



PAKISTAN NUCLEAR REGULATORY AUTHORITY

Off Shore Marker Piles

Construction of Marker Piles and Navigational Aids
at Karachi Nuclear Power Plant

TENDER DOCUMENTS (Rev-B)

Volume-2

Tender Form
Appendix to Form of Tender
Form of Tender Bond
Security Undertaking
Insurance Undertaking
Schedules
Bill of Quantities

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PAKISTAN NUCLEAR REGULATORY AUTHORITY

***Construction of Marker Piles and Navigational Aids
at Karachi Nuclear Power Plant***

TENDER DOCUMENTS

VOLUME 2

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PAKISTAN NUCLEAR REGULATORY AUTHORITY

***Construction of Marker Piles and Navigational Aids
at Karachi Nuclear Power Plant***

TENDER FORM

To: Pakistan Nuclear Regulatory Authority

**TENDER FOR: Construction of Marker Piles and Navigational Aids
at Karachi Nuclear Power Plant**

Gentlemen

1. Having visited the Site and examined the Conditions of Contract, Specification, Drawings, Bill of Quantities, Schedules, Ground Investigation Data and Circular Letters Nos for the execution of the above named Works, we, the undersigned, offer to execute and complete and the whole of the said Works and remedy any defects therein in conformity with the said Conditions of Contract, Specification, Drawings, Bill of Quantities, Schedules, Ground Investigation Data and Circular Letters for the Sum of or such other sums as may be ascertained in accordance with the said Conditions.
2. We acknowledge that the Appendix forms part of our Tender.
3. We undertake, if our Tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix to Tender.
4. If our Tender is accepted we undertake to obtain a Security provided by an Insurance Company or Bank (to be approved in either case by you) to be jointly and severally bound with us in a sum equivalent to ten per cent of the Contract Price for the due performance of the Contract under the terms of a Guarantee in the form annexed to the Conditions of Contract.
5. We agree to abide by this Tender for a period of 180 days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
6. Unless and until a formal Agreement is prepared and executed this Tender, together with your written acceptance thereof, shall constitute a binding contract between us.

7. We understand that you are not bound to accept the lowest or any tender you may receive.
8. We enclose the required Security and Insurance Undertakings.
9. We enclose our Tender Security in the sum Rs. 3.5 million.

Dated this _____ day of _____ 20____

Signature _____ in the capacity of _____

duly authorized to sign tenders for and on behalf of:

Company _____

Address: _____

Witness:

Signature : _____

Name : _____

Occupation : _____

Address : _____

PAKISTAN NUCLEAR REGULATORY AUTHORITY

***Construction of Marker Piles and Navigational Aids at
Karachi Nuclear Power Plant***

APPENDIX TO TENDER

SUB-CLAUSE

Amount of Security		10% of the Contract Price
Minimum Amount of Third Party Insurance		Rs 10 million (or equivalent) per occurrence with the number of occurrences unlimited.
Time for Issue to Notice to Commence		28 days
Time for Completion		214 calendar days
Amount of Liquidated Damages		Pakistani Rupees 128,250 per calendar day
Limit of Liquidated Damages		10% of the Contract Price
Defects Liability Period		365 days (extendable to max 730 days)
Percentage for Adjustment of Provisional Sums	 per cent*
Percentage of Retention		10% (ten per cent)
Limit of Retention Money		5% of the Contract Price
Minimum Amount of Interim Certificates		5% of the Contract Price
Rate of Interest upon Unpaid Sums		14% per annum
Amount of Advance Payment		15% of the Contract Price

Signature

FORM OF TENDER BOND

BY THIS BOND WE (hereinafter called “the Tenderer”) and (Bank) whose registered office is at (hereinafter called “the Surety”) are held and firmly bound unto Karachi Nuclear Power Plant (hereinafter called “KANUPP”) in the sum of Rupees 6.0 million for the payment of which sum the Tenderer and the Surety bind themselves their successors and assigns jointly and severally by these presents.

Sealed with our respective seals and date this day of 2014

WHEREAS

- (1) Karachi Nuclear Power Plant has invited the Tenderer and other personas to complete Tenders in similar terms for the Construction of Marker Piles and Navigational Aids at Karachi Nuclear Power Plant (hereinafter called “the Works”) and to submit the same for consideration by KANUPP.
- (2) The Tenderer proposes to submit to KANUPP a Tender (hereinafter called “the Tender”) in accordance with such invitation and by the above-written Bond to provide security for the due performance by him of the undertakings and obligations in the Tender on his part contained.

NOW THE CONDITION of the above-written Bond is such that:

- (a) if the Tenderer withdraws his Tender during the period of validity specified in the Form of Tender or such further period as may have been requested by KANUPP and agreed by the Tender; or
- (b) if the Tenderer refuses to accept the correction of errors in his Tender in accordance with the method stated in paragraphs 6.12 and 6.13 of the Instructions to Tenderers; or
- (c) if the Tenderer, having been notified of the acceptance of his Tender by KANUPP during the period of Tender validity, fails within the respective times stipulated in the Instructions to Tenderers to execute the Contract Agreement or to furnish in an acceptable form the Performance Security required under the Contract.

We undertake to pay to KANUPP an amount not exceeding the sum stated above on receipt of its first written demand, without KANUPP having to substantiate its demand, provided that in its demand KANUPP will note that the amount claimed by it is due to it owing to the occurrence of one or more of the above conditions, specifying the occurred condition or conditions.

This Bond will remain in force up to and including the date 90 (ninety) calendar days after the period of Tender validity including any agreed extension thereof, notice of which extension(s) to the Surety being hereby waived. Any demand in respect thereof should reach the Surety not later than the above date.

The Common Seal
of

(the Tenderer) was hereunto affixed in the presence of:

Signature:
Name:
In the capacity of

The Common Seal
of

(the Surety) was hereunto affixed in the presence of:

Signature:
Name:
In the capacity of

SECURITY UNDERTAKING

If the Contract for Construction of Marker Piles and Navigational Aids at Karachi Nuclear Power Plant is awarded to:

) Contractor's Name
) and Address
)
)

We

) Surety's Name
) and Address
)
)

hereby undertake to provide in accordance with Sub-Clause 10.1 of the Conditions of Contract, under seal if required, a Guarantee* in the Form shown in an Annex to the Conditions of Contract in a sum equal to ten per cent of the Contract Price, for the due performance of the Contract by the above-named Contractor.

Signed for and on behalf) Signature

of the above Surety) Name

In the capacity of

.....

Date

*delete whichever does not apply.

INSURANCE UNDERTAKING

If the Contract for the Construction of Marker Piles and Navigational Aids at Karachi Nuclear Power Plant is awarded to:

) Contractor's Name
) and Address
)
)

We) Insurer's Name
) and Address
)
)

hereby undertake to provide in accordance with Clauses 21, 23 and 24 of the Conditions of Contract the insurances to be provided by the Contractor, complying with the conditions stated therein.

Signed for and on behalf) Signature
of the above Insurer)

Name

In the capacity of

.....

Date

PAKISTAN NUCLEAR REGULATORY AUTHORITY

***Construction of Marker Piles and Navigational Aids at
Karachi Nuclear Power Plant***

SCHEDULE I

BILL OF QUANTITIES

Signature

Date

(Note: This schedule shall form part of the Contract)

PREAMBLE

Method of Measurement

1. The Works shall be measured against the items in the Bill of Quantities according to the procedure set out in the "Civil Engineering Standard Method of Measurement", Third Edition (CESMM) published by the Institution of Civil Engineers, London, as amended or modified in this Preamble. Should there be a conflict between the CESMM and the Bill of Quantities and this Preamble, the Bill of Quantities and this Preamble shall prevail.
2. The Bill of Quantities has been drawn up generally in accordance with the CESMM but no warranty is given that it has been followed in all respects.
3. Item descriptions in the Bill of Quantities serve to identify particular components of the Works but do not necessarily describe all the operations needed to produce them. Clauses 5.12 and 5.13 of the CESMM shall not apply to this Contract.
4. The items listed in the Bill of Quantities shall be deemed to cover compliance with all the provisions of the Contract and all the operations needed to construct the works described in the Employer's Requirements and other documents issued for tendering purposes. No extra Bill item will normally be created where the Bill of Quantities does not specifically list items described separately in the CESMM.
5. Item descriptions in the Bill of Quantities which identify categories of work shall be deemed to be all inclusive of design, materials, equipment and labour.
6. The Bill of Quantities has been drawn up on the basis that all the works shown on the Drawings will be included in the Contract.
7. The Bill of Quantities shall be read in conjunction with the General and Particular Conditions of Contract and the Employer's Requirements. Contrary to the definition in Section 1 of the CESMM, the Conditions of Contract applicable shall be the Conditions forming part of this Contract.

Units of Measurement and Abbreviations.

8. The following units of measurement and abbreviations shall be used:

UNITS OF MEASUREMENT

cm	centimeter
g	gramme
h	hour
ha	hectare
kg	kilogramme
km	kilometer
m	metre
m ²	square metre
m ³	cubic metre
mm	millimetre
mm ²	square millimeter
nr	number
t	tonne
wk	week
mth	month

ABBREVIATIONS

av	average
dia	diameter
drg	drawing
incl	including
max	maximum
rrun	minimum
n.e.	not exceeding
PKR	Pakistani Rupee

Item Numbering System

9. The coding and numbering system described in Section 4 of the CESMM shall not apply.

Rates and Prices Generally

10. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other Rates and Prices entered in the Bill of Quantities.
11. Should there be any details of construction or materials which have not been referred to in the Employer's Requirements or in the Bill of Quantities, but the necessity for which may reasonably be implied or inferred therefrom, or which are usual or essential to the completion of all works in all trades, the same shall be deemed to be included in the Rates and Prices tendered in the Bill of Quantities.

12. The whole costs of tests, test certificates, inspections, trials and commissioning procedures, the provision and storage of samples and the carrying out of surveys and setting out required by the Employer's Requirements shall be deemed to be included in the rates for work unless itemized separately.
13. The rates for field testing shall be deemed to include for the provision of all necessary labour and Equipment and associated overheads for testing and the costs for any labour and Equipment for construction rendered idle while the test is being set up and dismantled and while it is in progress.
14. The Rates and Prices shall be deemed to include for all non-productive time associated with programming of the work to suit the work of other contractors at the Site.
15. All costs associated with carrying out designs and preparing drawings, schedules and manuals, where these are specified to be done by the Contractor, shall be deemed to be included in the Rates and Prices. Items to be designed by the Contractor are described in the Contract.

General and Provisional Items

16. Items for insurance classed as contractual requirements shall include only provision of insurance in accordance with Clause 21 of the Conditions of Contract. The cost of additional insurances arranged by the Contractor shall be distributed in the rates for relevant work.
17. Time-related items shall be measured according to the period for which the item is specified or ordered to be provided or available, or the period for which the item is actually provided or available, whichever is the less.
18. Items for mobilization shall become due for certification by the Employer's Representative only when the equipment, materials or plant concerned has been delivered to the Site.
19. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Employer's Representative in accordance with Clause 58.2 of the Conditions of Contract.
20. Provisional Sums for additional tests shall be used only to cover tests ordered by the Employer's Representative which are not specified or where the frequency or number of tests required is greater than is indicated by the Employer's Requirements.
21. "Rate Only" items, shall be used as the basis for payment against the corresponding Provisional Sum, if used.

Work Affected by Water

22. Information on tide level variations, winds, waves and currents is given in the Employer's Requirements. The Contractor shall be deemed to have ascertained for himself the extent to which the work has to be carried out over water, underwater or in tidal conditions, and his rates and prices shall be deemed to include for all costs

and charges whatsoever arising out of such working, whether or not separate items have been provided in the Bill of Quantities.

23. Items for underwater work shall be deemed to include for all necessary divers and diving equipment and also stand-by personnel and equipment as required by the Employer's Requirements.

24.

Demolition and Site Clearance

24. Items for demolition and site clearance shall be deemed to include for the removal and disposal of all debris.

Piling

25. Items for Piling shall be deemed to include for all work necessary to advance the piles to the specified levels including but not limited to pre-boring.

Structural Metalwork

26. Items for Structural Metalwork shall be deemed to include for all work necessary to construct and install the complete structure excluding only that work specifically included under items for Piling and Navigation Aids.

Fall Arrest System

27. Items for Fall Arrest System shall include for supply, installation, testing and commissioning of all components excluding only the supply and installation of components specifically included under items for Structural Steelwork.

BILL OF QUANTITIES

Project: SUPPLY AND INSTALLATION OF MARKER PILES AND NAVIGATION AIDS

Item No	Item Description	Unit	Quantity	Rate	Rate in Word	Amount, Rs.
1.0	GENERAL ITEMS					
1.1.1	Performance Bond	Sum	Lump Sum			
1.1.2	Insurance of Works	Sum	Lump Sum			
1.1.3	Insurance of Contractor's Equipment	Sum	Lump Sum			
1.1.4	Insurance against damage to persons	Sum	Lump Sum			
1.1.5	Insurance against accident or injury to Contractor's Workmen	Sum	Lump Sum			
	Specified Requirements (Section 1 of the Specifications)					
1.2.1	Provide equipment and facilities for the use of the Engineer	Sum	Lump Sum			
1.2.2	Maintenance of Equipment and Facilities for the Engineer including all consumables	month	7			
1.2.3	Attendance upon the Engineer's Staff	month	7			
1.2.4	Remove equipment and facilities for the use of the Engineer	Sum	Lump Sum			
1.2.5	Hydrographical Survey of area within 50 m of each of the proposed marker pile using side scan sonar or equivalent approved	Sum	Lump Sum			

BILL OF QUANTITIES

Item No	Item Description	Unit	Quantity	Rate	Rate in Word	Amount, Rs.
	Provisional Sums					
1.3.1	Additional Works instructed by the Engineer	Sum	Lump Sum			20,000,000.00
1.3.2	Additional Test	Sum	Lump Sum			1,000,000.00
1.3.3	Method Related Charges	Sum	Lump Sum			1,000,000.00
2.0	PILES					
	Isolated Steel Plies Including Protective Coatings and paint as per specification and direction of the Engineer.					
	Grade 50 Tubular Steel Plies 750mm dia x 25mm thickness					
2.1 a	21.50 m nominal length	nr	1			
2.1 b	depth driven	m	8			
2.2 a	21.50 m nominal length	nr	1			
2.2 b	depth driven	m	8			
2.3 a	21.80 m nominal length	nr	1			
2.3 b	depth driven	m	8			
2.4 a	22.50 m nominal length	nr	1			
2.4 b	depth driven	m	8			
2.5 a	23.00 m nominal length	nr	1			
2.5 b	depth driven	m	8			
2.6 a	27.00 m nominal length	nr	1			
2.6 b	depth driven	m	10			
2.7 a	27.00 m nominal length	nr	1			
2.7 b	depth driven	m	10			

BILL OF QUANTITIES

Item No	Item Description	Unit	Quantity	Rate	Rate in Word	Amount, Rs.
2.8 a	27.00 m nominal length	nr	1			
2.8 b	depth driven	m	10			
2.9 a	23.50 m nominal length	nr	1			
2.9 b	depth driven	m	8			
2.10 a	27.00 m nominal length	nr	1			
2.10 b	depth driven	m	10			
3.0	PILING ANCILLARIES					
	Isolated Steel Piles					
	Preparing Heads of Grade 50 Tubular steel Incl. Provision and Installation of Capping Plate					
3.1	750mm dia x 25 mm thick	nr	10			
4.0	STRUCTURAL METALWORK					
	Pile extension assemblies including corrosion protection and paint, complete with maintenance platform including handrails, ladder including fall arrest system complete in all respect as per specification and instructions of the engineer.					
4.1	Fabrication : 600mm dia x 20mm thick	nr	10			
5.0	TIMBER					
	Timber Fenders					
	Provide and Erect Pairs of Timber Fenders Including All Fixings and Support Steel work					
5.1	Attached to Tubular steel piles 750mm dia. X 25 mm thickness	nr	10			

BILL OF QUANTITIES

Item No	Item Description	Unit	Quantity	Rate	Rate in Word	Amount, Rs.
6.0	NAVIGATIONAL AIDS					
	Navigation Beacons: Supply and Installation Including Lantern, Flash Facility, Solar Power System and Battery, Radar Reflector ; Range Colour and Characterisitcs as Specified and direted by the Engineer					
6.1	Beacon Light	nr	6			
7.0	MISCELLANEOUS					
	Fall Arrest System					
7.1	Provide Fall Arrest System including 3 nr harness and trollies	sum	1			

TOTAL IN WORDS: _____

Signature: _____