumina trihydrate) Grain Size	Between 10 and 20 microns, 13 to 15 microns preferred	
Specific Gravity at 25°C	Between 1.10 and 1.15	
Percent of solids by Weight	> 70%	
Solvent content by Weight	25% maximum	
Skin-Overtime in Minutes	15	
Tack-Free Time in Minutes	30	
Additives	ATH for dry band arcing resistance	

### 1.3 As Cu red” (i.e. specifications of the material in its solid form)

Material properties	Requirement	To be filled by vendor.
Method of Application	Spray	
Use of Primer for Proper adhesion	FORBIDDEN	
Tracking Resistance at 2.5 kV (ASTM D2303 test)	> 800 minutes	
Dielectric Strength	. > 250 kV/cm	
Tracking & Erosion Resistance (IEC 60587 test)	. Minimum grade 1A 4.5	
Accelerated Weathering Test (IEC 61109 test)	<ul style="list-style-type: none"> <li>• Minimum 5,000 hours testing under clause 5.3, Annex C of the IEC 61109 test standard</li> <li>• Maximum allowable leakage current pulses during 5,000 hours: 1.10mA</li> <li>• maximum allowable 100 data point moving average during 5,000 hours: 0.75 mA.</li> </ul>	
Dielectric Strength	. > 250 kV/cm	
Dielectric Constant	<ul style="list-style-type: none"> <li>. at 100 Hz &lt; 4.0</li> <li>. at 100 kHz &lt; 3.9</li> </ul>	
Loss Tangent at 50 Hz	. < 6.0 x 10 to the power-3	
Dry Arc Resistance	<ul style="list-style-type: none"> <li>. Trac &gt; 140 seconds</li> <li>. Burn Out &gt; 420 seconds</li> </ul>	
Volume Resistivity at 25°	. 7.0 x 10 <sup>16</sup> ohm/cm	
Water Repellency Angle	. > 115°	
Warranty Period	<ul style="list-style-type: none"> <li>. 10 years from date of application,</li> <li>. Warranty for material to be provided direct from material manufacturer.</li> </ul>	
Dissipation factor	At 100Hz-0.0864& At100KHz-0.0788	
Minimum Required Coating Thickness microns.	. <b>0.5mm Minimum</b>	

## 2.1 TECHNICAL SPECIFICATION OF APPLICATION OF RTV SILICON COATING ON INULATORS OF 220KV & 132 SWITCH YARD EQUIPMENTS AT 220/132/33 KV GRID SUBSTATION, PARADEEP.

### 2. BRIEF SCOPE OF WORK

(A) **Surface Preparation:-** All insulator surfaces to be coated should be made free from dust, grease. Oil etc, & other foreign matter including frost. In addition, prior to applying the coating all surface must be dry. This is to ensure proper addition of RTV silicon coating to the insulator surface.

B) **Coating Application:-** All surfaces should be clean & dry prior to application. The RTV coating supplied for application should be properly mixed before application. The coating should be applied in a manner that prevents runs, sags, drips, spills etc. & that completely covers surfaces without holidays. The entire insulator should be coated with minimum 0.5 mm.

Note:- All the required materials, tools & tackles are in the vendors scope.

### 3. SECURITY RULES:

The contractor shall follow all security rules as may be framed by the corporation from time to time regarding movement of materials to site, issue, cancellation, deposition, loss etc. of identity cards, control of entry of personnel etc. The contractor and his personnel shall abide by all security measures imposed by the Engineer or his duly authorized representative from time to time. Contractor shall also follow all rules and regulations applicable in the event of subject area being declared/ proclaimed under emergency from time to time by existing grid stations in the vicinity or by any other statutory order. Nothing extra will be payable on account of stoppage/ hindrance of the work on this account.

The contractor should apply for issue of Identity cards with photo for al his workmen which should be displayed while on duty. The photo identify card shall be issued by OPTCL.. At the end of contract period all the identity cards shall be accounted for and submitted to OPTCL for cancellation. Failing this a penalty of Rs.200/- per missing card shall be levied. The contractor has to submit a copy of report to local police station regarding missing photo passes.

#### **4. PREFERENCE TO PROJECT AFFECTED PERSONS:**

Contractor shall employ their workmen, preferably from amongst the project affected eligible persons. Contractors, if asked by engineer, shall submit regularly in a prescribed proforma, a list of such eligible project affected persons employed by him through out the contract period.

#### **5. INSURANCE**

The contractor is required to submit insurance policy.. In case of continued non-compliance suitable action as deemed fit by OPTCL shall be taken and work order is liable to be cancelled.

#### **6. PROVISION OF UNIFORM:**

The contractor shall at his own expenses provide one uniform and footwear etc. for all labourers engaged on work to the satisfaction of the employer during entire period of work order. The minimum uniform shall be overcoat type half shirt with firm's name printed on back.

## ANNEXURE-I

### PRICE SCHEDULE FOR SUPPLY OF SUPPLY OF HVIC, RTV-I SILICONE COATING CONTAINING ATH (ALUMINA TRIHYDRATE)

Sl. No.	Description of work	Unit	Quantity	Unit supply price including taxes & duties in Rs	Total supply price including taxes & duties in Rs
1	2	3	4	5	6
	Supply, transportation to Paradeep Grid Sub station site of HVIC,RTV-I silicon coating containing ATH (Alumina trihydrate) as per clause 1.1 of technical specification.	KG	4000*		

**Note:-**

The above prices shall include all other taxes & duties except entry tax which shall be extra as per actual.

\* The quantity estimated for application on the equipment listed in Annexure-III. This may change as per actual application.

## ANNEXURE-II

PRICE SCHEDULE FOR APPLICATION OF RTV SILICON COATING ON INULATORS OF 220KV & 132 SWITCH YARD EQUIPMENTS AT 220/132/33 KV GRID SUBSTATION, PARADEEP.

Sl. No.	Description of work	Unit	Quantity	Unit application price including taxes & duties in Rs	Total application price including taxes & duties in Rs
1	2	3	4	5	6
	Application work of high voltage insulator coating ( RTV silicon rubber coating) on the equipment listed in Annexure – III.	KG	4000*		

**Note:-**

The above prices shall include all other taxes & duties except entry tax which shall be extra as per actual.

\* The quantity estimated for application on the equipment listed in Annexure-III. This may change as per actual application.

## ANNEXURE-III

List of equipments at 220/132/33 KV Grid Sub Station Paradeep.

Sl. No.	Description of work	Unit	Quantity	Unit application price in Rs.	Total application price in Rs.
1	2	3	4	5	6
<b>A</b>	<b>220KV side Insulator</b>				
1	CT	Nos.	15		
2	CVT	Nos.	06		
3	LA	Nos.	12		
4	ISOLATOR	Nos.	153		
5	CIRCUIT BREAKER	Nos.	15		
6	BUS POST INSULATOR	Nos.	32		
7	HT BUSHING	Nos.	06		
8	LT BUSHING	Nos.	06		
9	DISC INSULATOR	Nos.	123		
<b>B</b>	<b>132KV side Insulator</b>				
1	CT	Nos.	42		
2	CVT	Nos.	07		
3	LA	Nos.	36		
4	ISOLATOR	Nos.	450		
5	CIRCUIT BREAKER	Nos.	39		
6	BUS POST INSULATOR	Nos.	37		
7	HT BUSHING	Nos.	06		
8	LT BUSHING	Nos.	02		
9	DISC INSULATOR	Nos.	309		
10	NEMA 140 PI	Nos.	224		

END

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