

THE ISLAMIC REPUBLIC OF PAKISTAN

DETAILED DESIGN STUDY

ON

WEST WHARF

THERMAL POWER PLANT PROJECT

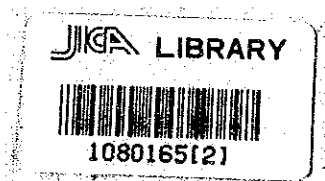
FINAL REPORT-II

LOT III

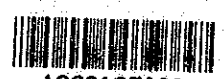
JANUARY 1990

JAPAN INTERNATIONAL COOPERATION AGENCY

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FINAL REPORT-II

LOT III

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KARACHI ELECTRIC POWER SUPPLY CORPORATION LTD.

WEST WHARF THERMAL POWER STATION UNITS 1 AND 2

LOT I: POWER PLANT FACILITIES

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KARACHI ELECTRIC POWER SUPPLY CORPORATION LTD.

WEST WHARF THERMAL POWER STATION UNITS 1 AND 2

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KARACHI ELECTRIC POWER SUPPLY CORPORATION LTD.

WEST WHARF THERMAL POWER STATION UNITS 1 AND 2

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KARACHI ELECTRIC POWER SUPPLY CORPORATION LTD.
WEST WHARF THERMAL POWER STATION UNITS 1 AND 2

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1. INVITATION FOR TENDERS

Sealed tenders for Lot III "Dismantling Works" of the West Wharf Thermal Power Station shall be comprised of the dismantling of the existing "A" "B" and "BX" Stations and their related accessories.

All work to be done in tendering will be received by the Karachi Electric Supply Corporation Limited (hereinafter called the "Owner") from reputed and pre-qualified tenderers only.

Tenders shall be sent by registered mail or hand-delivered to the following address by the local time/day/date to be announced later.

The Project Engineer
Karachi Electric Supply Corp. Ltd.,
Aimai House, Abdullah Haroon Road,
Karachi, Pakistan

A Tender Bond or a Pay Order of an amount equal to 2 percent of the dismantling cost, one set of completed Tender documents (clearly marked "original"), and one duplicate identical copy all in originally bound form together with three sets of legible photo copies of the Tender with all Exhibits duly filled in as well as the priced Bills of Quantities, each set separately bound in the same order as set out in the Tender Documents as required from the Tenderer, shall be submitted and delivered on the address above mentioned on or before the date and time set for opening of Tenders.

One set of duplicate identical copy in originally bound form of the completed Tender Document including one copy of the Tender Drawings

shall be submitted to the Engineer at his address within 24 hours of the opening of the Tenders.

The Tenders submitted shall be enclosed in a sealed envelope clearly marked as follows:

SEALED TENDERS FOR
WEST WHARF THERMAL POWER STATION
LOT - III DISMANTLING WORKS
for the Karachi Electric Supply Corporation Ltd.,
NOT TO BE OPENED BEFORE A.M. ON

Package Number _____ of _____
submitted by

If the Tender is sent by registered mail, the inner sealed envelope shall be enclosed in an outer envelope suitable for mailing.

1.1 Qualification of Tenderers, Equipment and Materials

1.1.1 Only firms prequalified by the Owner are authorised to submit tenders for the dismantling works described in the Tender Documents. However, there is no objection to such firms forming a joint venture with other firms, (whether previously qualified or not) re-organising joint ventures previously qualified, to submit tenders, provided that:

- a) The joint venture is sponsored by one of the firms prequalified by the Owner to submit tenders for the dismantling works;

- b) The prime responsibility for the dismantling of the Works remains with the firm sponsoring the joint venture already prequalified for the purpose;
- c) All firms comprising the joint venture are reliable and competent and acceptable to the Owner and;
- d) The capabilities of the joint venture equals or exceeds the capabilities of the original firm or joint venture already prequalified.

1.1.2 Firms approved by the Owner to submit tenders for the dismantling of Works are under no obligation to tender.

Tenderers will not be reimbursed for any costs of any kind whatsoever incurred in connection with the preparation and submission of their Tenders.

1.1.3 Tenders shall be prepared and submitted in accordance with the instructions set forth herein. These instructions are provided to assist Tenderers in the preparation of their tenders and constitutes part of the Tender Documents.

2. PURCHASE OF TENDER DOCUMENTS

2.1 Purchase of Tender Documents

A complete package of Tender Documents consisting of two (2) volumes may be obtained from the office of The Project Engineer, Karachi Electric Supply Corporation Ltd. upon non-refundable cash payment of Rs.5,000.--. Additional copies of the Tender Documents may be obtained upon payment of Rs.1,500.- (for each set).

2.2 Tender Documents

a. Tender Documents shall consist of following items.

- SECTION I : INSTRUCTIONS TO TENDERERS
- SECTION II : TENDER FORM AND EXHIBITS
- SECTION III : GENERAL CONDITIONS OF CONTRACT
- SECTION IV : SCHEDULE OF PRICES
- SECTION V : TECHNICAL GENERAL CONDITIONS
- SECTION VI : TECHNICAL SPECIFICATION FOR
MECHANICAL AND ELECTRICAL PART
- SECTION VII : TECHNICAL SPECIFICATION FOR
CIVIL AND ARCHITECTURE
- SECTION VIII: DRAWINGS FOR TENDERING

2.3 Tender Requirements

One set of the Tender Documents complete in all respect shall be clearly marked "Original" and the two identical sets clearly marked "Duplicate". The Tenderer shall make three sets of legible photo copies of his Tender, all the Exhibits he is

required to fill and the Schedule of Prices from the fourth copy of the Documents issued to him. Each set is to be separately bound and marked "photo copies of Tender, Exhibits and Schedule of Prices".

2.4 Preparation of Tenders

- 2.4.1 In order to minimize coordination and communication problems during the tender preparation and evaluation periods, the Tenderer is cautioned to observe the following instructions. Failure to comply will result in rejection of their Tenders.
- 2.4.2 Tenders shall be prepared for submission complete with all exhibits and supplementary information in the forms attached with the Tender without alterations or modifications. Every page of the original and duplicate copies must be initialled and official seal stamped by the Tenderer.
- 2.4.3 In preparing their Tenders, Tenderers shall observe the following requirements:
- a) Tenders are to be prepared by filling out the forms provided completely and without alterations or modifications. All entries shall be type written or printed in ink. Signatures shall be written in ink. The completed forms shall be without interlineations or erasures except those necessary to correct errors made by the Tenderer, in which case the erasures and interlineations shall be initialled and official

seal stamped by the person or persons signing the Tender.

- b) All entries in the Tender and supplementary information to be submitted therewith are to be in the English language.
- c) The Tender must be signed by a person duly authorised to do so. In the case of a company, its common seal must be affixed to the Tender in the manner required by its Articles of Association. A Tender submitted by a Company, firm or joint venture must be accompanied by copies of the documents defining the constitution and management of the Tenderer, and in the case of a joint venture, defining the constitution and management of the joint venture and constituents thereof, which copies shall be certified as true copies by the public officer required by law to hold the original or by a Notary Public. Such additional information should also be furnished to enable the Owner to make a full appraisal of the functioning of the Tenderer and to identify the persons authorised to represent, obligate and bind the Tenderer.
- d) Tenderers shall indicate in the space provided for their full and proper address at which notices may be legally served on them and to which all communications in connection with the Tender and Contract are to be sent.
- e) In the event of a Tender being submitted by a consortium, one member of the consortium shall be designated as the Coordinator and this member shall be the point of contact for the Owner or his Representatives. All members of the

consortium shall duly execute the Contract if the consortium is the successful Tenderer.

2.4.4 Any explanation desired by the Tenderer regarding the meaning or interpretation of the Tender Documents must be requested in writing and addressed to the office of the Owner's Representative with copies to the Engineer. If any explanation or interpretation is necessary, it will be issued in the form of a numbered Bulletin which will formally supplement or revise the Tender Documents and be issued to all Tenderers. Any written request must be sent early enough, at least four weeks before due date of opening of Tender, to allow time for the Bulletin to reach all Tenderers before submission of their Tenders. The receipt of every Bulletin issued during the tendering period must be acknowledged in the space provided in the Tender Form or by letter or cable received before the Tender opening due time. Oral explanations or instructions given during the tendering period shall not be binding.

2.4.5 The final Tender as submitted by the Tenderer shall consist of:

- a. Three copies of each set (one set original and two set duplicate) of the Tender Documents duly complete in all respect executed by an authorised official of the Tenderer in the space provided thereof. Each page of the three sets shall be initialled and official seal stamped.

The original set and one duplicate set of completed Tender

Documents shall be submitted on the date and time of opening of the Tender at the Owner's address. One set of the duplicate identical copy of the completed Tender Document including one copy of the Tender Drawings shall be submitted to the Engineer within 24 hours of the opening of the Tender.

- b. Three bound sets of photo copies of the Tender, the Exhibits which the Tenderer is required to fill in and the Schedule of Prices.
- c. The original and two duplicate copies of the Tender Bond or pay order attached to the Tender Documents.
- d. One (1) copy of power of attorney if Tender Form is executed by a person other than president, partner or owner of Tenderer's company, attached to copies of the Tender.

2.4.6 No Alternative Proposals

Each Tenderer must submit the Tender Exactly in accordance with the Tender Document unless otherwise an alternative scheme has been specifically asked for.

2.5 Tender Bond

- a. The Tenderer must submit with his tender a Pay Order or Tender Bond in Exhibit 'L' drawn on a Scheduled Bank or Insurance Company acceptable to the Owner, payable to the order of the Owner, in an amount equal to 2% of the Tenderer's bid price of dismantling cost.
- b. The Tender Bond or the Pay Order shall be in local currency. The Tender Bond shall be valid for 135 days from the due date of opening of the Tender.
- c. The Tender Bond or the Pay Order of all unsuccessful Tenderers will be returned within 30 days after the issuance of the Letter of Intent to the successful Tenderer, or within 135 days from the tender opening date if no award is made.
- d. The successful Tenderer will be required to keep his Tender Bond or the Pay Order valid until he activates his Performance Bond.
- e. Should a successful Tenderer fail or refuse to execute final Contracts and/or to furnish a Performance Bond satisfactory to the Owner within fifteen (15) days after receipt of the Letter of Intent, the Tenderer will be considered to have abandoned his Tender and the amount of the Tender Bond or the Pay Order delivered with his Tender shall thereupon be due and owing to the Owner as liquidated damages for such failure or refusal, and the Owner may thereupon award the Contract to any other Tenderer. The term "successful Tenderer" shall

then be deemed to mean the Tenderer whose Tender is thereafter accepted.

- f. More than one Tender Bond is acceptable for a consortium provided the full bid value is covered.

2.6 Supplementary Information

2.6.1 The following supplementary information shall be submitted with each copy of the Tender Documents and with each set of the required photo copies.

- a. A preliminary construction schedule showing the construction programme for various activities proposed by the Tenderer for carrying out the work from commencement of mobilisation to completion. The schedule shall be in such form and in sufficient detail to adequately show the sequence of operations proposed and the period of time estimated for performing each activity and phase of the work.
- b. A preliminary equipment schedule showing the ownership and the manner and period of utilisation of the major items of dismantling equipment, plant and machinery proposed by the Tenderer for carrying out the Works. The Tenderer must indicate against each item information concerning its make, model, capacity, age, prior usage and present condition.
- c. The organisation chart of the supervisory staff and workers the Tenderer proposes to employ at the site of Works for the execution of the work, indicating which are Pakistani and

which are non Pakistani nationals.

- d. The other additional informations shall be submitted in accordance with format attached herewith.

3. TENDER DUE DATE

Tenderers are responsible for dispatching their Tenders in such time as to allow ample margin for early delivery by registered mail. Tender received after due time of opening of Tender shall not be considered regardless of the cause of delay.

Any modification in the Tender sent by cable or telegraph shall not be accepted unless written confirmation, executed by the same authorized person as is in the original Tender, is received prior to the Tender opening time.

3.1 Tender Opening

All Tenders shall be opened publicly by the Owner at the time set for opening of Tender and at the Karachi address given in Clause 1 above. The Tender price shall be read aloud and recorded. The Tenderer must ensure delivery of the Tender to the Owner in time before public opening of the Tender.

4. SCHEDULE OF PRICES

- 4.1 Tenderers shall enter their quotations for undertaking the Works under the contract in the Schedule of Prices appended to the Tender. Schedule of price must be filled out completely with

all rates and amounts expressed in Pakistani Rupees.

4.2 The quantities contained in column of the the Schedule of Price are based on the estimates for the OWNER's own use for comparing the Tenders and the Owner does not expressly or by implication agree that the actual quantities of the work to be performed will correspond therewith. No claim for payment will be admissible on account of anticipated profits or otherwise for work not actually performed nor will any adjustment in the unit rates set forth in the Schedule of Price be made because of any increase or decrease in quantity indicated therein.

4.3 The unit rate entered in column of the Schedule of Prices will be rates at which payment will be made to the contractor and should include all costs of performing the works including labour, material, income tax, super tax, any duties or taxes levied by the Government or local bodies, profits and costs of accepting the general risks, liabilities and obligations set forth or implied in the contract. The unit rates shall be extended to show the total costs for each item. The total of amount is the Tendered Price and this shall be entered in paragraph 1 of the Tender. Where a discrepancy exists between the unit rate and extended total cost, the unit rate shall be taken as correct and the total amount adjusted accordingly.

5. PROGRESS SCHEDULE

5.1 A tentative Monthly Graphic Progress Schedule is attached as part of the Tender Documents. This tentative schedule shows the completion date of the entire project as well as key dates of completion as desired by the Owner and the time that will be required to meet this completion date.

6. SUFFICIENCY OF TENDER

6.1 Each Tenderer must satisfy himself before tendering as the correctness and sufficiency of his Tender and of the rates and prices stated in the Schedule of Price which rates and prices, except in so far as it is otherwise expressly provided in the Conditions of Contract, must cover all his obligations under the Contract and all matters and things necessary for the proper completion and the maintenance of the Works in accordance with the Drawings, Specifications and other Tender Documents.

7. INSPECTION OF SITE

7.1 Each Tenderer shall inspect and examine the site of work and surroundings and shall satisfy himself before submitting his Tender as to the nature of ground, the hydrological and climatological conditions, the form and nature of the site, the quantities and nature of Work, the materials necessary for the completion of the works, the means of access to the site, the accommodation he may require, and in general shall obtain all necessary information as to risks, contingencies and other

circumstances which may influence or affect his Tender.

8. WITHDRAWAL OF TENDER

8.1 A Tender may be modified, corrected or withdrawn at any time prior to the date set for opening of Tenders upon submission of a request in writing to that effect, signed in the same manner as in the Tender.

9. PROCEDURE FOR REVIEW OF TENDERS AND CONTRACT AWARD

No Tenderer shall be permitted to alter his Tender after it has been opened, but clarifications not changing the substance of the Tender will be accepted. The Owner may ask any Tenderer for clarifications but any change suggested by the Tenderer in the substance of his original Tender will not be accepted.

Each Tender will be checked in detail to ascertain compliance with the Tender Documents and for complete information requested herein. It shall be ascertained whether material errors in computation have been made, whether the Tender is fully responsive to the technical specifications, whether the required guarantees and sureties have been provided, whether the Tender has been properly executed and whether it is otherwise generally in order. If a Tender does not substantially conform to the technical specifications or is not otherwise responsive to the Tender Documents, it shall be rejected. A technical analysis shall be made of each responsive Tender to enable evaluated comparisons to be made.

The Owner reserves the right to waive minor irregularities or errors in any Tender, if it appears to the Owner that such irregularities or errors were made inadvertently. Any such irregularities or errors so waived must be corrected in the Tender in which they occur prior to the execution of the Letter of Intent which may be awarded thereon.

The Owner is not bound to accept the lowest Tender or any other Tender nor is he bound to assign any reason for rejection of a Tender. The Owner will adopt the minimum limit method for the cost evaluation of both the dismantling cost and purchase price. Until formal Contracts are executed, the successful Tenderer shall be bound by the terms and conditions of these Tender Documents.

Detailed analyses of the Tender and recommendations for award of the Contract will be completed by the Owner and his Representatives as soon as possible so that the Letter of Intent to award the Contract may be issued.

10. CONFORMANCE TO PREQUALIFICATION DOCUMENTS

The pre-qualified Tenderers shall ensure that their Tender conforms wholly to the pre-qualification documents submitted by them to the Owner. Where joint venture arrangements have been proposed in the pre-qualification documents, the Tenderers shall submit their Tender in the same pattern and arrangements as given by them in their prequalification documents. Tenders not conforming to these conditions are liable to be rejected at the sole discretion of the Owner.

SECTION II

TENDER FORM AND EXHIBITS

TENDER FORM

TO:

The Karachi Electric Supply,
Corporation Limited,
Karachi.

Gentlemen,

The undersigned Tenderer, having examined the Tender Documents listed in paragraph 7 below for the work of:

WEST WHARF THERMAL POWER STATION

LOT III DISMANTLING WORKS

and having examined the site of the above noted Works, or having caused the site to be examined on our behalf by a competent and reliable agent, and having satisfied ourselves as to all conditions under which the above-named Works must be performed, hereby Tender.

- a) to construct, complete and maintain the whole of the abovenamed Works in conformity with the Tender Documents for the Tender Price of Pakistan Rupees (in words) Rupees. For such other sum as may be ascertained in accordance with the Conditions of Contract and the rates and prices setforth in the Schedule of Price comprised in the Tender Documents; and, should a Letter of Intent accepting this Tender be issued to us,
- b) to sign, within 10 days following issue of said Letter of

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Intent, an Agreement in the form set out in Exhibit "K" to this Tender with such alterations and additions thereto as you may require to adopt such Agreement to the circumstances of this Tender, and for this purpose to attend, or to cause one or more representatives duly authorized by us under appropriate power(s) of attorney to attend, your office,

- c) to commence the Works within fifteen days following the receipt of the written order to commence the Works and to complete all the Works comprised in the Tender Documents on or before the expiry of the date and time set for completion of the Works,
- d) to submit within 15 days following signing of the Contract Agreement a Performance Bond in the form set out in Exhibit "E" to this Tender for the due performance of the Contract in an amount equivalent to ten (10) percent of the dismantling cost in the Contract Price executed by
..... being a Scheduled Bank/Insurance Company approved by you, and
- e) if we should desire payment of any mobilization advance in accordance with the Conditions of Contract, to submit within 15 days following the signing of the Contract Agreement a Mobilization Advance Bond in the form set out in Exhibit "H" to this Tender in an amount equal to the mobilization advance desired (but not exceeding 15 percent of the dismantling cost in the Contract Price) executed by
being a Scheduled Bank/Insurance Company approved by you.

2. This Tender shall remain valid for a period of 135 days following _____ the date set for opening of Tenders, and may be accepted by you at any time before the expiration of this period.
3. Unless and until a formal agreement is prepared and executed, this Tender together with the other Tender Documents and your written Letter of Intent accepting this Tender, shall constitute a binding contract between us.
4. We understand that you are not bound to accept the lowest or any tender you may receive, and that you will not defray any expenses incurred by us in preparing and submitting this Tender or otherwise in connection with this Tender.
5. As a guarantee for the due performance of the undertakings and obligations of this Tender, we submit herewith Tender/Earnest Money in an amount equivalent to 2 percent of the dismantling cost in the Tender Price in the form of Pay Order No. _____ dated _____ of the _____ Bank Limited, _____ Branch, being a Scheduled Bank at Karachi/a Guarantee of _____ Bank Limited, _____ Branch, being a Scheduled Bank/a Bond of _____ Limited, being an insurance company approved by you made in your favour and made payable to you, without any reference to us, and valid for one hundred thirty-five (135) days from the date established for the opening of tenders.

6. We agree that our quoted unit rates given in the Schedule of Prices are firm subject to applicable/escalation de-escalation provisions of the Conditions of Contract.

7. The Tender Documents referred to above constitute a part of this Tender and comprise the following:

- i- Instructions to Tenderers.
- ii- Tender Form and Exhibits.
- iii- General Conditions of Contract.
- iv- Schedule of Prices.
- v- Technical General Conditions.
- vi- Technical Specification for Mechanical and Electrical Part.
- vii- Technical Specification for Civil and Architecture.
- viii- Drawings for Tendering.

We acknowledge that we have received and have taken into account in our Tender Bulletin Number(s) _____ which were issued by you subsequent to these Tender Documents.

Appended to the Tender and forming part thereof are following

Exhibits and Sections:

- Exhibit "A" Certificate of Completion.
- Exhibit "B" Affidavit of Contractor.
- Exhibit "C" Certificate of Compliance.
- Exhibit "D" Release of Lien.
- Exhibit "E" Performance Bond.
- Exhibit "F" Temporary Works.

- Exhibit "G" Services Distribution.
- Exhibit "H" Mobilization Advance Bond.
- Exhibit "J" Special Stipulations.
- Exhibit "J1" Time Schedule. (Lot-III)
- Exhibit "J2" Not used
- Exhibit "K" Form of Agreement.
- Exhibit "L" Tender Guarantee Bond.
- Exhibit "M" Retention Money Bond.
- Exhibit "N" Construction Machinery & Equipment.
- Exhibit "P" Proposed Subcontractors and Suppliers.
- Exhibit "Q" Contractors Construction Management.
- Exhibit "R" Not used
- Exhibit "S" Not used
- Exhibit "T" Contractors Dismantling Practice.
- Section A3 Schedule of Prices
- Section A4 List of Tender Drawings

8. Details of Tenderers Company

- a. The Tenderers Company name, address, telephone number and cable code are listed as follows:
- b. If the Tenderer is a consortium, list the following information
 - 1) Consortium name (if any), address, telephone number and cable code:
 - 2) Senior partner or Coordinator of consortium - name, address, telephone number and cable code:
 - 3) Other members of consortium (list names only)

c. Person's name, company name, address, telephone number, and cable code for the Owner and Engineer to contact for answering all questions pertaining to this Tender:

d. List of subcontractors (if any)

9. Execution of the Tender

I, _____ being the duly authorized representative of the Tenderer certify that all of the data entered in these Tender Documents are correct and truly represent the equipment, materials and work covered by our formal Tender No. _____ dated _____ I hereby certify that I am a duly authorized representative of the Tenderer whose name appear above my signature.*)

Tenderer's name: _____

Authorized signature: _____

Type name of authorized signatory _____

* Note: One (1) copy of power of attorney must be attached to the Tender submitted to the Owner if this Tender Form is executed by a person other than president, partner or owner of the Tenderer's Company.

CERTIFICATE OF COMPLETION

(Contract Designation)

To: _____
(Owner)

I, the undersigned Contractor for the above designated Contract (hereinafter called the "Contractor") with the Karachi Electric Supply Corporation Ltd. (hereinafter called the "Owner") do hereby certify that:

1. The work to be performed by _____ (hereinafter called the "Contractor") pursuant to the Contract Agreement dated _____ 19____ is completed and is in all respects in strict compliance with the provisions of the Contract, including all plans, specifications, maps and drawings and modifications thereof.
2. Payment has been made in full by the Contractor to all persons who have furnished labour and material for this Contract.
3. The Contractor has obtained valid release of lien from all persons, firms, and/or corporations furnishing materials, supplies and appliances which were employed by the Contractor in the performance of this Contract, and such releases have been delivered by the Contractor to the Engineer.

4. The complete cost account statement attached hereto and made a part thereof is a complete and accurate cost break-down, and in accordance with the Cost Account Code, given to the Contractor by the Owner, of all materials, equipment, and work performed in accordance with the Contract.

5. All defects in equipment, materials, and workmanship reported by the Engineer have been corrected by the Contractor.

6. The total true and correct cost of the Contract as so completed was and is Rs _____.

Of this total, the entire balance now due to the Contractor is Rs. _____.

CERTIFICATE OF COMPLETION

We, the undersigned Owner and Contractor, do hereby certify that:

The above designated Contract has been completed in accordance with the provisions of said Contract Agreement dated _____ 19___, provided however, that the acceptance of the Contractor's work by the Owner shall not be deemed to relieve the Contractor of his obligations contained in the Contract with respect to defective workmanship, materials, or equipment discovered within the maintenance period.

The Karachi Electric Supply Corp. Ltd.

(Owner)

Date _____

BY: _____

TITLE: _____

(Contractor)

Date _____

BY: _____

TITLE: _____

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AFFIDAVIT OF CONTRACTOR

(Contract Designation)

(To be furnished on stamp paper of appropriate value)

CITY OF: _____

_____, being duly sworn according to
law, deposes and says that he is the _____
(Title)

_____ of _____,

the Contractor, in a contract entered into between the Contractor and
The Karachi Electric Supply Corporation Ltd., the Owner, for the
_____; and that he is authorized to and
does make this affidavit on behalf of said Contractor to induce the
Owner to make final payment to the Contractor in accordance with the
provisions of the said Contract.

The Affiant further says that all persons or entities who have furnished
labour, equipment, materials and/or services in connection with the said
Contract have been paid in full; that the names of Manufacturers,
Material Suppliers and Subcontractors that furnished any material or
services or both in connection with the said Contract and that the kind
or kinds of materials or services or both in connection with the said
Contract so furnished are:

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NAME	KIND OF MATERIAL AND SERVICE
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

and that the Contractor has delivered to the Owner duplicate releases of lien executed by all such manufacturers, materials suppliers, and subcontractors.

 (Signature of Affiant)

Sworn to and Subscribed
 before me this _____ day
 of _____, 19__

 (Notary Public)

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EXHIBIT "C"

CERTIFICATE OF COMPLIANCE

(Contract Designation)

(To be furnished on stamp paper of appropriate value)

TO: _____

I, the undersigned Contractor for the Contract above named do hereby
certify that:

The work to be performed by _____

(hereinafter called the "Contractor") pursuant to the Contract dated

_____, 19____, has been completed as of _____ 19____,

and to the best of my knowledge, was performed in all respects in strict
compliance with all laws of the City of Karachi and the Country of
Pakistan.

(Contractor)

BY: _____

TITLE: _____

DATE _____

EXHIBIT "C"

CERTIFICATE OF COMPLIANCE

I, _____, a Notary Public of _____
_____, hereby certify that _____

(name of deponent)

(title)

of _____ whose name is
signed to the foregoing instrument, acknowledged before me this day that
he, with full authority, executed the foregoing instrument for _____

(Name of organization)

Given under my hand and seal this
_____ day of _____ 19____

40

(Contract Designation)

(To be furnished on stamp paper of appropriate value)

WHEREAS, the undersigned _____ has furnished to
The Karachi Electric Supply Corporation Ltd., the Owner, the following:

(Kind of equipment, material and/or

(services furnished)

for use in the construction of _____
(name of project)

belonging to the said Owner.

NOW, THEREFORE, the undersigned _____
(name of Contractor)

acknowledges that, upon payment of the amount setforth in the Final Bill
accompanying this Release of Lien, it hereby does relinquish, waive and
release any and all claims, liens, or right to or claim of lien, whether
real or disputed, it may have had or now has against the Owner arising
from the performance of the above Contract on the above described system
and premises, under any law, common or statutory, on account of labour,
equipment and/or materials heretofor and hereafter furnished by the
undersigned to or for the account of said _____
given under my hand and seal the _____ day of _____ 19____

BY:

president, partner or owner, or if signed by other than one of the
foregoing, accompanied by power of attorney signed by one of the
foregoing in favour of the signed (use designation applicable).

I, _____, a Notary Public of _____
_____, hereby certify that _____
name of

deponent Title

of _____ whose name is
signed to the foregoing instrument, acknowledged before me this day that
he, with full authority, executed the foregoing instrument for _____

Given under my hand and seal this
_____ day of _____,

(Notary Public)

12

PERFORMANCE BOND

(To be furnished on Stamp Paper of appropriate,
value, see also instructions)

Date of Execution of Bond _____

PRINCIPAL (CONTRACTOR) _____

SURETY _____

PANEL SUM OF BOND

Rs. _____

(Rupees) _____

CONTRACT NUMBER _____

NAME OF WORK _____

DATE OF CONTRACT _____

KNOW ALL MEN BY THESE PRESENTS, THAT WE, the PRINCIPAL and SURETY above named, are held and firmly bound unto THE KARACHI ELECTRIC SUPPLY CORPORATION LIMITED a company incorporated under the Companies Act 1913 and registered at Karachi (hereinafter called the KESC) in the panel sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered

into a certain contract with the KESC numbered and dated as shown above and hereto attached.

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, condition and agreements and said contract during the original term of said contract and any extensions thereof that may be granted by The KESC, with or without notice to the Surety, and during the life of any guarantee required under the Contract, and shall also well and truly perform and fulfil and the undertakings,

Covenants, terms, conditions and agreements, of any and all duly authorized modifications of said contracts that may hereafter be made, notice of which modifications to the surety being hereby waived then this obligation to be void, otherwise to remain in full force and virtue,.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In presence of

WITNESS

INDIVIDUAL PRINCIPAL

1. _____ as to _____ (SEAL)
2. _____ as to _____ (SEAL)
3. _____ as to _____ (SEAL)
4. _____ as to _____ (SEAL)

WITNESS

INDIVIDUAL PRINCIPAL

1. _____ as to _____ (SEAL)
2. _____ as to _____ (SEAL)

Attest

CORPORATE PRINCIPAL

BUSINESS ADDRESS

BY AFFIX CORPORATE SEAL

TITLE

The rate of premium on this bond is _____ per thousand

Total amount of premium charged _____

(The above must be filed in by the Corporated Surety)

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____ certify that I am the _____ Secretary of the Corporation named as principal in the within bond, that _____ who signed the said bond in behalf of the principal, was then _____ of said corporation, that I know his signature, and his signature thereto is genuine, and that said bond was duly signed, sealed, and attested for and on behalf of said corporation by authority of its governing body.

.....(SIGNATURE)

.....(CORPORATE SEAL)

EXHIBIT "E"
PERFORMANCE BOND

INSTRUCTIONS FOR FILLING THE PERFORMANCE BOND

1. This form shall be used for dismantling work or the furnishing of supplies or services, whenever a performance bond is required. There shall be no deviation from this form except as authorized by the KESC.
2. The Surety on the bond may be any corporation Insurance Company or Bank authorized to act as surety.
3. The name, including full name, and business or residence address of each individual party to the bond shall be inserted in the space provided therefor, and each such party shall sign the bond with his usual signature on the line opposite the scroll seal.
4. If the principals are partners, their individual names shall appear in the space provided therefor, with the recital that they are partners composing a firm naming it, and all the partners of the firm shall execute the bond as individual.
5. If the principal or surety is a corporation, the name of the State, Province, or other political Sub Division and country, as the case may be, in which incorporated shall be inserted in the space provided therefor, and said instrument shall be executed and attested under the corporate seal as indicated in the form. If the corporation has no corporate seal the fact shall be stated, in which case a scroll or adhesive seal shall appear following the

corporate name.

6. The official character and authority of the person or persons executing the bond for the principal, of a corporation, shall be certified by the head of the organization, according to the form herein provided. In lieu of such certificate there may be attached to the bond copies of so much of the records of the corporation as will show the official character and authority of the officer signing, duly certified by the competent authority, under the corporate seal, to be true copies.
7. The date of this bond must not be prior to the date of the contract in connection with which it is given.

EXHIBIT "F"

TEMPORARY WORKS

The Tenderer shall provide in his tender details of his proposal in respect of stores, laydown areas, office accommodation, and other facilities and shall include all costs connected with these provisions in his Tender Price.

EXHIBIT "G"

SERVICES DISTRIBUTION

The Tenderer shall describe fully in his Tender the distribution system and equipment for Electric Power Supply and Water Supply he proposes to install giving detailed list of the loads/consumers together with the anticipated segregated consumption.

MOBILIZATION ADVANCE BOND

(To be furnished on Stamp Paper of appropriate value)

BY THIS BOND we,

(hereinafter called the Contractor) and

(hereinafter called the Surety) are held and firmly bound unto KARACHI ELECTRIC SUPPLY CORPORATION LIMITED a company incorporated under the Companies Act, 1913 and registered at Karachi (hereinafter called the KESC) in the sum of Rupees

for the payment of which sum the Contractor and the Surety bind themselves their successors and assigns jointly and severally by these presents.

Signed and dated this day of19.....

WHEREAS the Contractor by an agreement made between the KESC of the one part and the Contractor of the other part has entered into a contract (hereinafter called the Contractor) for the construction completion and maintenance of certain Works, viz:

WEST WHARF THERMAL POWER PLANT LOT-III ----- for the Contract Price of Rupees to enable the Contractor to mobilize for the construction of the said Works which advance is recoverable from the Contractor in accordance with the Contract.

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NOW THE CONDITION of the above-written bond is such that

- (a) if the KESC shall certify in writing that the entire mobilization advance has been recovered from the Contractor or
- (b) if upon the written certificate of the KESC stating that the mobilization advance or any part thereof is due to the KESC under the contract and has not been paid the Surety shall pay to the KESC without reference to the Contractor such sum not exceeding the amount of the above-written bond as the KESC shall demand in writing within the time stated in the further condition below;

then and in either such event this obligation shall be null and void but otherwise shall be and remain in full force and effect but no alteration in the terms of the Contract or the conditions on which the mobilization advance is paid made by agreement between KESC and the Contractor or in the extent or nature of the Works and no allowance of time by the KESC or the Engineer under the Contract nor any forbearance or forgiveness in or in respect of any matter or thing concerning the Contract or the mobilization advance on the part of the KESC or the said Engineer shall in any way release the Surety from any liability under the above-written bond.

Signed and delivered by the
Contractor above-named in
the presence of:

1. _____
2. _____

Signed and delivered by the
Surety above-named in the
presence of:

1. _____
2. _____

SPECIAL STIPULATIONS

This Exhibit summarizes certain stipulations which are the subject of the foregoing Tender. References in the third column are to the applicable Sections of the Conditions of Contract.

1.	Amount of Earnest Money or Tender Guarantee		2% (two percent) of the dismantling cost in the tendered price.
2.	Amount of Performance Bond.	2.9.2	10% of the dismantling cost in the Contract Price.
3.	Insurance of Works	2.9.14	Full value of Permanent & Temporary Works from time to time.
4.	Insurance of third parties (each occurrence)	2.9.14	Rs.2,000,000 Bodily Injury Rs.3,000,000 Property Damage.
5.	Insurance against injury to workmen	2.9.14 2.10.2	As per laws of Pakistan.
6.	Amount of liquidated damages	2.11.18	0.15% of the dismantling cost in the Contract Price per day upto a maximum of 10% of the dismantling cost in the Contract Price.
7.	Percentage of Retention Money for security deposit	2.16.2	10% of amounts certified on Monthly Interim Payment Requests in the dismantling cost.
8.	Limit of Retention Money	2.16.2	10% of the dismantling cost in the Contract Price.
9.	Time of commencement of work	2.11.11	Within 15 days of receipt of Engineer's order to commence Works.
10.	Time of completion of the whole works and KEY DATES	2.11.14	Calendar months (see detailed time schedule Exhibit J1).

calender months
for UNIT 1

Calender months
for UNIT 2

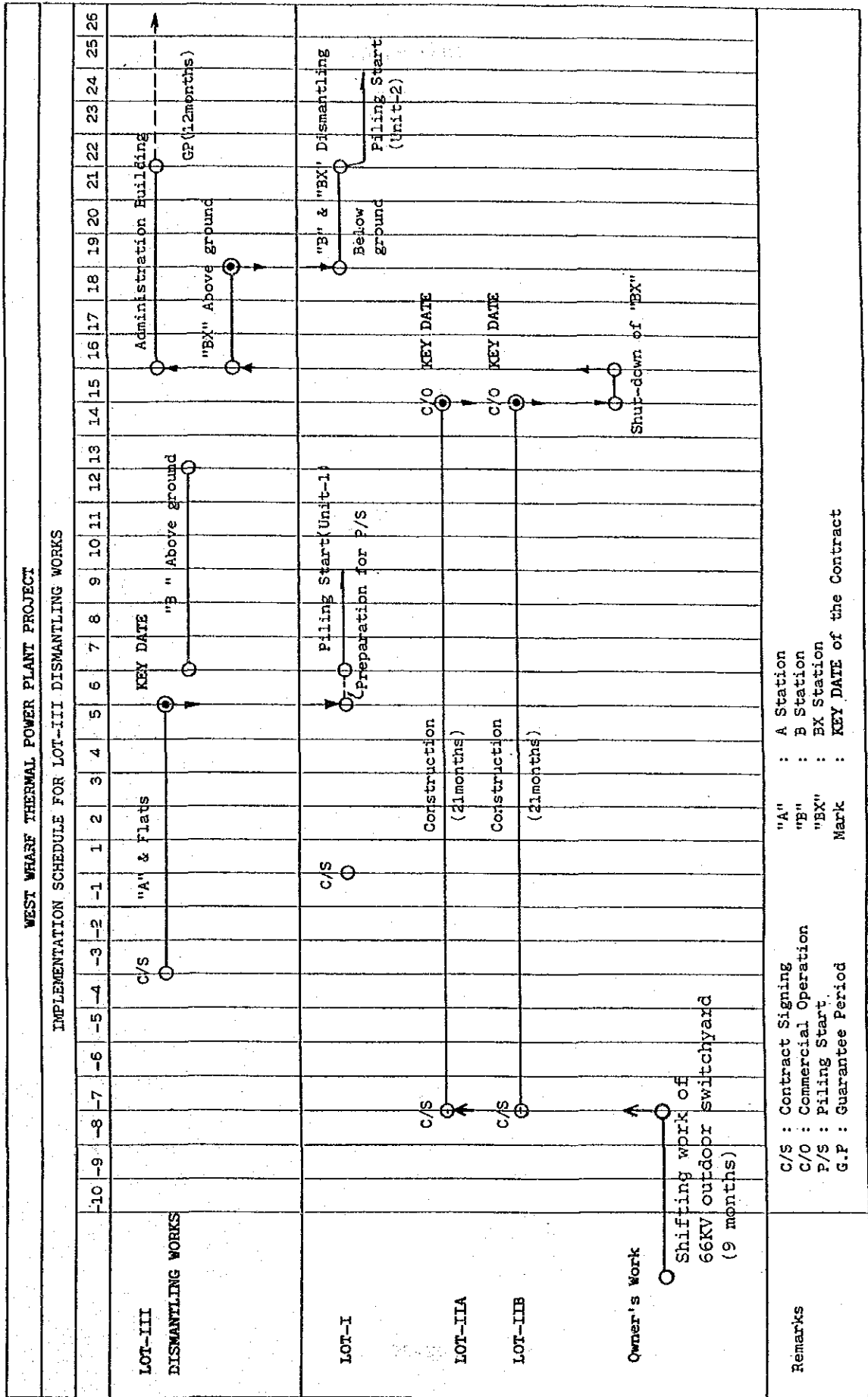
11. Period of maintenance 2.12.1 Twelve months from the date of acceptance of the completed Works by the Owner.
12. Mobilization Advance 2.6.3 Upto 15% of the dismantling cost in the Contract Price.

Dated this _____ day of _____ 19____

WITNESS:

1. Signature _____	Tenderer _____
Name _____	BY _____
Occupation _____	Title _____
Address _____	Address _____
_____	_____
_____	_____

Time Schedule (Lot-III)



9-8

(Not used)

A02-30

FORM OF AGREEMENT

(To be executed on Stamp Paper of appropriate value)

THIS AGREEMENT is made at Karachi the
day of19..... between KARACHI ELECTRIC SUPPLY
CORPORATION LIMITED a company incorporated under the Companies Act 1913
and registered at Karachi (hereinafter called the Owner) of the one part
and

(hereinafter called "the Contractor") of the other part. WHEREAS the
Owner is desirous that certain works should be constructed, viz.

WEST WHARF THERMAL POWER STATION, LOT III - DISMANTLING WORKS and has
accepted a Tender by the Contractor for the construction completion and
maintenance of such Works. NOW THIS AGREEMENT WITNESSETH as follows:-

1. In this Agreement words and expressions shall have the same
meanings as are respectively assigned to them in the Conditions of
Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and
construed as part of this Agreement, viz:
 - i. Instructions to Tenderers.
 - ii. The said Tender and Exhibits to the Tender.
 - iii. The Performance Bond.
 - iv. The Mobilization Advance Bond.
 - v. The General Conditions of Contract.
 - vi. The Schedule of Prices

EXHIBIT "K"

- vii. Technical Conditions of Project.
 - viii. The Technical Specifications.
 - ix. The Tender Drawings.
 - x. Addendum/Corrigendum/Bulletin Nos. 1 to
 - xi. The Letter of Intent/Notice of Award
No. dated and the
corrigendum referred to therein.
 - xii. The Insurance Policies.
3. The above mentioned documents contain the entire Agreement between the parties hereto and shall not be modified in any manner, except by an instrument in writing signed by the respective parties.
 4. The Contractor agrees to proceed with all diligence and care and at all times to take all precautions to ensure completion of the Works in accordance with the specified dates.
 5. In consideration of the payments to be made by the Owner to the Contractor as hereinafter mentioned the Contractor hereby covenants with the Owner to construct complete and maintain the Works in conformity in all respects with the provisions of the Contract.
 6. The Owner hereby covenants to pay to the Contractor in consideration of the construction, completion and maintenance of the Works the Contract Price at the times and in the manners prescribed by the Contract.

IN WITNESS whereof the parties hereto have executed this Agreement the
day month and year first above written.

Signed and delivered by the
Owner above-named in the
presence of:

KARACHI ELECTRIC SUPPLY
CORPORATION LIMITED

1. _____

2. _____

Signed and delivered by the
Contractor above-named in
the presence of:

1. _____

2. _____

TENDER GUARANTEE BOND

(To be furnished on Stamp Paper of appropriate value)

BY THIS BOND We,
(hereinafter called the Tenderer) and
(hereinafter called the Surety) are held and firmly bound unto KARACHI
ELECTRIC SUPPLY CORPORATION LIMITED, a company incorporated under the
Companies Act 1913 and registered at Karachi (hereinafter called the
KESC) in the sum of Rupees
(Rs.) for the payment of which sum the
Tenderer and the Surety bind themselves their successors and assigns
jointly and severally by these presents.

Signed and dated this day of19.....

WHEREAS the KESC has invited tenders to be submitted no later than
maintenance of certain Works, WEST WHARF THERMAL POWER STATION LOT III
DISMANTLING WORKS conditioned upon each tenderer depositing with the
KESC a sum equal to 2% of the dismantling cost in the tender price by
way of earnest money or a tender guarantee bond in lieu thereof.

AND WHEREAS the Tenderer has completed his tender for the said Works for
a tender price of Rupees
and is desirous of submitting the same with a tender guarantee bond in
lieu of earnest money.

0
0
6/

NOW THE CONDITION of the above-written bond is such that

- (a) if the KESC shall certify in writing that the Tender submitted for the said Works by the Tenderer has been rejected, or
- (b) if upon the written certificate of the KESC stating that notwithstanding the acceptance by the KESC of the Tender submitted by the Tenderer, with or without modification agreed between the Tenderer has failed to sign an agreement in the form appended to the Tender or to submit a performance bond in the form appended to the Tender the Surety shall pay to the KESC without reference to the Tenderer such sum not exceeding the amount of the above written bond as the KESC shall demand in writing within the time stated in the further condition below,

then and in either such event this obligation shall be null and void but otherwise shall be and remain in full force and effect but no alteration in the terms of the tender documents mentioned in the tender or the contract resulting on the acceptance thereof with or without modifications agreed between the KESC and the Tenderer or in the extent or nature of the Works and no allowance of time by the KESC or the Engineer under the tender documents or such contract nor any forbearance or forgiveness in or in respect of any matter or thing concerning the Tender documents or such contract on the part of the Corporation or the said Engineer shall in any way release the Surety from any liability under the above-written bond.

EXHIBIT "L"

IT IS A FURTHER CONDITION of the above-written bond that if the KESC shall not demand payment from the Surety under this bond within one hundred thirty five (135) days from the date hereinabove recited for the submission of tenders then in such event this obligation shall be null and void.

Signed and delivered by the Tenderer above-named in the presence of:

1. _____

2. _____

Signed and delivered by the Surety above-named in the presence of:

1. _____

2. _____

RETENTION MONEY BOND

(To be furnished on stamp paper of appropriate value)

BY THIS BOND _____

having its registered office at _____

_____ (hereinafter called the SURETY) is

held and firmly bound unto the Karachi Electric Supply Corporation

Limited, Karachi (hereinafter called the KESC) in the just sum of

(Rupees _____) for the payment

of which the SURETY binds itself, its heirs, executors, administrators,

successors and assigns firmly by this Bond.

Signed by the SURETY by this day _____

WITNESS

SURETY

WHEREAS BY Agreement dated _____

(hereinafter called the Contractor) has contracted with the KESC for the

construction, completion and maintenance of _____

for the WEST WHARF Thermal Power Station Lot III, dismantling works, the

KESC.

AND WHEREAS under terms of the said Agreement the Contractor is required

to furnish a Guarantee for the unconditional payment to the KESC of the

sum of Rs _____ (Rupees _____)

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being in lieu of _____
Retention Money.

NOW THEREFORE the condition of the foregoing obligations are such that if the Contractor shall well and truly promptly and faithfully comply with all the terms, covenants, conditions and specifications of the aforesaid Agreement dated _____ on its part to be kept and Performed according to the tenure of the said Agreement and if on default by the Contractor the SURETY shall pay to KESC unconditionally on demand without any question or reference to the Contractor said amount of _____ then this obligation shall be null and void otherwise it shall remain in full force and effect.

Signed by the SURETY this day _____

WITNESS

SURETY

CONSTRUCTION MACHINERY & EQUIPMENT

The dismantling machinery and equipment (a) owned by us and (b) hired by us and proposed to be employed in the dismantling works are listed below. Documents giving details of the listed Machinery and Equipment will be provided if required by you.

Machinery/ Equipment.	No.	Capacity	Date of Manufacture/	Present Condition	Approximate Value.	Remarks
--------------------------	-----	----------	-------------------------	----------------------	-----------------------	---------

SIGNATURE AND SEAL OF TENDERER

PROPOSED SUB-CONTRACTORS AND SUPPLIERS

Given below are the names of the sub-contractors we propose to use for the portion of work indicated:

Sub-Contractors proposed to be employed shall be subject to approval of the Engineer.

No.	Firm's Name and Address	W o r k
-----	----------------------------	---------

SIGNATURE AND SEAL OF TENDERER

CONTRACTOR'S CONSTRUCTION MANAGEMENT

The Tender shall show that he is capable of carrying out dismantling planning in sufficient detail to demonstrate efficient contract control. He shall demonstrate his capabilities by either including copies of previously used project target schedules or submit provisional schedules for specific areas of work to be executed in this contract.

Sufficient support documentation in the form of time scaled curves, graphs etc. shall be submitted to demonstrate that the Tender has considered the quantities of materials to be used in performing the following work.

1. Dismantling works of mechanical and associated foundations
2. Removal of structural steel work
3. Excavation work
4. Total labour distribution

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CONTRACTORS DISMANTLING PRACTICE

The Tender shall answer the following questions regarding the dismantling practices he proposes to adopt. The answers shall include full details of the numbers and types of equipment and manpower he propose to use.

1. Submit a forecast of the quantity of concrete to be dismantled each month during the dismantling period:
2. State the installation of temporary facilities.
3. State the transportation plan for major dismantled materials and machinery.
4. State the countermeasuring plan for preventing the pollution to disposed materials at outside area.

SECTION III

GENERAL CONDITIONS OF CONTRACT

SECTION III - GENERAL CONDITIONS OF CONTRACT

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1. INTENT

These General Conditions of Contract, together with the other Tendering Documents, shall apply to the Contract entered into for the Lot III - DISMANTLING WORKS, for the West Wharf Thermal Power Station Unit 1 and 2.

2. DEFINITIONS

a) The "Owner" as referred to herein is defined as:

The Karachi Electric Supply Corporation Ltd.,

Aimai House, Abdullah Haroon Road,

P.O. Box 7179,

Karachi, Pakistan.

Phone : 510914

Cable : UTILITIES

b) The "Owner's Representative" or "Engineer" as referred to herein is defined as:

Engineer's Name and Address

or other person or persons for the time being or from time to time duly appointed in writing by the Owner to act as Engineer for the purpose of the Contract, or in default of such appointment, the Owner.

Time being or from time to time duly appointed by the Owner or the Engineer to perform the duties setforth in Section A2.4 hereof.

- c) "Contractor" is defined as the person, partnership, company, corporation or consortium whose tender has been accepted by the Owner for the works of the project.
- d) "Contract" is defined as the finally executed Contract Agreement as defined in the Notice and Instructions to Tenderers.
- e) "Bidding Documents" or "Tender Documents" are the legal and technical documents which constitute the basis for the Tender and Contract (see Notice and Instructions to Tenderers).
- f) "Bidder" or "Tenderer" is defined as the person, partnership, company, corporation or consortium that submits the Tender.

- g) "Letter of Intent" is defined as the Owner's letter conveying his acceptance of the Tender subject to such reservations as may be stated therein.
- h) "Project" "Equipment and materials", "work", "civil works", "goods", "plant" shall mean the contractual requirements of the Contractor including labour or supervision or material or equipment or any combination of these.
- i) "Sub contractor" or "Sub supplier" shall mean the person or party to whom any part of the work has or will be sublet by the Contractor with the written approval of the Owner/ Engineer and includes his heirs, executors, administrators, representatives, successors, or assignees as approved by the Owner.
- j) "Manufacturer" shall mean the person or party who will design and/or manufacture the goods as specified complete or in part.
- k) "Specification" or "Specified" shall mean the requirements of the documents.
- l) Where the words "directed", "required", "permitted" "approved", "accepted", or similar terms are used the "Direction", "requests", etc. shall be understood to mean "by the Owner" and/or "by the Engineer" in writing.
- m) The words "indicated or shown" shall be understood to mean "on the drawings", "on the diagrams" or on any other

documents.

- n) "Site" means the lands and other places on, over, under, in or through which the Works are to be executed or carried out and any other lands or places provided by the Owner for the purposes of the Contract together with such other places as may be specifically designated in or pursuant to the Contract as forming part of the Site.

For the purpose of 'Overhaul of earth' 'site' means area within the boundary of Project as shown on the drawings.

- o) "Day", "week", "month" shall mean calendar day, calendar week, or calendar month respectively.
- p) "Contractor's Representative" means the person for the time being or from time to time appointed by the Contractor pursuant to the provisions of Section A2.9.9 hereof.
- g) "Constructional Plant" means all appliances or things of whatsoever nature required in or about the construction, completion or maintenance of the Works or Temporary Works but does not include material or other things intended to form or forming part of the permanent work.
- r) "Contract Price" or "Tender Price" means the sum named in the Tender subject to such additions thereto or deductions therefrom as may be made under the provisions hereinafter contained.

- s) "Tender Drawings" means the drawings referred to in the Specifications and any modifications of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer.
- t) "Temporary Works" means all temporary works of every kind in or about the construction, completion or maintenance of the Works.
- u) "Unit Rate" means the rate quoted by the Contractor in the Schedule of Prices for the specified work or works and shall include the cost of all materials to be used in or in connection with the construction or maintenance of the Works, all the labour and machinery employed therefor, all the fixtures, fittings, installations, plant and accessories to be installed therein, all the profits and overhead expenses of the Contractor and all the incidental direct or indirect costs to be incurred for the execution, completion and maintenance of the Works.
- v) Words imparting the singular only shall also include the plural and vice versa where the context requires.
- w) Words imparting "person" shall include firm, company, Corporation and Consortia.
- x) "Construction" means to construct and/or dismantle the equipment, facilities, buildings, foundations and so forth.

3. MARGINAL NOTES

The marginal headings or notes in these Conditions of Contract shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.

4. ENGINEER'S REPRESENTATIVE

4.1 Duties and Powers of Engineer's Representative

The duties of the Engineer's Representative are to watch and supervise the Works and to test and examine any materials to be used or workmanship employed in connection with the Works. He shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract nor to make any variation of or in the Works nor except as expressly provided hereunder to order any work involving delay or any extra payment by the Owner. The Engineer may from time to time in writing delegate to the Engineer's Representative any of the powers and authorities vested in the Engineer and shall furnish to the Contractor a copy of all such written delegations of powers and authorities and also of any revocation thereof. Any written instruction or written approval given by the Engineer's Representative to the Contractor within the terms of such delegation (but not otherwise) shall bind the Contractor and the Owner as though it had been given by the Engineer. Provided always as follows:

- i) Failure of the Engineer's Representative to disapprove any work or materials shall not prejudice the power of the Engineer thereafter to disapprove such work or materials and to order the pulling down removal or breaking up thereof.
- ii) If the Contractor shall be dissatisfied by reason of any decision of the Engineer's Representative he shall be entitled to refer the matter to the Engineer who shall thereupon confirm reverse or vary such decision.

4.2 Emergency Powers of Engineer's Representative

Notwithstanding the provisions of Section 2.4.1 hereof if in the opinion of the Engineer's Representative an emergency occurs affecting the safety of life or of the Works or of adjoining property he may direct the Contractor in writing to carry out all such work or to do all such things as may be necessary in the opinion of the Engineer's Representative to abate or reduce the risk. The Contractor shall forthwith comply without appeal with any such direction of the Engineer's Representative. The Engineer shall determine the amount (if any) of extra payment to which the Contractor may be entitled in accordance with the Contract in respect of work done pursuant to the provisions of this Section.

5. ASSIGNMENT AND SUB-LETTING

5.1 Assignment

The Contractor shall not assign or sublet this Contract in whole or in part without the written consent of the Owner and the Engineer. The approval of any assignment or subcontract by the Owner and the Engineer will not relieve the Contractor from responsibility for such assigned or sublet work in the event that it is not satisfactorily performed by the subcontractor.

5.2 Subcontractors

The Contractor shall give particulars of subcontractors he desires to engage on this project with details of assignments. Any change of the subcontractor shall be made only with prior approval of the Owner.

The Contractor is obligated to keep his subcontractors fully informed as to the contents and requirements of these Contract Documents.

5.3 Sub-contracts and Sub-orders

As soon as practicable after entering into the Contract the Contractor shall, having obtained the Owner consent in accordance with the Conditions of Contract, enter into the sub-contracts he considers necessary for the satisfactory completion of the Contract Works. Three unpriced copies of the Contractor's sub-orders shall be supplied to the Owner.

One copy of any drawing to which the sub-order refers shall also be submitted at the request of the OWNER's Representative or with the sub-order as appropriate.

Each sub-order and drawing shall contain the following references.

Karachi Electric Supply Corporation Ltd.,

WEST WHARF THERMAL POWER STATION.

LOT-III DISMANTLING WORKS

and the instruction that the equipment/material is subject to inspection by the Owner's Representative.

6. EXTENT OF CONTRACT

6.1 Extent of Contract

The Contract comprises the dismantling, completion and maintenance of the Works and the provision of all labour material constructional Plant, Temporary Works and every thing whether of a temporary or permanent nature required in and for such construction completion and maintenance so far as the necessity for providing the same is specified in or reasonably to be inferred from the Contract.

6.2 Contractor to Arrange Finance

The Contractor shall make his own arrangements for finances required for carrying out his obligations under the Contract and

no advance payments will be made to the Contractor save as expressly stated in the Contract.

6.3 Mobilization Advance

- a) Notwithstanding the provisions of Section 2.6.2 hereof, if the Contractor shall by notice in writing delivered to the Owner within seven days of acceptance of his Tender request an advance of upto fifteen percent (15%) of the dismantling cost in the Contract Price for purposes of mobilization (hereinafter referred to as the Mobilization Advance) the Owner shall pay the mobilization advance to the Contractor at the same time as the Engineer's written order to commence the Works under Section 2.11.11 hereof or earlier provided that the Contractor on his part has provided to the satisfaction of the Owner the Performance Bond mentioned in Section 2.9.2 hereof, all policies of insurance required to be provided by the Contractor under the Contract and a joint and several Mobilization Advance Bond in an amount equal to the amount of the mobilization advance duly signed by the Contractor and a Schedule Bank or an Insurance Company approved by the Owner.
- b) In the event of any delay on the part of the Contractor in requesting the mobilization advance or in complying with the conditions upon which it may be paid the Owner may decline to pay the whole or any part of the amount requested by the Contractor as the Owner may in its absolute discretion determine.

c) The mobilization advance shall be recovered by the Owner from payments due to the Contractor against his Monthly Interim Payment Requests as provided in Section 2.16.1 (b) hereof and from any other payments that may become due to the Contractor. If the Owner shall be of the opinion that no further payments are due to the Contractor, the Owner may demand from the Contractor the balance then remaining unrecovered of the mobilization advance and the Contractor shall pay such balance upon demand by the Owner.

7. CONTRACT DOCUMENTS

7.1 Documents Mutually Explanatory

The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies, the same shall be explained and adjusted by the Engineer, who shall thereupon issue to the Contractor the instructions directing in what manner the work is to be carried out. Provided always that if in the opinion of the Engineer compliance with any such instructions shall involve the Contractor in any expense which by reason of any such ambiguity or discrepancy the Contractor did not and had reason not to anticipate the Owner shall pay such additional sum as the Engineer shall certify to be reasonable to cover such expense.

7.2 Contract Documents

The Contract Documents comprise and include the following taken as a whole and made an integral part thereof and constitute the Contract:

- i. Instructions to Tenderers.
- ii. The said Tender and Exhibits to the Tender.
- iii. The Performance Bond.
- iv. The Mobilization Advance Bond.
- v. The General Conditions of Contract.
- vii. Technical Conditions of Project.
- viii. The Technical Specifications.
- ix. The Tender Drawings.
- x. Addendum/Corrigendum/Bulletin Nos. 1 to
- xi. The Letter of Intent/Notice of Award
No. dated and the
corrigendum referred to therein.
- xii. The Insurance Policies.

8. DRAWINGS AND INSTRUCTIONS

8.1 Drawings

The drawings mentioned in the Tender serve to indicate generally the type extent and quantity of the Works to be performed and may be supplemented by further drawings including dismantling drawings where necessary issued by the Engineer pursuant to Sections 2.8.2 and 2.8.3 hereof. Before commencing any part

of the Works or placing orders for materials or equipment required for the execution of any part of the Works the Contractor shall secure the written confirmation of the Engineer or the Engineer's Representative that all drawings then intended to be issued for such part of the Works have been issued to him and shall also ensure that all the drawings received by him are adequate for such part of the Works.

8.2 Further Drawings and Instructions

The Engineer shall have full power and authority to supply to the Contractor from time to time during the progress of the Works such further drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the Works and the Contractor shall carry out and be bound by the same.

8.3 Further Drawings, Specifications or Instructions required by the Contractor

The Contractor shall give adequate notice in writing to the Engineer of any further drawing specification or instruction that the Contractor may require for the proper and adequate execution and maintenance of the Works.

8.4 Custody of Drawings

The Drawings shall remain in the sole custody of the Engineer but one reproducible copy or four prints thereof shall be

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furnished to the Contractor free of cost. The Contractor shall provide and make at his own expense any further copies required by him. At the completion of the Contract the Contractor shall return to the Engineer all drawings provided under the Contract.

8.5 One Copy of Drawings to be kept on Site

One copy of the drawings shall be kept by the Contractor on the site and the same shall at all reasonable time be available for inspection and use by the Engineer and the Engineer's Representative and by any other person authorised by the Engineer in writing.

9. GENERAL OBLIGATIONS

9.1 Agreement

The Contractor shall when called upon so to do, enter into and execute an agreement in the form annexed to the Tender with such modifications as may be considered necessary by the Owner.

9.2 Performance Bond

- a. Not later than fifteen (15) days from the date of the signing of the Contract the Contractor shall furnish a performance bond to the extent of ten (10%) of the value of dismantling cost in the Contract as a guarantee for the due and faithful performance of the Contract, such guarantee to be binding notwithstanding any variations, alterations or

extensions of time that may be given or agreed upon. Said performance bond may be from an Insurance Company approved by the Owner or a Scheduled Bank to be jointly and severally bound with the Contractor.

- b. The Owner shall be at liberty to reject the surety proposed and, in such an event, the Contractor shall deposit in currency notes, or Government securities endorsed to the Owner, a sum amounting to 10 percent of the value of the dismantling cost in the Contract as security for the due and faithful performance of the Contract.
- c. No claim shall be entertained against the Owner on account of interest on security deposits.
- d. The performance bond shall be binding up to the date of formal acceptance of the project by the Owner, subject to conditions stated elsewhere in these documents.
- e. The performance bond shall be in the Form given in Exhibit "E".

9.3 Examination of Site

The Contractor shall be deemed to have carefully examined the Tender Documents, the site and the existing surroundings, nature of ground, hydrological and climatological conditions as applicable and to have satisfied himself as to the nature and character of the work to be executed and other relevant matters and details. Any information received from the Owner or

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Engineer shall not in any way relieve the Contractor from his responsibility for executing the work in terms of the Contract including all details and incidental works and supply of all accessories or apparatus which may not have been specifically mentioned in the Contract but are necessary for ensuring the completion of the Works. If the Contractor shall have any doubt as to the meaning of any portion of the Contract, he shall, before signing it, set forth the particulars thereof and submit them to the Owner and the Engineer in writing.

9.4 Sufficiency of Tender

a. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his Tender and of the rates and prices stated in the Schedule of Price which rates and prices shall (except in so far as it is otherwise expressly provided in the Contract) cover all his obligations under the Contract and all matters and things necessary for the proper execution completion and maintenance of the Works.

b. Adverse Physical Conditions and Artificial Obstructions

If, however, during the execution of the Works the Contractor shall encounter physical conditions (other than weather conditions) or conditions due to weather conditions or artificial obstructions which conditions or obstructions could not have been reasonably foreseen by an experienced contractor and the Contractor is of opinion that additional

work or the use of additional constructional plant will be necessary which would not have been necessary if the physical conditions or artificial obstructions had not been encountered he shall if he intends to make any claim for additional payment give notice to the Engineer in writing specifying:

- i) the physical conditions and artificial obstructions encountered, and
- ii) the additional work and the additional constructional plant which he proposes to do and use (as the case may be) and
- iii) the extent of the anticipated delay in or interference with the execution of the Work.

Provided always that the cost of all work done or Constructional Plant used by the Contractor prior to giving such notice and all work and constructional plant not specified in a notice given under this clause shall be deemed to have been covered in the rates and prices referred to in Clause (a) of this Section 2.9.4.

- c. Upon receipt by the Engineer of a notice under Clause (b) of this Section 2.9.4 the Engineer shall investigate the claims therein, and if in the opinion of the Engineer the physical conditions or artificial obstructions encountered by the Contractor could not have been reasonably foreseen by an experienced contractor the Engineer may give such suspension

order under Section 2.11.10 hereof or such variation order under Section 2.13 hereof as may in his opinion be appropriate in the circumstances including if he thinks fit an order to vary the Works so as to avoid the necessity for the doing of the additional work or using the constructional plant so specified.

9.5 Work to be done to the satisfaction of the Engineer

The Contractor shall execute complete and maintain the Works in strict accordance with the Contract to the satisfaction of the Engineer, and the whole of the materials plant and labour and other things to be provided by the Contractor pursuant to the Contract and the mode manner and speed of execution and maintenance of the Works shall be of a kind and conducted in a manner to the satisfaction of the Engineer.

9.6 Interpretation

- a. Decisions by the Engineer shall be conclusive as to the true intent and meaning of Engineer's drawings and technical specifications. Any discrepancy which may exist between drawings and the technical specifications shall be referred to the Engineer, whose decision as to the true meaning shall be final.
- b. The Contractor shall study and compare the drawings, technical specifications and other information given to him by the Engineer. He shall also scan the figures and

dimensions, and shall report in writing to the Engineer any discrepancies, inconsistencies, or omissions of statement regarding materials and methods of construction, which he notes.

- c. All drawings and technical specifications, being instruments of service, are the property of the Engineer and shall be returned to him when the work is completed.
- d. Verbal instructions or information purported to have come from the Engineer's office will not be recognized by him unless confirmed in writing.
- e. The drawings and technical specifications are intended to cooperate so that any items set forth in either shall be recognized the same as if duly set forth in both.

9.7 Compliance with Owner's and Engineer's Instructions

The Contractor shall comply and adhere strictly to the Owner's/Engineer's instructions and directions on any matter (whether mentioned in the Contract or not) touching or concerning the Works. The Contractor shall take instructions and directions only from the Owner/Engineer or (subject to the limitations referred to in Section 2.4 hereof) from the Engineer's Representative.

9.8 Programme to be Furnished

- a. The Contractor shall within fifteen days after the acceptance of his Tender submit in writing:
- i) for the approval of the Owner/Engineer, a programme showing the order of procedure and method in which he proposes to carry out the Works, which programme shall be comprehensive and shall show a breakdown of principal elements and types of construction in the works, the date upon which each type of construction or activity or operation is scheduled to begin and when it should be completed, the periods when double shifts or night work is likely to be undertaken, and the approximate total number of days likely to be lost due to holidays, lack of working space or other hinderances which can reasonably be anticipated, and
 - iii) for the information of the Engineer, full particulars of the organization and staff by which he proposes to direct and administer his performance of the Contract.
- b. The Contractor shall furnish in writing such further information as the Owner/Engineer or the Engineer's Representative may from time to time require within such period, not being less than 15 days, as he may prescribe concerning the Contractor's arrangements for the carrying out of the Works and of the Constructional Plant or Temporary Works he intends to supply use or construct and of

his arrangements for the direction and administration of his performance of the Contract.

c. Contractor's Responsibilities for Programme

The submission to or approval by the Owner/Engineer of any such programme or the furnishing of any such particulars or information shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

- d. If required by the Owner or his Representatives a further programme shall be provided as a Critical Path Network or similar and shall show the interfaces between the respective phases and sections of the Contract Works. In addition, the Contractor shall prepare and submit during the Contract detailed sub networks of certain phases of the Contract programme as required by the Owner or his Representatives covering erection, commissioning and testing. The updating period shall be four weeks.

If at any time during the execution of the Contract it is found necessary to modify the approved programmes, the Contractor shall inform the Owner and his Representatives and submit modified programmes for his approval. Any approval or changes to the approved programmes shall not constitute approval of an extension to the guaranteed completion date.

e. Remedy for Non-submission of Programme

If the Contractor shall fail to submit any programme or information in accordance with sub-clause (a) or (b) of this Section 2.9.8 within the time allowed for the purpose, the Owner/Engineer may (without prejudice to the right of the Owner to terminate the Contract for breach thereof) agree to extend such time either unconditionally or on the condition that the Contractor shall pay to the Owner such sum, not exceeding Rs.1500.00 per day of delay beyond the time allowed under the said clauses.

9.9 Contractor's Superintendence

- a. The Contractor shall give or provide all necessary superintendence during the execution of the Works and as long thereafter as the Owner/Engineer may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract.
- b. The Contractor shall keep a qualified and competent representative in charge on the premises continuously from the time work is commenced until it is entirely completed. The representative shall meet the approval of the Owner/Engineer and shall receive and comply with his directions and with the drawings and technical specifications, and shall supervise the work of the workmen or others responsible to the Contractor. He shall also work in harmony with the personnel of the Owner and the Engineer at

the job site. The representative should be conversant with the English Language and be registered with the Pakistan Engineering Council.

- c. The representative shall not be transferred from this operation without the consent of the Owner and the Engineer.
- d. The representative shall carefully examine the drawings and technical specifications and acquaint the Engineer with any inconsistency or discrepancy that may appear before proceeding with the work.

9.10 Qualification of Contractor's Employees

- a. The Contractor shall employ only competent and skilled workmen fully experienced and capable of performing the duties assigned to them. Any employee who, in the opinion of the Owner/Engineer, does not perform his work in a proper and skilled manner, or who is disorderly or otherwise objectionable, shall be discharged and not re-employed on the work.

b. Removal of Contractor's Employees

The Owner/Engineer shall be at liberty to object to and to require the Contractor to remove forthwith from the Site the person employed by the Contractor or any sub-contractor who in the opinion of the Owner/Engineer misconducts himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by the

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Owner/Engineer to be undesirable and such person shall not be again employed for the purpose of or in connection with the Contract without the written permission of the Owner/Engineer. Any person so removed shall be replaced as soon as possible by a competent person approved by the Owner/Engineer.

c. Non-Pakistani Employees

The Contractor shall so far as may be consistent with his obligations under the Contract make the maximum possible use of Pakistani technicians and skilled and unskilled labour.

9.11 Setting - Out

The Contractor shall be responsible for the true and proper setting out of the Works in relation to points lines and levels of reference given by the Engineer in writing and for the correctness of the position, levels, dimension and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of the Works any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works the Contractor on being required so to do by the Engineer or the Engineer's Representative, unless such error is based on incorrect data supplied in writing by the Engineer or the Engineer's Representative in which case the expense of rectifying the same shall be borne by the Owner. The checking of any setting-out or of any line or level by the

Engineer or the Engineer's Representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof. The Contractor shall carefully protect and preserve all bench-marks, sight-rails, pegs, slope-stakes, batter boards, stakes for pile location, and other things used in setting-out.

Before execution of the actual work, a survey of the existing ground level of the entire Site area will be done jointly by the Owner/Engineer and Contractor at 10 meter square grid or as determined by the Engineer.

9.12 Watching, Lighting and Security

The Contractor shall in connection with the Works, provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or the Engineer's Representative or by any competent statutory or other authority for the protection of the Works or for the safety and convenience of the public or others.

9.13 Care of Works

- a. From the commencement to the completion of the Works the Contractor shall take full responsibility for the care thereof and of all Temporary Works and in case any damage loss or injury shall happen to the Works or to any part thereof or to any Temporary Works from any cause whatsoever (save and except the Excepted Risks as defined in sub-Clause (c) of this Section 2.9.13) shall at his own cost replace,

repair and make good the same so that at completion of the Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer's instructions. In the event of any such damage loss or injury happening from any of the Excepted Risks the Contractor shall if and to the extent required by the Engineer replace, repair and make good the same as aforesaid at the cost of the Owner. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations under Section 2.12.1 and 2.12.2 hereof (but without prejudice to the provisions of these Sections as to cases in which the cost of Works shall be paid for by the Owner).

- b. The Contractor shall also take full responsibility for the proper care and safety of all Constructional Plant, materials and other things belonging to the Owner or which may be on the Site and in case any damage or loss or injury shall happen thereto or any part thereof from any cause whatsoever (save and except the Excepted Risks as defined in sub-clause (c) of this Section 2.9.13) shall at his own cost replace, repair and make good the same.
- c. The "Excepted Risks" are war hostilities (whether war be declared or not) invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war or (otherwise than among the Contractor's

own employees) riot, commotion, or disorder or use or occupation by the Owner, of any portion of the Works in respect of which a Certificate of Completion has been issued or a cause solely due to the Engineer's design.

- d. The Contractor shall effectually protect his work from action of weather and from injury or defacement, and shall cover finished parts where required for their thorough protection. Finished work shall be left perfectly clean and free from defects.
- e. The Contractor and/or his subcontractors who are installing or erecting equipment, material etc., shall be responsible for protecting work which has been completed by other contractors. Heavy planking shall be used when moving any equipment over finished floors, grades, etc. Metal rollers shall not be permitted.

9.14 Damages and Insurance

- a. The Contractor shall indemnify the Owner and the Engineer against all loss, detriment, damages, costs, charges and expenses, including payments under any prevailing Workmen's Compensation Laws (or similar governmental legislation), which the Owner, Engineer, or Contractor may suffer, sustain or be in anyway subjected to by reason of injuries to the Contractor's workmen or other persons directly or indirectly responsible to him, or to the employees of the Owner or Engineer, or the other persons, or by reason of damage to

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the property of any person, ownership, corporation or agency arising out of or in the course of the performance of the work of this Contract.

b. The Contractor shall take out, pay all costs of and maintain throughout the construction period, insurance in the following minimum requirements.

- 1) "All risk" Builders Risk Insurance covering interests of the Contractor, Owner and all subcontractors for the full value of the permanent & temporary works executed from time to time.
- 2) Public Liability and Property Damage Insurance covering all operations under the Contract. Limits for bodily injury or death shall be not less than Rs.2,000,000 for each person and Rs.3,000,000 for each accident, and for property damage not less than Rs.3,000,000 for each accident.
- 3) Automobile Liability Insurance on all self-propelled vehicles used in connection with the Contract work, whether owned, non-owned or hired by the Contractor. Limits for bodily injury or death shall be not less than Rs.1,000,000 for each person and Rs.3,000,000 for each accident, and for property damage not less than Rs.1,000,000 for each accident.
- 4) Accident to Workmen Insurance for his employees & those of the Owner.

- c. The Owner shall have the right at any time to require insurance coverage limits greater than those specified above. In such event, the additional premiums payable solely as the result of such increase in insurance shall be added to the Contract amount.
- d. The Contractor shall submit a certificate from the Contractor's insurance company covering each type of insurance the Contractor is required to provide. Each certificate shall state that no policy will be cancelled before the Owner and the Engineer have been given thirty (30) calendar days notice of the Contractor's intention to cancel such policy and assurance that a new policy in lieu shall be in force before cancellation of the previous policy. The Contractor shall name the Owner and the Engineer in each policy, in addition to himself as the insured.

9.15 Remedy on Contractor's Failure to Insure

- a. If the Contractor shall fail to effect and keep in force the insurances referred to in Section 2.9.14 hereof or any other insurance which he may be required to effect under the terms of the Contract then and in any such case the Owner may without prejudice to any other rights or remedies it may have effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by

the Owner as aforesaid from any moneys due or which may become due to the Contractor or recover the same as a debt due from the Contractor.

b. Contractor to Notify Insurers

It shall be the duty of the Contractor to notify the insurers of any of the insurances referred to in Section 2.9.14 hereof of any matter or event which by the terms of such insurances are required to be so notified and the Contractor shall indemnify and keep indemnified the Owner against all loss claims demands proceedings costs charges and expenses whatsoever arising out of or resulting from any default by the Contractor in complying with the requirements of this clause whether on account of the avoidance of any such insurance or otherwise.

9.16 Laws, Rules and Regulations

The laws, rules and regulations bye-laws or orders of the Government of Pakistan and all other governmental authorities having jurisdiction over the work of the project shall govern with the same force and effect as if written herein. Where such laws, rules and regulations conflict with the Contract, the more stringent requirements, as interpreted by the Owner/Engineer, shall govern. Should such conflicts require changes in the Contract the Contractor shall promptly notify the Owner/Engineer. The Contractor shall remove and replace all work not meeting the requirements of this clause.

9.17 Local Authorities

The Owner shall serve all notices and obtain assents, way leaves and permissions required in connection with bye-laws of any local or other authority having jurisdiction.

9.18 Fossils

All fossils coins articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site shall as between the Owner and the Contractor be deemed to be the absolute property of the Owner and Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal acquaint the Engineer of such discovery and carry out at the expense of the Owner the Engineer's orders as to the disposal of the same.

9.19 Patents and Royalties

The Contractor shall provide for and pay all royalties and license fees, and shall save the Owner and his Representatives harmless from loss or annoyance on account of suits or claims of any kind for violation or infringement of any letters patent, or patent rights, by the Contractor or anyone directly or indirectly employed by him, or by reason of the use by him or them of any part, machine, manufacture or composition of matter in connection with the work furnished in violation or

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infringement of any letters patent, or patent rights, by the Contractor or anyone directly or indirectly employed by him, or by reason of the use by him or them of any art, machine, manufacture or composition of matter in connection with the work furnished in violation or infringement of such letters or rights. The Contractor shall pay all royalties, rent and other payments or compensation if any, for getting stone, gravel, sand, clay or other materials required for the Works or Temporary Works or any of them.

9.20 Compliance with Contract Documents

Equipment, materials and services shall be complete in all respects and in strict accordance with the Contract Documents.

9.21 Personnel Taxes and Duties

The Contractor or his employees shall pay all personal income or other taxes due in Pakistan for personnel employed by the Contractor for supervising the Work included in the Contract.

The Contractor shall obtain, at his own cost, work permits from competent authorities to enable any foreign personnel to work in Pakistan. The Contractor shall be responsible for all formalities in connection with passports, obtaining visas, police permits, and expenses for custom duties related to personal goods of foreign personnel employed on the project. However, the Owner will, if requested, assist the Contractor in obtaining visas and work permits.

9.22 Income Tax

The Contractor shall be responsible for all Contractor's corporate or company income tax payable in Pakistan.

9.23 Permits and Fees

The Contractor shall obtain and pay for all permits, licenses or other privileges necessary to complete the work, certificates of which shall be delivered to the Engineer and will become the property of the Owner.

9.24 Interference with Traffic and Adjoining Properties

a) All operations necessary for the execution of the Works and for the construction of any Temporary Works shall so far as compliance with the requirements of the Contract permits be carried on so as not to interfere unnecessarily or improperly with the public convenience or the access to use and occupation of public or private roads and footpaths or to or of properties whether in the possession of the Owner or of any other person and the Contractor shall save harmless and indemnify the Owner in respect of all claims demands proceedings, damages, costs, charges and expenses whatsoever arising out of or in relation to any such interference.

b) Access and Haul Roads

Except as may be specifically provided otherwise the

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Contractor shall construct, provide and maintain all access service and haul roads required by him for the execution of the Works or any Temporary Works. Where the Contractor finds it necessary or elects to use existing roads the Contractor shall make all necessary arrangements for journeys over and use of such roads. The Contractor shall observe all rules and regulations regarding the use of such existing roads. The costs of safety measures and temporary structures and any repairs replacements or other operations and all or any other costs required by reasons of his use of such existing roads shall be borne by the Contractor and the Contractor shall save harmless and indemnify the Owner in respect of all claims, demands, proceedings, damages, costs, charges and expenses whatsoever arising out of or in relation to any such operations.

c) Interference with Utilities

The Contractor shall at his own cost make necessary arrangements and take suitable precautions and perform any incidental work required for the protection of and avoidance of interference with power transmission, telegraph, telephone, water supply, drainage, sewerage and natural-gas lines and other utilities that may be affected by his operations under the Contract and shall save harmless and indemnify the Owner in respect of all claims, demands, proceedings, damages, costs, charges and expenses whatsoever, arising out of or in relation to any such

interference.

9.25 Extraordinary Traffic

a) The Contractor shall use every reasonable means to prevent any of the highways or bridges communicating with or on the routes to the Site from being damaged or injured by any traffic of the Contractor or any of his sub-contractors and in particular shall cause routes to be selected, vehicles to be chosen and used and loads to be restricted and distributed so that any such extraordinary traffic as will inevitably arise from the moving of plant and material from and to the Site shall be limited as far as reasonably possible and so that no unnecessary damage or injury may be occasioned to such highways and bridges.

b) Special Loads

Should it be found necessary to move any load or constructional plant machinery or pre-constructed units or parts of units of work the moving whereof is likely to damage any highway or bridge unless special protection or strengthening is carried out then the Contractor shall before such load is moved give notice to the Engineer's Representative of the weight and other particulars thereof and his proposal for protecting or strengthening such highway or bridge. Unless within fourteen days of the receipt of such notice the Engineer's Representative shall by counter-notice direct that such protection or

strengthening is unnecessary then the Contractor shall cause such proposals or any modification thereof that the Engineer's Representative shall require to be carried out and unless there is an item or are items in the Schedule of Prices of the necessary work for the protection or strengthening aforesaid the costs and expenses thereof shall be paid by the Owner to the Contractor.

c) Settlement of extra-ordinary traffic claims

If at any time the Contractor shall receive any claim arising out of the performance of the Contract in respect of damage or injury to highways or bridges he shall immediately report the same to the Engineer and thereafter the Owner shall negotiate the settlement of and pay all sums due in respect of such claim and shall indemnify the Contractor in respect thereof and in respect of all claims demands proceedings damages costs charges and expenses in relation thereto provided always that if and so far as any such claims or part thereof shall in the opinion of the Engineer be due to any failure on the part of the Contractor to observe and perform his obligations under sub-clauses (a) and (b) of this Section 2.9.25 then the amount certified by the Engineer to be due to such failure shall be paid by the Contractor to the Owner.

9.26 Coordination with Other Contractors

- a) The Owner reserves the right to let other contracts in connection with this Work. The Contractor shall afford such other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work simultaneously with his own and shall properly connect and coordinate his work with theirs.
- b) Two (2) black and white prints of all drawings and documents prepared by the Engineer or other contractors furnished to the Contractor for counterchecking and approval. The Contractor shall promptly check such drawings and documents for compliance with the requirements of his interests and shall return one (1) print with his examination endorsement and/or comments to the Engineer.

The Contractor shall immediately inform the Engineer of any discrepancies, errors or omissions in the drawings and documents furnished to him under this Clause.

On failure to meet these requirements the Contractor shall be liable for any resulting damages and expenditures.

- c) The Contractor shall cooperate with the Contractors of other related equipment in the mutual exchange of all necessary drawings, dimensions, templates, gauges, data and other information required to ensure the complete and proper design and manufacture of all connecting or related parts. No extra compensation shall be claimed by the Contractor

because of any modifications required to accommodate the equipment of other contractors unless otherwise specifically provided herein, and all adjustments shall be made between the respective contractors without extra cost to the Owner. The Owner or his Representatives shall receive a copy of all correspondence between contractors.

- d) Should the occasion arise that the Contractor believes that the other contractor has failed or may fail to supply any requested information related to the equipment, and that lack of such information will affect his contractual obligations, then he shall seek the Owner's and/or the Engineer's assistance to have such information provided.
- e) If any part of the Contractor's work depends for proper execution or results upon the work of any other contractor, the Contractor shall inspect and promptly report in writing to the Engineer any defects in such other work that render it unsuitable for such proper execution or results. His failure so to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other contractor's work after the execution of his work.
- f) To ensure the proper execution of his subsequent work, the Contractor shall measure work already in place and shall at once report to the Engineer any discrepancy between the executed work and the drawings.

9.27 Coordination of Work at Site

The Contractor shall take cognizance that during the execution of the project, other contractors will be working concurrently on this site.

All works of his responsibility shall be coordinated by the Contractor so as to give the necessary facilities to other contractors or their workmen or any other employees who execute or supervise any work on the site.

The Contractor shall ensure that the necessary safety precautions will be observed and interferences shall be avoided especially for the works executed side-by-side by different contractors.

Due consideration must be given to permit access to sections of the work as required by other contractors for the execution of their works. With a view to co-ordinating the works, the Owner's Representative may from time to time direct the order of the work to be carried out.

9.28 Supply of Plant, Materials and Labour

- a) Except where otherwise specified the Contractor shall at his own expense and risk supply and provide all the Constructional Plant, Temporary/Works, materials both for temporary and for permanent work, labour (including the supervision thereof), transport to and from the Site and in and about the Site and other things of every kind required

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for the construction, completion and maintenance of the Works.

b) Supply of POL

The Contractor shall arrange and maintain at all times an adequate supply of diesel oil motor spirit kerosene lubricants and other petroleum products.

c) Supply of Electric Power

Unless stated otherwise in Section 1 - Technical General Condition of the Project the Contractor shall at his own cost make all arrangements for the supply of electricity and lighting facilities to the Site and its distribution to the various points of requirements on Site.

d) Supply of Water

Unless stated otherwise in Section 1 - Technical General Condition of the Project the Contractor shall at his own cost make all arrangements for the supply and storage of water to the Site and its distribution to the various points of requirements on Site.

9.29 Site to be kept clear of Obstruction

- a) The Contractor shall at all times keep the Site free from obstruction and shall at any time if directed by the Engineer or the Engineer's Representative remove any Constructional Plant and surplus materials and clear away

and remove from the Site any wreckage or rubbish or Temporary Works no longer required.

- b) The Contractor and any persons responsible to him shall, at intervals of not more than 48 hours, remove any rubbish resulting from the execution of their work. If the Contractor fails to remove rubbish within 48 hours after being requested to do so by the Engineer, the rubbish will be removed by others and the cost charged to the Contractor.
- c) Adjacent streets, roads, and driveways, shall be kept clear and unobstructed at all times. Any materials resulting from demolition and not suitable for use in the Construction work will become the property of the Contractor on the Owner's approval and shall be immediately removed from the site. Upon completion, the Contractor shall remove all rubbish tools, forms, scaffolding, surplus materials, etc. and leave the premises clean and fit for use.
- d) No useable equipment or material purchased for the work, or construction tools and equipment shall be removed from the site without the written consent of the Owner. After completion of all work required under the Contract, any equipment, materials or consumable supplies remaining shall become the property of the Owner except that the Contractor may remove his tools, construction equipment, material or consumable supplies, with the written permission of the Owner and/or Engineer.

e) Clearance of Site on Completion

On the completion of the Works the Contractor shall clear away and remove from the Site all Constructional Plant, Temporary Works, surplus materials, wreckage and rubbish of every kind and shall leave the whole of the Site and the Works clean and in a workmanlike condition and in a state satisfactory to the Engineer or the Engineer's Representative.

f) Remedy of clearance not done by the Contractor

If the Contractor shall fail to clear the Site or leave the Works in the manner and condition stated in various clauses of this section 2.9.29 the Owner shall be at liberty without prejudice to any other rights it may have against the Contractor, at the cost of the Contractor to employ such other contractors and/or its own labour and such machinery as the Engineer or the Engineer's Representative may consider necessary for the purpose. The Contractor shall not question the mode of carrying out the work and the certificate of the Engineer as to the cost of the Work so carried out shall be final and binding on the Contractor.

10. LABOUR

10.1 Employment and Repatriation of Labour

a) The Contractor shall make all arrangements in connection with the requirement, supervision, transport, accommodation, feeding, quarantine, repatriation and all other matters whatsoever concerning the provision of labour and supervisory staff.

b) Recruitment

The Contractor shall not recruit or attempt to recruit persons in the service of the Owner and Engineer.

c) Labour Laws

The Contractor shall conform and comply in all respects with the provisions of all laws, rules regulations, bye-laws or orders of any Government, or other authority from time to time in force governing the employment of labour and other personnel, payment of wages, hours of work, holidays and other terms and conditions of service and shall indemnify and keep the OWNER indemnified against all liabilities and penalties arising thereunder.

d) Housing of labour

The Contractor shall not be allowed to provide any housing accommodation and amenities within the premises of the power plant. The Owner shall not be assume any

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responsibility for providing space for Contractor's Labour Camp and amenities. The Contractor shall, at his risk and cost provide at convenient location outside the plant premises such housing accommodation and amenities as may be required for all his labour and supervisory staff employed for the purposes of or in connection with execution and maintenance of the Works. The Contractor shall maintain and remove at the completion of the Contract such housing accommodation and amenities including all the fencing, water supply, sanitation, cook houses, fire prevention and fire fighting equipment, furniture and other things necessary for the facility of labour and staff and clear the area of all the debris and undesirable material at his cost and expense.

e) Supply of Water

The Owner will provide raw water from available source at the site, which may not be sufficient to the Contractor's requirements.

The additional requirements of the water shall be arranged by the Contractor himself.

However, the Owner will assist the Contractor in this regard.

f) Contractor to preserve peace

The Contractor shall at all times take all requisite precautions and use his best endeavours to prevent any

riotous or unlawful behaviour by or amongst the labourers and others employed by him or his sub-contractor for the purposes of or in connection with the execution and maintenance of the Works and for the preservation of the peace and the protection of the inhabitants and the security of property on or in the neighbourhood of the Site.

g) Health

The Contractor shall in consultation with and according to the requirements of the Engineer and every medical or sanitary authority having jurisdiction ensure that suitable arrangements are made on the Site for the maintenance of health, the prevention and overcoming of epidemics and for adequate first aid welfare and hygiene services.

h) Contractor's Responsibility

The Contractor shall be responsible for the observance by his sub-contractors of the foregoing provisions of this section which shall apply to all persons employed by the Contractor and his sub-contractors for the purpose of or in connection with the Works.

i) Sanitary Conveniences

Sanitary conveniences for the use of persons employed by the Contractor and his subcontractors shall be provided and maintained by the Contractor to the extent and in such a

manner and at such places as shall be approved by the Owner and the Authority concerned, and all persons connected with the works shall be obliged to use them. The Contractor shall make all temporary arrangements for refuse and garbage collection and disposal and for the proper treatment and discharge of sewage and drainage from or in connection with the works and shall maintain the same to the satisfaction of the Owner or his Representatives and the Authority concerned as long as they may be required.

The Contractor shall prohibit the committing of any nuisance on the site or upon the land of the Owner or adjacent landowners and any employee found violating this provision shall be liable to immediate dismissal and will not be again employed on the site.

- j) The rate of pay for local labour at site shall not be less than prevailing wage scales for similar duties in the locality. The Contractor shall further more make all efforts to avoid labour disputes, strikes, slow-down, and similar difficulties which may delay the completion of the Contract.

10.2 Safety for Workmen and Public

- a) The Contractor shall comply with the "Safety and Engineering Practices" as set forth in the Manual of Accident Prevention in Construction, published by the Associated General Contractors of America, and with

applicable Governmental safety and sanitary laws, regulations and ordinances, as well as the established safety rules and practices of the Owner. The Contractor shall also provide insurance cover, throughout the construction period, under prevailing Workmen's Compensation Laws to the Contractor's workmen.

- h) The Contractor shall provide and properly maintain prohibitory and warning signs and lights, barricades, railings and other safeguards for the protection of personnel from the existence or possible existence of danger such as inflammable substances, explosive substances, corrosion or noxious substances, suspended loads, restricted width/height, danger of trapping, steps, falling.
- c) The Contractor shall furnish and issue approved safety helmets to all workmen and authorised personnel during the course of hazardous construction of all types.
- d) All accidents shall be promptly reported to the police, local Chief Inspector of Factories or the Chief Electrical Inspector as the case may be, with copies to the Owner and the Engineer.

10.3 Unemployment Compensation

The Contractor shall accept an exclusive liability for the payment of contributions or taxes for unemployment insurance,

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old age pensions, annuities, or similar taxes imposed by authorities having jurisdiction which are measured by remunerations paid to the Contractor's employees, and shall comply with and furnish to the Owner all information required by all laws imposing such taxes.

10.4 First Aid and Medical Supervision

a) The Contractor shall accept full liability for the payment of all first aid and medical costs required for workmen under his jurisdiction assigned to the project.

b) The Contractor shall produce certificate of physical fitness of all his employees if desired by the Owner or OWNER'S Representative and he shall employ only such persons as are found to be free from contagious disease. Whenever, in the opinion of the Owner, it is necessary for the protection of other personnel, the Contractor shall remove any of his employees found to be suffering from a contagious disease, either to a hospital or permanently from the site area. Any contagious disease, when discovered, shall be immediately reported to the Owner. The Contractor, if required by the Owner, shall subject all of his employees to regular medical examination and produce satisfactory evidence of their being free from any contagious disease.

11. MATERIALS AND WORKMANSHIP

11.1 Quality of Materials & Workmanship and Tests

a) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subject from time to time to such tests at such places at such times by the Owner or Engineer or such other persons as the Engineer may direct. The Contractor shall provide such assistance, instruments, machines, labour and materials as are required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the Works for testing as may be selected and required by the Engineer.

b) Cost of Samples

All samples shall be supplied by the Contractor at his own cost if the supply thereof is clearly intended by or provided for in the Specification or Schedule of Prices but if not then at the cost of the Owner.

c) Cost of Test

The cost of making any test shall be borne by the Contractor if such test is clearly intended by or provided for in the Specification or Schedule of Prices and (in the cases only of a test under load or of a test to ascertain

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whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfil) is particularized in the Specifications or Schedule of Prices to enable the Contractor to price or allow for the same in his Bid.

d) Cost of tests not provided for

If any test is ordered by the Owner or Engineer which is either:

- i) not so intended by or provided for, or
- ii) (in the cases above mentioned) is not so particularized).

then the costs of such test shall be borne by the Contractor if the test shows the workmanship or materials not to be in accordance with the provisions of the Contract or the Engineer's instructions. Otherwise the costs of such tests will be to the account of the Owner.

e) Maximum use of Pakistani goods

So far as may be consistent with his obligations under the Contract the Contractor shall make the maximum possible use of materials supplies and equipment indigenous to or produced in Pakistan.

11.2 Access to Site

- a) The Engineer and any person authorised by him shall at all

times have access to the Works and Temporary Works, to the Site and to all workshops and places where work is being prepared or where materials, manufactured articles and machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance for or in obtaining the right to such access.

11.3 Examination of Work before covering up

- a) No work shall be covered up or put out of view without the approval of the Engineer or the Engineer's Representative and the Contractor shall afford full opportunity for the Engineer or the Engineer's Representative to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer or the Engineer's Representative whenever any such work or foundations is or are ready or about to be ready for examining and the Engineer or the Engineer's Representative shall as soon as practicable during normal working hours (unless he considers it unnecessary and advises the Contractor accordingly) attend for the purpose of examining and measuring such work or of examining such foundations.

b) Uncovering making openings and searching

The Contractor shall uncover any part or parts of the Works or make openings in or through the Works or search for the

cause of any defect imperfection or fault in the Works as the Engineer may from time to time direct and shall reinstate and make good such part or parts after such uncovering opening or searching to the satisfaction of the Engineer. If any such part of the Works has been covered up or put out of view after compliance with the requirements of above clause and is found to be executed in accordance with the Contract or if the defect fault or imperfection is one for which the Contractor is not liable under the Contract the expenses of uncovering opening or searching and reinstating and making good shall be borne by the OWNER but in any other case all such expenses shall be borne by the Contractor and shall if paid by the Owner be recoverable from the Contractor by the Owner or may be deducted by the Owner from the moneys due or which may become due to the Contractor.

11.4 Guarantee for Material, Workmanship and Performances

- a) The Contractor shall guarantee that the materials and workmanship incorporated into the work are new and the best of their respective kinds for the service intended and that all items will be free from defects inherent in design, workmanship and materials.
- b) Guarantees, when required by the Specification, shall be furnished by the Contractor upon form approved by the Engineer and shall be signed by both the Contractor and the

subcontractor whose work is involved.

- c) The Contractor's liability shall be limited to the replacement of any defective part that may develop in the equipment or material of his own work or manufacture or those of his subcontractors under proper use and arising solely from faulty design, materials, or workmanship.
- d) All replacements shall be made free of cost at the site by the Contractor and the return of the defective parts shall be the Contractor's responsibility and shall be made at his expense.
- e) If it becomes necessary for the Contractor to replace or renew any defective portions of the work under this clause, the provisions of this clause will apply to the portions of the work so replaced or renewed until the expiration of six months from the date of such replacement or until the end of the guarantee period, whichever shall be later. If any defects are not remedied within a reasonable time, the Owner may proceed to replace or renew the work at the Contractor's risk and expense without prejudice to any other rights which the Owner may have against the Contractor in respect of such defects.
- f) If the replacements or renewals are of such a character as may effect the efficiency of the plant, the Owner shall have the right to give to the Contractor within one month of such replacement or renewal, notice in writing that

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performance tests be made in which case such tests shall be carried out as provided in these documents. Should such tests show that plant sustains the guarantees of the Contract, the costs of the tests shall be borne by the Owner. Should the guarantees not be sustained, the cost of the test shall be borne by the Contractor.

11.5 Period and Extent of Guarantees

- a) The period of guarantee on all equipment, materials and workmanship shall be one year starting from the date of acceptance by the Owner or as expressly stated elsewhere.
- b) If during the guarantee period the services of the Contractor's personnel are required for the rectification or replacement of and defective part of the work due to defective material or workmanship, such services shall be made by the Contractor without charge to the Owner.

11.6 Suitable Appliances

- a) The Contractor shall use such methods and appliances for the performance of all portions of the work as will produce a satisfactory quality of workmanship and rate of progress which, in the opinion of the Engineer, will result in completion of the Contract within the time agreed upon, or with a reasonable time if no time has been agreed upon.
- b) All materials, tools, construction plant, etc. at the site

as necessary for the prosecution of the work, shall be held, maintained, and operated entirely at the risk of the Contractor.

11.7 Responsibility of the Contractor

- a) The Contractor shall be responsible for all equipment and materials until they are erected or installed in satisfactory condition and accepted by the Owner in writing, except during that time when any equipment and material is taken over and operated by the OWNER for the purpose of commercial operation, provided said "taking over" is not necessitated by the Contractor's negligence or non-performance.
- b) The Contractor shall be responsible for corrections of positions, levels and dimensions of the work according to the drawings notwithstanding that he may have been assisted by the Engineer's Representative in setting out the same.

11.8 Completeness of Works

- a) It is the intent of the technical specifications to provide for the furnishing, delivery, erection, and testing of the equipment and materials specifically noted, shown, or called for. The omission of specific reference to any item of work that is reasonably necessary for the proper functioning of the Works, will not relieve the Contractor of the responsibility to furnish all equipment, materials,

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transportation, and/or labour required for a completed Works.

- b) The technical specifications are presumed correct, but complete accuracy is not guaranteed. Any error or ambiguity must be reported to the Engineer before starting the work affected. In the event of any dispute arising as to the true intended meaning of a technical specification, the Engineer shall interpret same and his interpretation shall be accepted as final and binding upon all parties concerned.

11.9 Removal of Improper Work and Materials

- a) The Engineer during the continuance of the Contract which period shall be deemed to include:
- i) the period (if any) in the Contract for which the Works are guaranteed by the Contractor, or if there is no such guarantee period:
 - ii) the period during which any retention money or other security is retainable by the OWNER under the Contract.
 - iii) if the above periods are not specified in the Contract, for a period of 12 months from the date of completion certified by the Owner.

Shall have power to order in writing from time to time:

- A. the removal from the Site within such time or times as may be specified in the order of any materials which in the opinion of the Engineer are not in accordance with the Contract;
- B. the substitution of proper and suitable materials; and,
- C. the removal and proper re-execution (notwithstanding any previous test thereof or interim payment therefor) of any work which in respect of materials or workmanship is in the opinion of the Engineer not in accordance with the Contract.

b) Default of Contractor in compliance

In case of default on the part of the Contractor in carrying out such order the Owner shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be borne by the Contractor and shall be recoverable from him by the Owner or may be deducted by the Owner from any moneys due or which may become due to the Contractor.

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11.10 Suspension of Work

a) The Contractor shall on the written order of the Owner/Engineer (herein referred to as "Suspension Order") suspend the progress of the Works or any part thereof for such time or times and in such manner as the Owner/Engineer may consider necessary and shall during such suspension properly protect and secure the work so far as will be necessary in the opinion of the Owner/Engineer. The extra cost including all wages to be paid on the site, salaries, depreciation and maintenance of plant at Site and general overhead costs of the Contract incurred by the Contractor in giving effect to any Suspension Order shall be borne and paid by the Owner unless such suspension is:

- i) otherwise provided for in the Contract, or
- ii) necessary for the proper execution of the Work or by reason of weather conditions (or conditions due to weather conditions affecting the safety or the quality of the Works) or by some default on the part of the Contractor, or
- iii) necessary for the safety of the Works or any other part thereof.

Provided that the Contractor shall not be entitled to recover any such extra cost unless he gives notice in writing of his intention to claim to the Engineer within

fourteen days of the Suspension Order. The Engineer shall settle and determine the extra payment to be made to the Contractor in respect of such claim as shall in the opinion of the Engineer be fair and reasonable.

b) Suspension lasting more than 90 days

If on the written order of the Owner/Engineer (in the clause referred to as 'Suspension Order') the progress of Works or any part thereof should be suspended for a period or consecutive periods amounting in all to 90 days or if the Owner/Engineer having previously issued a Suspension Order for a period which has lasted less than 90 days shall within less than 90 days from the expiration of that period of suspension issue a further Suspension Order either in respect of the whole of the Works or (where the previous Suspension Order has effected only a part) effecting or including that part then and in any such case the Contractor may serve a written notice on the Owner/Engineer requiring permission within 28 days from the receipt thereof to proceed with the Works or that part thereof in regard to which the progress is suspended and if such permission is not granted within that time the Contractor by a further written notice so served may (but is not bound to) elect to treat the suspension where it effects part only of the Works as an omission of such Part under Clause 2.13.1 hereof or where it affects the whole Works as an abandonment of the Contract by the Owner.

11.11 Commencement of Works

The Contractor shall commence the Works within the period stated in the Tender after the receipt by him of the Owner/Engineer's written order to commence the Works and shall proceed with the same with due expedition and without delay except as may be expressly sanctioned or ordered in writing by the Owner/Engineer.

11.12 Possession of Site

Save in so far as the Contract may prescribe the extent of portions of the Site of which the Contractor is to be given possession from time to time and the order in which such portions shall be made available to him and subject to any requirement in the Contract as to the order in which the Works shall be executed the Owner shall give the Contractor possession of so much of the Site as may be required to enable the Contractor to commence and proceed with the programme referred to in Section 2.9.8 hereof and otherwise in accordance with such reasonable proposals of the Contractor as he shall by notice in writing to the Engineer make and will from time to time as the work proceeds give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the construction of the Works with due despatch in accordance with the said programme or proposals (as the case may be). If the Contractor suffers delay or incurs expense from failure on the part of the Owner

to give possession in accordance with the terms of this Clause the Engineer shall grant an extension of time for the completion of the Works and certify such sum as in his opinion shall be fair to cover the expense incurred which sum shall be paid by the Owner.

11.13 Wayleaves, etc.

The Contractor shall bear all expenses and charges for special or temporary wayleaves required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional accommodation outside the Site required by him for the purposes of the Works.

11.14 Time for Completion

Subject to any requirement in the Specification as to completion of any portion of the Works before completion of the whole, the whole of the Works shall be completed within the time stated in the Tender or such extended time as may be allowed under Section 2.11.15 hereof.

11.15 Extension of Time for Completion - Force Majeure

Should the Contractor be obstructed or delayed in the commencement, prosecution or completion of his work by any necessary or unavoidable act or delay of the Owner, or unavoidable acts or delays on the part of railroad or steamship lines or any other transportation company in transporting

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material consigned to the Contractor for a period exceeding one month, or by riot; insurrection, war directly affecting the project, blockade, revolution, civil commotion, pestilence, acts of public authorities, fire, explosion, lightning, earthquake, cyclone, tidal waves, typhoons, hurricanes, tornadoes, floods, plague, epidemic, quarantine, or through any default of other portions under contract with the OWNER, or similar causes not caused by and beyond the control of the Contractor; and if, in the opinion of the Engineer, the ultimate completion of the entire work is delayed thereby, then the Contract dates will be extended for a period equivalent to the time said work as a whole has been delayed for said reason, provided that within seven (7) days the Contractor submits to the Owner through the Engineer for approval a notice in writing stating in detail the reason for each delay caused by force majeure. The Contractor shall provide full evidence for the delay of completion due to force majeure. However, for delays by the Contractor or his subcontractors which result directly or indirectly from his negligence, mistakes, improper cooperation or failure to supply full information, or failure of electricity/water supply or through any defaults, the Contract dates will not be extended.

11.16 No Night or Friday Work

- a) Subject to any provision to the contrary contained in the Contract none of the permanent work shall save as hereinafter provided be carried on during the night or on

Fridays without the permission in writing of the Engineer save when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the Works in which case the Contractor shall immediately advise the Engineer's Representative. Provided always that the provisions of this Clause shall not be applicable in the case of any work which is customary to be carried out by rotary or double shifts.

b) Lighting Work at Night

In the event night work is carried on by the Contractor he shall provide and maintain at night such good sufficient lights at the site and the approaches to the Site as will enable the Works to be carried on satisfactorily and without danger and shall in all respects comply with the instructions of the Engineer's Representative with regard to such lighting.

11.17 Rate of Progress

The whole of the materials, plant and labour to be provided by the Contractor under Section 2.6.1 hereof and the mode, manner and speed of execution and maintenance of the Works are to be of a kind and conducted in a manner approved by the Engineer. Should the rate of progress of the Works or any part thereof be at any time in the opinion of the Engineer too slow to ensure the completion of the Works by the prescribed time or extended time for completion the Engineer shall so notify the Contractor

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in writing and the Contractor shall thereupon take such steps as the Contractor may think necessary and the Engineer may approve to expedite progress so as to complete the Works by the prescribed time or extended time for completion. If the work is not being carried on by day and by night and the Contractor shall request permission to work by night as well as by day then if the Engineer shall grant such permission the Contractor shall not be entitled to any additional payment for so doing if such permission shall be refused and there shall be no equivalent practicable method of expediting the progress of the work the time for completion of the Works shall be extended by the Engineer by such period as is solely attributable to such refusal. All work at night shall be carried out without unreasonable noise and disturbance created while or in carrying out the work and from and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in regard or in relation to such liability.

11.18 Liquidated Damages

- a) Time is the essence and due consideration shall be given to completion dates given in the Tender before awarding Contract(s).
- b) Should the Contractor fail to complete the Works of each KEY DATE by the time stated in the Contract, the Contractor shall pay the Owner the sum of 0.15% of the dismantling cost in the Contract amount for each and every day

thereafter, including Fridays and holidays, that such completion is delayed, which sum shall be construed as liquidated damages. The each KEY DATE completion liquidated damages shall be limited to a maximum of ten percent (10%) of the dismantling cost in the Contract Price. The Owner may without prejudice to any other method of recovery deduct the amount of such damages from any monies in his hands due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works or from any other of his obligations and liabilities under the Contract.

- c) In the event that the Contractor is prevented from completing his work because of the failure or inability of another contractor to conform to his schedule the completion time will be extended for his Contract, provided the Contractor presents acceptable evidence in writing to the Engineer that the delay is beyond his reasonable control. However, in no event will the Contractor be allowed any price addition to the Contract for "stand-by time" or other alleged losses claimed by the Contractor because of such failure or inability on the part of another contractor to conform to his schedule.

11.19 Certificate of Completion of Works

- a) When the whole of the Works have been substantially

completed and have satisfactorily passed any final test that may be prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer or to the Engineer's Representative accompanied by an undertaking to finish any outstanding Work during the Period of Maintenance. Such notice and undertaking shall be in writing and shall be deemed to be a request by the Contractor for the Engineer to recommend to the Owner to issue a Certificate of Completion in respect of the Works. The Engineer shall, within twenty one days of the date of delivery of such notice either recommend to the Owner for issuance of Certificate of Completion stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract or give instructions in writing to the Contractor specifying all the Work which, in the Engineer's opinion, requires to be done by the Contractor before the issue of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion of the Works specified therein. The Contractor shall be entitled to receive such Certificate of Completion within twenty one days of completion to the satisfaction of the Engineer of the work so specified and making good any defects so notified.