

NATIONAL GRID COMPANY OF PAKISTAN LIMITED



TENDER DOCUMENT NO. NOR-138W2-2026

**CIVIL WORKS, ERECTION, TESTING & COMMISSIONING OF
220/132KV NOWSHERA INDUSTRIAL GRID STATION & 500kV
SHEIKH MUHAMMADI GRID STATION UNDER NGC OWN
RESOURCES**

**LOT-I: CIVIL WORKS, ERECTION, TESTING & COMMISSIONING FOR
ADDITION OF 02 NOS. 220kV LINE BAYS AT 220/132kV NOWSHERA
INDUSTRIAL GRID STATION**

**LOT-II: CIVIL WORKS, ERECTION, TESTING & COMMISSIONING FOR
ADDITION OF 02 NOS. 220kV LINE BAYS AT
500kV SHEIKH MUHAMMADI GRID STATION**

UNDER NGC'S OWN RESOURCES

SINGLE STAGE TWO ENVELOPE

**PREPARED BY:
SUBSTATION DESIGN DEPARTMENT, NGC
143 - WAPDA HOUSE, LAHORE, PAKISTAN
June, 2026**

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INVITATION FOR BIDS

Date: 03-08-2026

Loan/Credit No. = N/A

Bid Ref. No. : NOR-138W2-2026

Contract No. and Title NOR-138W2-2026 - Civil Works, Erection, Testing & Commissioning for 220/132KV Nowshera Industrial Grid Station and 500kV Sheikh Muhammadi Grid station under NGC Own Resources.

Lot-I: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 220/132kV Nowshera Industrial Grid Station.

Lot-II: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 500kV Sheikh Muhammadi Grid Station.

1. National Grid Company of Pakistan Limited (NGCPL) "the Employer", intends to get the Works done for Contract No. **NOR-138W2-2026** through NGC own resources. The Scope of Works is as follows:

Civil Works, Erection, Testing & Commissioning for following Extension Works under NGC Own Resources:

Lot-I: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 220/132kV Nowshera Industrial Grid Station.

Lot-II: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 500kV Sheikh Muhammadi Grid Station.

2. The Employer invites sealed bids from eligible firms or persons licensed by the Pakistan Engineering Council in the appropriate category for the above scope of Works. **National Competitive Bidding (NCB)** will be conducted in accordance with **PEC Single Stage-Two Envelope (SSTE)** procedure.
3. Eligible Bidders may obtain further information from the Office of the Employer, as below:

Director General (Procurement) NGC (formerly Chief Engineer (MP&M) NGC)
8th Floor, Shaheen Complex, Egerton Road Lahore, Pakistan
Postal code: 54000
Telephone: 92-42-99202597
Email address: dg.procurement@ngc.gov.pk

4. Bidding Documents can be downloaded from NGC website <https://www.ntdc.gov.pk>.

a) Construction Experience

Lot-I: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 220/132kV Nowshera Industrial Grid Station	The bidder (as main contractor, JV partner or approved sub-contractor) shall have executed either one (01) extension works on 220kV or higher voltage substation or two (2) augmentation works at 220kV substation or three (3) extension works at 132kV substation(s) in past ten (10) year which have been in operation for at least last two (2) years as of bid opening date. The executed works shall be comprising of civil works, erection, testing and commissioning. In case of JV, the other partner(s) shall have executed at least one (1) 132kV extension works.
Lot-II: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 500kV Sheikh Muhammadi Grid Station	The bidder (as main contractor, JV partner or approved sub-contractor) shall have executed either one (01) extension works on 220kV or higher voltage substation or two (2) augmentation works at 220kV substation or three (3) extension works at 132kV substation(s) in past ten (10) year which have been in operation for at least last two (2) years as of bid opening date. The executed works shall be comprising of civil works, erection, testing and commissioning. In case of JV, the other partner(s) shall have executed at least one (1) 132kV extension works.

- b) If the Bidder has executed the above contract(s) as a JV partner, he must substantiate that he has carried out all the activities mentioned here above.
- c) In case the bid is submitted by a joint venture, Lead Partner shall meet the above experience criteria. However, the other partner(s) shall have executed at least:

Lot-I: One (01) 132kV Extension works

Lot-II: One (01) 220kV Augmentation works

The Bidder shall submit with the Bid evidence in this regard including inter alia copies (with English translation) of the contract agreement(s) and substantial completion certificate(s), Performance certificate duly notarized, for the contract(s).

5. All bids must be accompanied by a **Bid Security** of not less than **amount mentioned in BDS** in the format of bank guarantee on bid security form provided or in the form of deposit at call or from a foreign bank duly counter guaranteed by a Scheduled Bank in Pakistan.
6. The bids must be submitted through e-PADS only on or before **3rd August-2026** at 11:00 am, however, Bid Security is required to be submitted in Original (hard copy) before bids closing deadline, at the address mentioned at Sr. No. 3. Technical bids will be opened at 11:30 am on the same day, in the presence of Bidder's representatives who choose.
7. The bids must also be received by the Employer through e-PADS before the bid submission deadline.
8. The bidders must quote for the complete scope of work. Bids covering only a part of the work shall be rejected.
9. All bidders must fill in check list before submission of bid in their own interest as per Instructions to Bidders which is a mandatory requirement.
10. NGC reserve all its rights regarding rejection of bids as defined in Clause 33(1) of PPRA Rules 2004.

[Note: the bids shall be opened at least thirty minutes after the deadline for submission of bids]

SECTION I

INSTRUCTIONS TO BIDDERS

(Note: These Instructions to Bidders along with Bidding Data will not be part of the Contract and will cease to have effect once the Contract is signed.)

A. GENERAL

IB.1 Scope of Bid

- 1.1 The Employer as defined in the Bidding Data hereinafter called “the Employer” wishes to receive bids for the construction and completion of works as described in these Bidding Documents, and summarized in the Bidding Data hereinafter referred to as the “Works”.
- 1.2 The successful bidder will be expected to complete the Works within the time specified in Appendix-A to Bid.

IB.2 Source of Funds

- 2.1 The Employer has applied for/received a loan/credit from the source (s) indicated in the Bidding Data in various currencies towards the cost of the project specified in the Bidding Data and it is intended that part of the proceeds of this loan/credit will be applied to eligible payments under the Contract for which these Bidding Documents are issued.

IB.3 Eligible Bidders

- 3.1 This Invitation for Bids is open to all bidders meeting the following requirements:
 - a. Duly licensed by the Pakistan Engineering Council (PEC) in the category relevant to the value of the Works.
 - b. Duly prequalified/enlisted with the Employer.

IB.4 One Bid per Bidder

- 4.1 Each bidder shall submit only one bid either by himself, or as a partner in a joint venture. A bidder who submits or participates in more than one bid (other than alternatives pursuant to Clause IB.16) will be disqualified.

IB.5 Cost of Bidding

- 5.1 The bidders shall bear all costs associated with the preparation and submission of their bids and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

IB.6 Site Visit

- 6.1 The bidders are advised to visit and examine the Site of Works and its surroundings and obtain for themselves on their own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. All cost in this respect shall be at the bidder's own expense.
- 6.2 The bidders and any of their personnel or agents will be granted permission by the Employer to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the bidders, their personnel and agents, will release and indemnify the Employer, his personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of such inspection.

B. BIDDING DOCUMENTS

IB.7 Contents of Bidding Documents

- 7.1 The Bidding Documents, in addition to invitation for bids, are those stated below and should be read in conjunction with any Addenda issued in accordance with Clause IB.9.
1. Instructions to Bidders.
 2. Bidding Data.
 3. General Conditions of Contract, Part-I (GCC).
 4. Particular Conditions of Contract, Part-II (PCC).
 5. Specifications - Special Provisions.
 6. Specifications - Technical Provisions.
 7. Form of Bid & Appendices to Bid.
 8. Bill of Quantities
 9. Form of Bid Security.
 10. Form of Contract Agreement.
 11. Forms of Performance Security and Mobilization Advance Guarantee/Bond.
 12. Drawings.

- 7.2 The bidders are expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of bid submission will be at the Bidder's own risk. Pursuant to Clause IB.26, bids which are not substantially responsive to the requirements of the Bidding Documents will be rejected.

IB.8 Clarification of Bidding Documents

- 8.1 Any prospective bidder requiring any clarification (s) in respect of the Bidding Documents may notify the Employer in writing at the Employer's address indicated in the Invitation for Bids. The Employer will respond to any request for clarification which he receives earlier than 28 days prior to the deadline for submission of bids.

Copies of the Employer's response will be forwarded to all Employers of the Bidding Documents, including a description of the enquiry but without identifying its source.

IB.9 Amendment of Bidding Documents

- 9.1 At any time prior to the deadline for submission of bids, the Employer may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective bidder, modify the Bidding Documents by issuing addendum.
- 9.2 Any addendum thus issued shall be part of the Bidding Documents pursuant to Sub-Clause 7.1 hereof and shall be communicated in writing to all Employers of the Bidding Documents. Prospective bidders shall acknowledge receipt of each addendum in writing to the Employer.
- 9.3 To afford prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may extend the deadline for submission of bids in accordance with Clause IB.20

C. PREPARATION OF BIDS

IB.10 Language of Bid

- 10.1 The bid and all correspondence and documents related to the bid exchanged by a bidder and the Employer shall be in the bid language stipulated in the Bidding Data and Particular Conditions of Contract. Supporting documents and printed literature furnished by the bidders may be in any other language provided the same are accompanied by an accurate translation of the relevant parts in the bid

language, in which case, for purposes of evaluation of the bid, the translation in bid language shall prevail.

IB.11 Documents Accompanying the Bid

11.1 Each bidder shall:

- (a) submit a written power of attorney authorizing the signatory of the bid to act for and on behalf of the bidder;
- (b) update the information indicated and listed in the Bidding Data and previously submitted with the application for prequalification, and continue to meet the minimum criteria set out in the prequalification documents which as a minimum, would include the following:
 - (i) Evidence of access to financial resources alongwith average annual construction turnover;
 - (ii) Financial predictions for the current year and the two following years including the effect of known commitments;
 - (iii) Work commitments since prequalification;
 - (iv) Current litigation information; and
 - (v) Availability of critical equipment.

and

- (c) furnish a technical proposal taking into account the various Appendices to Bid specially the following:

Appendix-E to Bid	Proposed Construction Schedule
Appendix-F to Bid	Method of Performing the Work
Appendix-G to Bid	List of Major Equipment
Appendix-J to Bid	Organization Chart for Supervisory Staff

 and other pertinent information such as mobilization programme etc;

11.2 Bids submitted by a joint venture of two (2) or more firms shall comply with the following requirements:

- (a) the bid and in case of a successful bid, the Form of Contract Agreement shall be signed so as to be legally binding on all partners;
- (b) one of the joint venture partners shall be nominated as being in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the joint venture partners;

- (c) the partner-in-charge shall always be duly authorized to deal with the Employer regarding all matters related with and/or incidental to the execution of Works as per the terms and Conditions of Contract and in this regard to incur any and all liabilities, receive instructions, give binding undertakings and receive payments on behalf of the joint venture;
 - (d) all partners of the joint venture shall at all times and under all circumstances be liable jointly and severally for the execution of the Contract in accordance with the Contract terms and a statement to this effect shall be included in the authorization mentioned under Sub-Para(b) above as well as in the Form of Bid and in the Form of Contract Agreement (in case of a successful bid); and
 - (e) a copy of the agreement entered into by the joint venture partners shall be submitted with the bid stating the conditions under which it will function, its period of duration, the persons authorized to represent and obligate it and which persons will be directly responsible for due performance of the Contract and can give valid receipts on behalf of the joint venture, the proportionate participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. No amendments / modifications whatsoever in the joint venture agreement shall be agreed to between the joint venture partners without prior written consent of the Employer.
- 11.3 Bidders shall also submit proposals of work methods and schedule, in sufficient detail to demonstrate the adequacy of the Bidders' proposals to meet the technical specifications and the completion time referred to in Sub-Clause 1.2 hereof.

IB.12 Bid Prices

- 12.1 Unless stated otherwise in the Bidding Documents, the Contract shall be for the whole of the Works as described in Sub-Clause 1.1 hereof, based on the unit rates and / or prices submitted by the bidder.
- 12.2 The bidders shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by a bidder will not be paid for by the Employer when executed and shall be deemed covered by rates and prices for other items in the Bill of Quantities.
- 12.3 All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to the deadline for submission of bids shall be included in the rates and prices and the total Bid Price submitted by a bidder.

Additional / reduced duties, taxes and levies due to subsequent additions or changes in legislation shall be reimbursed / deducted as per Sub-Clause 70.2 of the General Conditions of Contract Part-I.

- 12.4 The rates and prices quoted by the bidders are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 70 of the Conditions of Contract. The bidders shall furnish the prescribed information for the price adjustment formulae in Appendix-C to Bid, and shall submit with their bids such other supporting information as required under the said Clause.

IB.13 Currencies of Bid and Payment

- 13.1 The unit rates and the prices shall be quoted by the bidder entirely in Pak rupees. A bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer's country (referred to as the "Foreign Currency Requirements") shall indicate the same in Appendix-B to Bid. The proportion of the Bid Price (excluding Provisional Sums) needed by him for the payment of such Foreign Currency Requirements either (i) entirely in the currency of the Bidder's home country or, (ii) at the bidder's option, entirely in Pak rupees provided always that a bidder expecting to incur expenditures in a currency or currencies other than those stated in (i) and (ii) above for a portion of the foreign currency requirements, and wishing to be paid accordingly, shall indicate the respective portions in his bid.
- 13.2 The rates of exchange to be used by the bidder for currency conversion shall be the TT&OD Selling Rates published or authorized by the State Bank of Pakistan prevailing on the date 28 days prior to the deadline for submission of bids.

For the purpose of payments, the exchange rates used in bid preparation shall apply for the duration of the Contract.

IB.14 Bid Validity

- 14.1 Bids shall remain valid for the period stipulated in the Bidding Data after the Date of Bid Opening specified in Clause IB.23.
- 14.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Employer may request that the bidders extend the period of validity for a specified additional period which shall in no case be more

than the original bid validity period. The request and the responses thereto shall be made in writing. A bidder may refuse the request without forfeiting his Bid Security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his Bid Security for the period of the extension, and in compliance with Clause IB.15 in all respects.

IB.15 Bid Security

- 15.1 Each bidder shall furnish, as part of his bid, a Bid Security in the amount stipulated in the Bidding Data in Pak Rupees or an equivalent amount in a freely convertible currency.
- 15.2 The Bid Security shall be, at the option of the bidder, in the form of Deposit at Call or a Bank Guarantee issued by a Scheduled Bank in Pakistan or from a foreign bank duly counter guaranteed by a Scheduled Bank in Pakistan in favour of the Employer valid for a period 28 days beyond the Bid Validity date.
- 15.3 Any bid not accompanied by an acceptable Bid Security shall be rejected by the Employer as non-responsive.
- 15.4 The bid securities of unsuccessful bidders will be returned as promptly as possible, but not later than 28 days after the expiration of the period of Bid Validity.
- 15.5 The Bid Security of the successful bidder will be returned when the bidder has furnished the required Performance Security and signed the Contract Agreement.
- 15.6 The Bid Security may be forfeited:
 - (a) if the bidder withdraws his bid except as provided in Sub-Clause 22.1;
 - (b) if the bidder does not accept the correction of his Bid Price pursuant to Sub-Clause 27.2 hereof; or
 - (c) if the bidder is involved in Corrupt and/or fraudulent practices.
 - (d) In the case of successful bidder, if he fails within the specified time limit to:

- (i) furnish the required Performance Security; or
- (ii) sign the Contract Agreement.

IB.16 Alternate Proposals by Bidder

- 16.1 Should any bidder consider that he can offer any advantages to the Employer by a modification to the designs, specifications or other conditions, he may, in addition to his bid to be submitted in strict compliance with the Bidding Documents, submit any Alternate Proposal(s) containing (a) relevant design calculations; (b) technical specifications; (c) proposed construction methodology; and (d) any other relevant details / conditions, provided always that the total sum entered on the Form of Bid shall be that which represents complete compliance with the Bidding Documents.
- 16.2 Alternate Proposal(s), if any, of the lowest evaluated responsive bidder only may be considered by the Employer as the basis for the award of Contract to such bidder.

IB.17 Pre-Bid Meeting

- 17.1 The Employer may, on his own motion or at the request of any prospective bidder(s), hold a pre-bid meeting to clarify issues and to answer any questions on matters related to the Bidding Documents. The date, time and venue of pre-bid meeting, if convened, is as stipulated in the Bidding Data. All prospective bidders or their authorized representatives shall be invited to attend such a pre-bid meeting.
- 17.2 The bidders are requested to submit questions, if any, in writing so as to reach the Employer not later than seven (7) days before the proposed pre-bid meeting.
- 17.3 Minutes of the pre-bid meeting, including the text of the questions raised and the replies given, will be transmitted without delay to all Employers of the Bidding Documents. Any modification of the Bidding Documents listed in Sub-Clause 7.1 hereof which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.
- 17.4 Absence at the pre-bid meeting will not be a cause for disqualification of a bidder.

IB.18 Format and Signing of Bid

- 18.1 Bidders are particularly directed that the amount entered on the Form of Bid shall be for performing the Contract strictly in accordance with the Bidding Documents.
- 18.2 All appendices to Bid are to be properly completed and signed.
- 18.3 No alteration is to be made in the Form of Bid nor in the Appendices thereto except in filling up the blanks as directed. If any such alterations be made or if these instructions be not fully complied with, the bid may be rejected.
- 18.4 Each bidder shall prepare by filling out the forms completely and without alterations one (1) original and number of copies, specified in the Bidding Data, of the documents comprising the bid as described in Clause IB.7 and clearly mark them "ORIGINAL" and "COPY" as appropriate. In the event of discrepancy between them, the original shall prevail.
- 18.5 The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by a person or persons duly authorized to sign on behalf of the bidder pursuant to Sub- Clause 11.1(a) hereof. All pages of the bid shall be initialed and stamped by the person or persons signing the bid.
- 18.6 The bid shall contain no alterations, omissions or additions, except to comply with instructions issued by the Employer, or as are necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.
- 18.7 Bidders shall indicate in the space provided in the Form of Bid their full and proper addresses at which notices may be legally served on them and to which all correspondence in connection with their bids and the Contract is to be sent.
- 18.8 Bidders should retain a copy of the Bidding Documents as their file copy.

D. SUBMISSION OF BIDS**IB.19 Sealing and Marking of Bids**

- 19.1 Each bidder shall submit his bid as under:
- (a) ORIGINAL and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such.
 - (b) The envelopes containing the ORIGINAL and copies will be put in one sealed envelope and addressed / identified as given in Sub-Clause 19.2 hereof.
- 19.2 The inner and outer envelopes shall:
- (a) be addressed to the Employer at the address provided in the Bidding Data;
 - (b) bear the name and identification number of the contract as defined in the Bidding Data; and
 - (c) provide a warning not to open before the time and date for bid opening, as specified in the Bidding Data.
- 19.3 In addition to the identification required in Sub-Clause 19.2 hereof, the inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "late" pursuant to Clause IB.21
- 19.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

IB.20 Deadline for Submission of Bids

- 20.1 (a) Bids must be received by the Employer at the address specified no later than the time and date stipulated in the Bidding Data.
- (b) Bids with charges payable will not be accepted, nor will arrangements be undertaken to collect the bids from any delivery point other than that specified above. Bidders shall bear all expenses incurred in the preparation and delivery of bids. No claims will be entertained for refund of such expenses.
- (c) Where delivery of a bid is by mail and the bidder wishes to receive an acknowledgment of receipt of such bid, he shall make a request

for such acknowledgment in a separate letter attached to but not included in the sealed bid package.

- (d) Upon request, acknowledgment of receipt of bids will be provided to those making delivery in person or by messenger.

20.2 The Employer may, at his discretion, extend the deadline for submission of bids by issuing an amendment in accordance with Clause IB.9, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

IB.21 Late Bids

- 21.1 (a) Any bid received by the Employer after the deadline for submission of bids prescribed in Clause IB.20 will be returned unopened to such bidder.
- (b) Delays in the mail, delays of person in transit, or delivery of a bid to the wrong office shall not be accepted as an excuse for failure to deliver a bid at the proper place and time. It shall be the bidder's responsibility to determine the manner in which timely delivery of his bid will be accomplished either in person, by messenger or by mail.

IB.22 Modification, Substitution and Withdrawal of Bids

- 22.1 Any bidder may modify, substitute or withdraw his bid after bid submission provided that the modification, substitution or written notice of withdrawal is received by the Employer prior to the deadline for submission of bids.
- 22.2 The modification, substitution, or notice for withdrawal of any bid shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause IB.19 with the outer and inner envelopes additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" as appropriate.
- 22.3 No bid may be modified by a bidder after the deadline for submission of bids except in accordance with Sub-Clauses 22.1 and 27.2.
- 22.4 Withdrawal of a bid during the interval between the deadline for submission of bids and the expiration of the period of bid validity

specified in the Form of Bid may result in forfeiture of the Bid Security in pursuance to Clause IB.15.

E. BID OPENING AND EVALUATION

IB.23 Bid Opening

- 23.1 The Employer will open the bids, including withdrawals, substitution and modifications made pursuant to Clause IB.22, in the presence of bidders' representatives who choose to attend, at the time, date and location stipulated in the Bidding Data. The bidders' representatives who are present shall sign a register evidencing their attendance.
- 23.2 Envelopes marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause IB.22 shall not be opened.
- 23.3 The bidder's name, total Bid Price and price of any Alternate Proposal(s), any discounts, bid modifications, substitution and withdrawals, the presence or absence of Bid Security, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening of bids.
- 23.4 Employer shall prepare minutes of the bid opening, including the information disclosed to those present in accordance with the Sub-Clause 23.3.

IB.24 Process to be Confidential

- 24.1 Information relating to the examination, clarification, evaluation and comparison of bid and recommendations for the award of a contract shall not be disclosed to bidders or any other person not officially concerned with such process before the announcement of bid evaluation report which shall be done at least ten (10) days prior to issue of Letter of Acceptance. The announcement to all Bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the bids evaluated. Any effort by a bidder to influence the Employer's processing of bids or award decisions may result in the rejection of such bidder's bid. Whereas any bidder feeling aggrieved may lodge a written complaint not later than fifteen (15) days after the announcement of the bid evaluation

report; however mere fact of lodging a complaint shall not warrant suspension of the procurement process.

IB.25 Clarification of Bids

- 25.1 To assist in the examination, evaluation and comparison of bids, the Employer may, at his discretion, ask any bidder for clarification of his bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids in accordance with Clause IB.28.

IB.26 Examination of Bids and Determination of Responsiveness

- 26.1 Prior to the detailed evaluation of bids, the Employer will determine whether each bid is substantially responsive to the requirements of the Bidding Documents.
- 26.2 A substantially responsive bid is one which (i) meets the eligibility criteria; (ii) has been properly signed; (iii) is accompanied by the required Bid Security; and (iv) conforms to all the terms, conditions and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one (i) which affect in any substantial way the scope, quality or performance of the Works; (ii) which limits in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the bidder's obligations under the Contract; or (iii) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.
- 26.3 If a bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

IB.27 Correction of Errors

- 27.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
- (a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and

- (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern, unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted will govern and the unit rate will be corrected.
- 27.2 The amount stated in the Form of Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and with the concurrence of the bidder, shall be considered as binding upon the bidder. If the bidder does not accept the corrected Bid Price, his Bid will be rejected, and the Bid Security shall be forfeited in accordance with Sub-Clause 15.6(b) hereof.

IB.28 Evaluation and Comparison of Bids

- 28.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause IB.26.
- 28.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) making any correction for errors pursuant to Clause IB.27;
 - (b) excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including competitively priced Daywork; and
 - (c) making an appropriate adjustment for any other acceptable variation or deviation.
- 28.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 28.4 If the Bid of the successful bidder is seriously unbalanced in relation to the Employer's estimate of the cost of work to be performed under the Contract, the Employer may require the bidder to produce detailed price analyses for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the Performance Security set forth in Clause IB.32 be increased at the expense of the successful bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful bidder under the Contract.

F. AWARD OF CONTRACT**IB.29 Award**

29.1 Subject to Clauses IB.30 and IB.34, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the Bidding Documents and who has offered the lowest evaluated Bid Price, provided that such bidder has been determined to be eligible in accordance with the provisions of Clause IB.3 and qualify pursuant to Sub-Clause IB 29.2.

29.2 The Employer, at any stage of the bid evaluation, having credible reasons for or *prima facie* evidence of any defect in supplier's or contractor's capacities, may require the suppliers or contractors to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not:

Provided that such qualification shall only be laid down after recording reasons therefor in writing. They shall form part of the records of that bid evaluation report.

IB.30 Employer's Right to Accept any Bid and to Reject any or all Bids

30.1 Notwithstanding Clause IB.29, the Employer reserves the right to accept or reject any Bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidders or any obligation except that the grounds for rejection of all bids shall upon request be communicated to any bidder who submitted a bid, without justification of grounds. Rejection of all bids shall be notified to all bidders promptly.

IB.31 Notification of Award

31.1 Prior to expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder in writing ("Letter of Acceptance") that his Bid has been accepted. This letter shall name the sum which the Employer will pay the Contractor in consideration of the execution and completion of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called the "Contract Price").

- 31.2 No Negotiation with the bidder having evaluated as lowest responsive or any other bidder shall be permitted, however, Employer may have clarification meetings to get clarify any item in the bid evaluation report.
- 31.3 The notification of award and its acceptance by the bidder will constitute the formation of the Contract, binding the Employer and the bidder till signing of the formal Contract Agreement.
- 31.4 Upon furnishing by the successful bidder of a Performance Security, the Employer will promptly notify the other bidders that their Bids have been unsuccessful and return their bid securities.

IB.32 Performance Security

- 32.1 The successful bidder shall furnish to the Employer a Performance Security in the form and the amount stipulated in the Bidding Data and the Conditions of Contract within a period of 28 days after the receipt of Letter of Acceptance.
- 32.2 Failure of the successful bidder to comply with the requirements of Sub-Clause IB.32.1 or Clauses IB.33 or IB.35 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.

IB.33 Signing of Contract Agreement

- 33.1 Within 14 days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the Employer will send the successful bidder the Contract Agreement in the form provided in the Bidding Documents, incorporating all agreements between the parties.
- 33.2 The formal Agreement between the Employer and the successful bidder shall be executed within 14 days of the receipt of the Contract Agreement by the successful bidder from the Employer.

IB.34 General Performance of the Bidders

The Employer reserves the right to obtain information regarding performance of the bidders on their previously awarded contracts/works. The Employer may in case of consistent poor performance of any Bidder as reported by the employers of the previously awarded contracts, inter alia, reject his bid and/or refer the case to the Pakistan Engineering Council (PEC). Upon such reference, PEC in accordance with its rules, procedures and relevant laws of the land take such

action as may be deemed appropriate under the circumstances of the case including black listing of such Bidder and debarring him from participation in future bidding for similar works.

IB.35 Integrity Pact and ADB Integrity Covenant

The Bidder shall sign and stamp the Integrity Pact provided at Appendix-O to Bid in the Bidding Documents for all Federal Government procurement contracts exceeding Rupees ten million. The Bidder shall also sign and stamp the ADB Integrity Covenant provided at Appendix O to Bid in the Bidding Documents. Failure to provide such Integrity Pact and ADB Integrity Covenant shall make the bidder non-responsive.

IB.36 Instructions not Part of Contract

Bids shall be prepared and submitted in accordance with these Instructions which are provided to assist bidders in preparing their bids, and do not constitute part of the Bid or the Contract Documents.

Section II

Bid Data Sheet

The following specific data for the Works to be bided shall complement, amend, or supplement the provisions in the Instructions to Bidders. Wherever there is a conflict, the provisions herein shall prevail over those in the Instructions to Bidders.

IB 1.1	Name and address of the Employer: Name: National Transmission and Despatch Company (NGC). Represented by: Director General (Procurement) NGC (Formerly Chief Engineer (MP&M) NGC) Address: 8th Floor, Shaheen Complex, Edgerton Road, Lahore Telephone No. 92-42-99202597 E-mail address: dg.procurement@ngc.gov.pk
IB 1.1	The bidding is open to [National Competitive Bidding (NCB)] through Single Stage Two Envelope (1S2E) procedure.
IB 1.1	The name of the NCB is: Civil Works, Erection, Testing & Commissioning for 220/132KV Nowshera Industrial Grid Station and 500kV Sheikh Muhammadi Grid Station under NGC Own Resources. The identification number of the NCB is: NOR-138W2-2026 The number and identification of lots comprising this NCB is: Two (02) Lots Lot-I: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 220/132kV Nowshera Industrial Grid Station Lot-II: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos 220kV Line Bays at 500kV Sheikh Muhammadi Grid Station The quoted price must correspond to full scope of work. The detailed scope of Works has been delineated under Special Provisions of this Bidding Document and includes but not limited to complete <i>civil works, erection, testing and commissioning for 220/132kV Nowshera Industrial Grid Station and 500kV Sheikh Muhammadi Grid Station.</i>
IB 1.3	The scope of the Works includes, in addition to construction, erection, testing and commissioning, the implementation of all environmental, social, labor, occupational health and safety (OHS), and community health and safety measures as specified in the Contract, Specifications, and applicable laws.
IB 2.1	Source of Funding: NGC own Resources
IB 3.1 (a)	The existing sub clause 3.1(a) is deleted and replaced with following: The Invitation for Bids is open to all bidders in their sole capacity or as joint venture meeting the following requirements:

	i) The Bidder shall be duly licensed by the Pakistan Engineering Council (PEC) minimum in the relevant category (depending upon the value of proposed award) or had applied for renewal of license before submission of its bid. In case of Joint Venture, all the partners shall be duly licensed by PEC and the sum total of the limit of construction cost permitted by the categories of the individual licensees shall not be less than limit of construction cost permitted by the category required here above. ii) Constructor shall be on Active Taxpayers List of the Federal Board of Revenue and relevant Provincial Revenue Authority. Note: - Only those Firms/Companies/Contractors will be eligible to bid who are active taxpayers as per Federal Board of Revenue Data base i.e. Active Taxpayer List (ATL) for both Income Tax & Sales Tax and provincial revenue authorities/boards as the case may be. iii) The Bidder shall not be blacklisted by NGC/NTDC/WAPDA/DISCOs/any Government/Public department/Donor Agencies at the time of submission of bids. The Bidder should provide details of previous black listing, if any. An affidavit is to be provided by the Bidder that the Bidder is not black listed by NGC/NTDC/WAPDA/DISCOs/any Government/Public department/Donor Agencies at the time of submission of bids. Further, the bidder shall submit an undertaking along with his bid that he has read and accepts the provisions of NGC/NTDC Policy for Blacklisting of Contractors (copy of policy attached with the bidding documents). Non-submission of this undertaking may result in the rejection of the bid. The undertaking will subsequently become part of the Contract Agreement as well iv) The bidder shall submit dully filled/complete Beneficial Ownership Declaration Performa as per S.R.O 592(I)/2022 available at https://www.ppra.org.pk/doc/sro592.pdf v) The Foreign bidder shall submit an unconditional "Comfort Letter" along with their bid as per Annexure-C to Bidding Data from a schedule bank (the Bank) in Pakistan extend banking facilities to the bidder including but not limited to opening of Letter of Credit, making payment through direct disbursement procedure, retirement of the shipping documents, issuance of electronic import for (EIF) for custom clearance purposes, in case of award of contract. NGC however, shall bear no risk in case of non-commitment by the Bank after award of contract. Further, it shall not be binding upon NGC to avail banking facility from the particular Bank.
IB 3.1(b)	Delete IB 3.1(b) and replace it with the following. Qualification of the Bidder To be qualified for award of a contract, the Bidder shall meet the qualification criteria delineated herein below:

1. Construction Experience:

Lot-I: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 220/132kV Nowshera Industrial Grid Station	The bidder (as main contractor, JV partner or approved sub-contractor) shall have executed either one (1) extension works on 220kV or higher voltage substation or two (2) augmentation works at 220kV substation or three (3) extension works at 132kV substation(s) in past ten (10) year which have been in operation for at least last two (2) years as of bid opening date. The executed works shall be comprising of civil works, erection, testing and commissioning. In case of JV, the other partner(s) shall have executed at least one (1) 132kV extension works.
Lot-II: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 500kV Sheikh Muhammadi Grid Station	The bidder (as main contractor, JV partner or approved sub-contractor) shall have executed either one (1) extension works on 220kV or higher voltage substation or two (2) augmentation works at 220kV substation or three (3) extension works at 132kV substation(s) in past ten (10) year which have been in operation for at least last two (2) years as of bid opening date. The executed works shall be comprising of civil works, erection, testing and commissioning. In case of JV, the other partner(s) shall have executed at least one (1) 132kV extension works.

The Bidder shall submit with the Bid evidence in this regard including inter alia copies (with English translation) of the contract agreement(s) and substantial completion certificate(s), Performance certificate duly notarized, for the contract(s).

- a) The bidder shall have his own key construction and erection equipment for each lot, in good working condition as listed hereunder:

Sr No.	Equipment Type and Characteristics	Minimum Number Required
1	Vibrator	01
2	Flatbed Compactor	02
3	Scaffolding	02

4	Crane	01
5	Material Lift Mixture	02
6	Mechanical excavators	03
7	Trucks/Loaders	04
8	General tools for tube connection	03
9	Instruments for testing & commissioning of 220kV AIS plant including protection & signaling	01 Set
10	Standard Instruments for erection of AIS plant	01 Set
11	Gas filling plant	01
12	General tools for erection of 220kV Equipment	01 Set
13	Relevant T&P and machinery required for successful testing & commissioning completion of the work	As per requirement

The bidder shall have his own above required equipment duly supported with documentary evidence/catalogues/drawings for undertaking such like works in good working condition. Alternatively, if not so, the bidder will identify the confirmed source of the said machinery, T&P etc. along with documentary evidence/catalogues/drawings and shall provide necessary guarantee/surety that he will arrange the said equipment in good working condition through its own resources prior to start of work. The aforementioned documentary evidence shall be submitted with the bid using the Appendix-H to Bid given in Section-III of the Bidding Documents).

2. Key Personnel:

The Bidder shall have the personnel for the key positions for each lot to be deployed for meeting the following requirements: (Information to be submitted in Appendix-G to Bid given in Section-III of the Bidding Documents).

Sr No.	Position	Relevant Construction Experience [years]
1	Project Manager	10
2	Construction Manager	07
3	Site Engineer Civil	07
4	Site Engineer Electrical	07

5	Plant erectors	07
6	Testing & Commissioning Engineer	07
7	Environmental Safeguard Expert	1-2

The above personnel shall be graduate engineers or equivalent, except Environmental / HSE Officer who should have Master's Degree in Environmental Sciences/Engineering with 1-2 years relevant experience)

The rejection of key personnel shall not result in rejection of the bid, however, bidder shall undertake to replace the key personnel with the acceptable to the Employer in case of award of contract.

3. Bidder's Financial Capability:

The Employer will take into account the following criteria to verify the financial qualification of the Bidder.

- i. The UDIN verified audited Financial "Standalone" Statements (Balance Sheet along with Notes, Profit & Loss Accounts and Cash Flow Statement) audited by Chartered Accountant for the last five (05) years shall be submitted by the Bidder. The Bidder's Financial Statements for the last One year of the audited accounts should show that it has positive "NET WORTH" calculated as a difference between total assets and total liabilities (Information to be submitted in prescribed Form QF-5 of Appendix-P to Bid given in Section-III of the Bidding Documents). In case of JV, each JV partner shall meet the aforementioned criteria.

- ii. Minimum average annual turnover for the following lots:
 Lot-I: PKR 52.2Million
 Lot-II: PKR 59.4 Million
 calculated as best of three years total certified payments received for contracts in progress or completed, within the last 05 years. The average annual turnover may include turnover of affiliates and subsidiaries to the extent of shareholding percentage of the Bidding company provided the turnover is accrued from similar business activity as the Bidding company.
 (Information to be submitted in prescribed Form QF-6 of Appendix-P to Bid given in Section-III of the Bidding Documents).

In case of JV, all the JV partners shall combinedly meet the requisite criteria with the lead partner and other partner(s) meeting not less than 40% and 25% respectively of the said criteria.

- iii. The Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, lines of credit (issued specifically for the project), and other financial means to meet the total cash flow demands against the following lot(s) of this contract which is being considered

equal to
 Lot-I: PKR 26.1 Million
 Lot-II: PKR 29.7 Million
 plus 25% of the Bidder's commitments for running contracts.
 (Information to be submitted in prescribed Form QF-7 of Appendix-P to Bid given in Section-III of the Bidding Documents).

Notes:

- In case of JV, all the JV partners shall combinely meet the requisite criteria with the lead partner and other partner(s) meeting not less than 40% and 25% respectively of the said criteria.
- The Bidder shall provide his current work commitments in form QF-4 of Appendix-P to bid given in Section-III of Bidding Documents.
- *[Note: Credit Lines submitted after opening of bids shall not be acceptable. Any withdrawal of the credit lines from the bidder's creditors during validity of bid shall be considered a withdrawal of bid.]*
- The bidder shall provide bank certificate for his lines of credit on the prescribed Form QF-8 of Appendix-P to Bid given in Section-III of the Bidding Documents.

In case of more than one Lot(s), Bidder is determined to be lowest evaluated substantially responsive in more than one Lot(s), qualification of the Bidder shall be assessed to meet the aggregate requirements for award of multiple Lots. [If, in this instant, the bidder qualifies for multiple Lots, Purchaser will have right to open price bids for all lots and consider most economical offer/bid/combination at its discretion].

4. Bidder's Litigation History

Bidders are required to submit details of all litigation, arbitration and other claims whether pending, threatened or resolved in the last five years. The Employer may disqualify bidder in the event that the total amount of pending or threatened litigation, arbitration or other claims represents fifty percent (50%) of the Bidder's net worth. Details in this regard should be submitted in the prescribed Form QF-9 given in Appendix-P of Section-III of Bidding Document.

Construction Experience of subsidiaries or parent/sister/affiliate companies shall not be considered for qualification of the Bidder.

The Qualification of the Bidders will be based on meeting the pass/fail criteria as demonstrated by the Bidders' responses in the respective Appendices.

	The above stated requirements are the minimum and the Employer reserves the right to request for any additional information. The Employer also reserves the right to reject the proposal of any Bidder, if in the opinion of the Employer the qualification details are incomplete, ambiguous or the Bidder is found not qualified to satisfactorily perform the Contract. The above stated Appendices should be completed as per prescribed format and submitted along with required attachments. The missing or incomplete information/ documents may render the bid substantially non-responsive. In this regard, the Employer does not have an obligation to request any document/certificates. 5. Bidder is not subject to Asian Development Bank's debarment and temporary suspension The Bidder will not be eligible to participate in the procurement of the Contract while under temporary suspension or debarment by the Asian Development Bank ("ADB") pursuant to its Anticorruption Policy (see Appendix O), whether such debarment was directly imposed by ADB, or enforced by ADB pursuant to the Agreement for Mutual Enforcement of Debarment Decisions. A bid from a temporarily suspended or debarred firm will be rejected and such bid may be in breach of debarment conditions, thereby subject to further ADB's investigation. 6. Bidder is not subject to sanctions decisions by United Nations Security Council Bidders shall be excluded if, by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Employer's country prohibits any import of goods from, or payments to, a particular country, person, or entity in respect of goods or services originating in that country. Where the Employer's country prohibits payments to a particular person or entity or for particular goods or services by such an act of compliance, that firm shall be excluded.
IB 3.2	The following sub clause is added after 3.1: A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if, including but not limited to: (i) they have controlling shareholders in common; or (ii) they receive or have received any direct or indirect subsidy from any of them; or (iii) they have the same legal representative for purposes of this bid; or

	(iv) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to material information about or improperly influence the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or (v) A Bidder or any affiliated entity, participated as a consultant in the preparation of the design or technical specifications of the plant and services that are the subject of the bid. (vi) a Bidder was affiliated with a firm or entity that has been hired (or is proposed to be hired) by the Employer or Employer's country as Engineer for the Contract; or (vii) a Bidder would be providing goods, works, or nonconsulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the IB 19.2(b) that it provided, or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or (viii) A Bidder that has a financial or familial relationship with Employer's personnel including personnel of project implementing/executing agency who: (i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the Contract, and/or the bid evaluation process of such Contract; or (ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Employer throughout the procurement process and execution of the contract.
IB 6.1	The Bidder shall inspect the site, examine and obtain all information required and satisfy himself regarding matters and things such as access to site, communication, transport, right of way, the type and number of equipment and facilities required for the satisfactory completion of work, the quantity of various sections of the work, the availability of local labor, availability and rates of materials, local working conditions, uncertainties of weather, obstructions and hindrances that may arise etc., which may affect the work or cost thereof, before submission of his bid. Ignorance of site conditions shall not be accepted by the Employer as basis for any claim for compensation. The submission of a bid by the bidder will be construed as evidence that such an examination was made and any later claims/disputes in regard to rates quoted shall not be entertained or considered by the Employer.
IB 6.3	In conducting the site visit, the Bidder shall familiarize itself with site-specific environmental conditions, occupational health and safety risks, live substation hazards, and potential impacts on nearby communities.

IB 7.2	The complete Bidding Document including Addenda (if any) will be available on Employer's website i.e. www.ntdc.com.pk and on e-PADS. The Bidders are responsible for the completeness of the Bidding Document in all respects. The Employer accepts no responsibility for any Bidder lacking a complete set of Bidding Documents including Addenda (if any).
IB 8.1	The Sub-Clause 8.1 is amended as under: No request for clarification will be entertained which will be received later than 14 days prior to the date fixed for submission of Bids. The Purchaser's response will be made not later than 7 days prior to the date fixed for submission of Bids. Moreover, the bidders may also submit their request for clarification through e-PADS. Further, the mere request for clarification from the bidders shall not be a ground for seeking extension in the deadline for submission of Bids. The Employer's response to the pre-bid clarifications will be communicated via publishing on NGC's website and on e-PADS.
IB 9.2	The sub-clause 9.2 is amended as under: Any addendum thus issued shall be part of the Bidding Documents pursuant to Sub-clause 7.1 hereof and shall be communicated via publishing on NGC's website and on e-PADS.
IB 10.1	The bid with all accompanying documents and all communications in relation to or concerning the bidding Process shall be in English language and strictly on the forms provided in the bidding Documents. In case any of these Documents is in another language, it must be accompanied by an accurate translation of the relevant passages in English, in which case, for all purposes of interpretation of the bid, the translation in English shall prevail. Any portions of Bids that are not in English may not be evaluated. Failure to comply with this may disqualify a bid.
IB 11.1	Documents Comprising the Bid Delete the text of this Sub-Clause and substitute with the following: The Bidder shall submit the bid through e-PADS only in 2 separate pdf files, one to be referred as "Technical Bid" and the other to be referred as "Price Bid" for each lot separately comprising the following documents in the respective pdf files, however, Bid Security is required to be submitted in original before bids submission deadline: I. Technical Bid a) Duly filled-in Form of Technical Bid with following Appendices to Bid:

	i) Appendix-A to Bid Special Stipulations ii) Appendix-C to Bid Price Adjustment (under Clause 70) iii) Appendix-E to Bid Proposed Construction Schedule iv) Appendix-F to Bid Method of Performing the Work v) Appendix-G to Bid Proposed Personnel vi) Appendix-H to Bid List of Major Equipment-Related Items vii) Appendix-I to Bid Construction Camp and Housing Facilities viii) Appendix-J to Bid Organizational Chart of the Supervisory Staff and Labor ix) Appendix-K to Bid List of Sub-Contractors x) Appendix-L to Bid Source of Materials xi) Appendix-N to Bid Deviations xii) Appendix-O to Bid Integrity Pact and ADB Integrity Covenant xiii) Appendix-P to Bid Bidder's Qualification Forms xiv) Appendix-Q to Bid Undertaking for Bidder's Compliance with Project Safeguards Requirements
	b) Bid Security as per requirements of clause BDS 15 of this document. c) Written Power of Attorney, duly notarized, authorizing the signatory of the bid to act for and on behalf of the Bidder; d) Copies of Original Documents defining the constitution or legal status, place of registration and principal place of business of the bidder and JV partners; e) An affidavit that the Bidder has not been blacklisted pursuant to Sub-Clause 3.1(iv); f) An Affidavit that the Bidder has read and accepts NGC 's SOP for blacklisting of Contractors pursuant to Sub-Clause 3.1(iv) & ITB 38 of Bid Data Sheet of this document. g) Beneficial Ownership Declaration Performa dully filled by the Bidder as per S.R.O 592(I)/2022 available at https://www.ppra.org.pk/doc/sro592.pdf. h) PEC license pursuant to Sub-Clause 3.1(i); and i) The Bidder shall submit: (a) an outline Environmental, Health and Safety (EHS) Management Plan; (b) an undertaking to comply with applicable labor laws and ADB Core Labor Standards; and (c) a Worker Code of Conduct addressing occupational safety and GBV/SEA prevention. j) Any other document required to be submitted in accordance with these Bidding Documents.
II.	Price Bid
	a) Duly filled-in Form of Price Bid with following Appendices to Bid:

	i) Appendix-B to Bid Foreign Currency Requirements (Not Used) ii) Appendix-D to Bid Bill of Quantities iii) Appendix-M to Bid Estimated Progress Payments b) Any other document required to be submitted in accordance with these Bidding Documents.
IB 11.2	Following is added at the end of Sub-Clause IB.11.2: “(f) The maximum J.V. partners shall not be more than three (03).”
IB 12.4	Delete clause 12.4 and replace it with the following. The rates and prices quoted by the bidders are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 70 of the Conditions of Contract. The bidders shall furnish the prescribed information for the price adjustment formulae in Appendix-C to Bid, and shall submit with their bids such other supporting information as required under the said Clause.
IB 12.5	The prices and bid evaluation should be without PST.
IB 12.6	Add the following new Sub-Clause IB 12.6: The lot wise cost of project is: Lot-I: <i>PKR 151.15 Million</i> Lot-II: <i>PKR 153 Million</i> for calculating insurance charges.
IB 13	Clause IB.13 is substituted with the following: “The unit rates and prices shall be quoted by the Bidder entirely in Pak Rupees. All payments under the contract shall be made in Pak Rupees only. Bidders expecting to incur expenditures in currency(ies) other than Pak Rupees shall manage foreign currency(ies) at their own arrangement. The exchange risk in this regard, if any, shall be deemed to be included in unit rates and prices quoted by the Bidder.”
IB 14.1	The period for Bid validity shall be minimum one hundred and fifty (150) days after the date of Bid opening.
IB 15.1	The amount of Bid Security for the following lots shall be Lot-I: PKR 2.1 Million. Lot-II: PKR 2.4 Million.
IB 15.2	Sub-Clause IB.15.2 is substituted with the following: “The Bid Security shall be, at the option of the Bidder, in the form of Deposit at Call or a Guarantee issued by a Scheduled Bank in Pakistan or from a foreign bank duly counter guaranteed by a Scheduled Bank in Pakistan in favor of Chief Engineer (MP&M) NTDC on the prescribed Form (Standard forms, section-III) annexed to these Documents valid for a period 28 days beyond the Bid Validity

	date. The Bid Security of Joint Venture shall be in the name of Joint Venture submitting the Bid. For avoidance of doubt, a Bid Security issued by a foreign bank but not counter guaranteed by a Scheduled Bank in Pakistan <i>[or a counter guarantee which impacts rights of Employer to encash the Guarantee on 1st written notice from Bank in Pakistan]</i> shall not be acceptable and rejected as non-responsive.” <i>[Any mode for submission of bid security apart from aforementioned like Swift Code or Crossed Cheque shall not be acceptable]</i>
IB 15.3	If a bidder submits a Bid Security that has following discrepancies (to the extent mentioned against each), the Procuring Agency shall request the Bidder to submit a complaint bid security within fourteen (14) days of receiving such request. Failure to provide a complaint bid security within the prescribed period of receiving such a request shall cause the rejection of the bid. Any bid accompanied by bid security with deviation greater than the extent mentioned below shall be rejected: i. Bid Security amount is short within 10% of Bid Security amount; and/or ii. Bid Security validity period is short by a maximum of two days. iii. Any changes with respect to format/text which does not hurt the right of employer for encashment of the guarantee and does not limit the obligation of the bidder as required in the Bidding Document/ Bid Security Format.
IB 15.6	The following is added at the end of Sub-Clause IB.15.6: “(d) If the Bidder is found involved in corrupt and fraudulent practices.”
IB 17.1	Pre-bid meeting will be held as per the following schedule: Date: 22-07-2026 Time: 10:00 HRS Venue: O/o Director General (Procurement) NGC, 8th Floor, Shaheen Complex, Egerton Road Lahore Pakistan
IB 17.3	Clause-17.3 is amended as under: Minutes of the pre-bid meeting, including the text of the questions raised and the replies given, will be communicated via publishing on NGC’s website and on e-PADS. Any modification of the Bidding Documents listed in Sub-Clause 7.1 hereof which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.

IB 18.4	Text of ITB-18.4 is deleted and replaced it with the following: Each bidder shall prepare by filling out the forms completely and without alterations of the documents comprising the bid as described in Clause IB.11.
IB.19.1	Sub-Clause 19.1 is substituted by the following: a) Firms are required to submit their bids through e-PADS only. However, Bid Security is required to be submitted in original before bids submission deadline. b) The Technical bid should be submitted as a single PDF file named "Tender NOR-138W2-2026 [mention lot no. and name] - TECHNICAL BID - [Name of Proposing Firm]". c) The Financial bid should be submitted as a single PDF file named "Tender NOR-138W2-2026 [mention lot no. and name] - FINANCIAL BID - [Name of Proposing Firm]". The Procuring Agency shall reject the bid, if the bid submitted through e-PADS is found corrupt, unreadable or contains a virus.
IB 19.2	Deleted
IB 19.3	Deleted
IB 19.4	Deleted
IB 20.1 (a)	Firms are required to submit their bids through e-PADS only on or before bid submission deadline. However, Bid Security is required to be submitted in original before bids submission deadline. Deadline for Submission of bids: Date: Time: 1100 HRS Employer's address for the purpose of Bid Security submission: Director General (Procurement) NGC, 8th Floor Shaheen Complex, Egerton Road Lahore, Pakistan Telephone No. 92-42-99202597 E-mail address: dg.procurement@ngc.gov.pk
IB 20.1 (b, c, d)	Deleted
IB 20.1	Add the following new Para (e) at the end of Sub-Clause: “(e) Bids submitted through fax or email shall not be considered.”
IB.21.1(a)	The Procuring Agency shall not consider for evaluation any Bids that arrive after the deadline for submission of bids including but not limited to following situations;

	i. Against which the Bid Security in original is received after the deadline for submission of Bids. ii. Against which bids are not received through e-PADs within bid submission deadline iii. Against which the bid/ pdf file received through e-PADs is found corrupt, unreadable or contains a virus.
IB 21.1(b)	Deleted
IB 22.1	Deleted
IB 22.2	Deleted
IB.23 23.1	Bid Opening: Sub-Clause IB.23.1 is substituted by the following: The Employer shall open the Technical Bids in public at the address, on the date, and time specified herein in the presence of Bidder's designated representatives who choose to attend. The Bidders' representatives who are present shall sign a register evidencing their attendance. Further the attendance will also be marked through e-PADS. Time: 11.30 A.M Date: 3rd August-2026 Address: 8th Floor, Shaheen Complex, Edgerton Road, Lahore
23.2	Deleted
23.3	The Technical Bids, except the Bids rejected pursuant to Sub-Clause IB.21.1 (a) shall be opened one at a time, and the following read out and recorded: (a) the name of the Bidder; (b) the receipt of Original Bid Security; and (c) any other details as the Employer may consider appropriate.
23.5	Clauses.23.5 to 23.9, as detailed below, are inserted after clause 23.4. At the end of the evaluation of the Technical Bids, the Employer will invite bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for award to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing and through e-PADS by the Employer. Bidders shall be given reasonable notice of the opening of Price Bids.
23.6	The Employer will notify Bidders in writing who have been rejected on the grounds of being substantially nonresponsive to the requirements of the Bidding Documents.
23.7	The Employer shall conduct the opening of Price Bids of all Bidders who submitted substantially responsive Technical Bids, in the presence of Bidders' representatives who choose to attend at the address, on the date, and time specified by the Employer. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.

	Further the attendance will also be marked through e-PADS
23.8	Price Bids shall be opened and the following read out and recorded: (a) the name of the Bidder; (b) the Bid Prices, including any discounts, cross discounts and alternative offers; (c) any other details as the Employer may consider appropriate. Only Price Bids, discounts, cross discounts and alternative offers (if allowed under Sub-Clause IB.16 hereof) read out and recorded during the opening of Price Bids shall be considered for evaluation.
23.9	The Employer shall prepare a record of the opening of Price Bids that shall include, as a minimum: the name of the Bidder, the Bid Price (per lot if applicable), any discounts, cross discounts, and any alternative offers. A copy of the record shall be distributed to all Bidders present at the time of Bid opening.
IB 24.2	Add the following new Sub Clause after IB 24.1: 24.2 Bidders and their respective agents, suppliers, sub-contractors, representatives and anyone else on behalf of the bidder will not communicate or attempt to communicate directly or indirectly with the Employer, including any employees, directors, officers, agents or representatives of any of them during any part of the Competitive Bidding Process, except as expressly directed or permitted by the Employer. Bidders will also not engage in any form of political or other lobbying whatsoever with respect to their Bids, or otherwise attempt to influence the outcome of the Competitive Bidding Process. In the event of any such communications or lobbying, Employer may at any time reject any Bid by that Bidder without further consideration.
IB 25.1	Add the following at the end of Sub-Clause 25.1: The Employer may, at his discretion, ask any Bidder for confirmation/submission of missing information to clarify its Bid. However, the Employer does not have an obligation to request any additional information or clarification with respect to missing or deficient information in a Bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered.
IB 25.2	Add the following new Sub-Clause: If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.
IB 26.1	Sub-Clause 26.1 is substituted by the following: "The Employer will determine whether Bid is substantially responsive to the requirements of the Bidding Documents."

IB 26.2	Sub-Clause 26.2 is substituted by the following: “A substantially responsive Technical Bid is one which (i) meets the eligibility criteria; (ii) has been properly signed; (iii) meets the qualification criteria delineated at Sub-Clause IB.3A hereof; and (iv) conforms to all the terms, conditions and specifications of the Bidding Documents, without material deviation or reservation. A substantially responsive Price Bid is one which (i) has been properly signed; (ii) is accompanied by the required Bid Security; and (iii) conforms to all the terms, conditions and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one (i) which affect in any substantial way the scope, quality or performance of the Works; (ii) which limits in any substantial way, inconsistent with the Bidding Documents, the Employer’s rights or the Bidder’s obligations under the Contract; or (iii) adoption/rectification whereof would affect unfairly the competitive position of other Bidders presenting substantially responsive bids. Any minor informality or non-conformity or irregularity in a Bid which does not constitute a material deviation may be waived by the Employer, provided such waiver does not prejudice or affect the relative ranking of any Bidder.”
IB 26.4	Following Sub-Clauses are added at the end of Sub-Clause 26.3: The Employer may reject any Bid as non-responsive if found materially incomplete, obscure, irregular or omits any material information required to be submitted by the Bidding Documents.
IB 27.3	Following Sub Clause is added after Sub Clause 27.2: If as a result of arithmetic correction, the Bid Price is increased substantially, the Bidder may be asked to increase the amount of its Bid Security accordingly by submitting its amendment within fifteen (15) days from issuing date of such notification. If the Bidder fails to provide the requisite amendment of the Bid Security within the stipulated period, his Bid will be held substantially non-responsive and will be rejected.
IB 28.1	In case of Lots only Following Para is added at the end of the Sub-Clause 28.1: “The Works will be evaluated and compared on Lot basis.”
IB 28.2	In case of Lots only Following Para is added after the Para (c) of IB. 28.2: (d) applying cross discount in case of combination of Lots to arrive at least cost combination
IB 28.4	Following is added at the end of Sub-clause IB 28.4: “or the employer may require the successful Bidder to balance his bid.”

	In case of front-end loading or unbalanced price of any BoQ item, the Employer reserve the right to adjust the price with other BoQ items provided that ceiling of overall price remains the same.
IB 28.5	Following new Sub Clause is added after IB 28.4: The Employer will evaluate the Bids, including all clarifications, additional information, modifications and negotiated changes, by applying the Eligibility and Qualification Criteria. Without limiting the particular criteria, the Employer may take into account the following in the Evaluation of Bids: i. Non-performance by a Bidder on previous contracts with Employer or others; ii. The quality of a Bidder's performance on previous contracts with Employer or others; iii. Anticipated or ongoing claims with or in connection with a Bidder; iv. Any security of safety concerns which Employer may have in respect of a Bidder or its facilities, subcontractors or suppliers; v. The results of any interview with a Bidder or supplied references; or vi. Any knowledge of or experience with a Bidder or its principals, directions, officers and employees. The Employer may independently verify any information (including conducting credit, reference and other checks with respect to a Bidder) and consider such findings in its evaluation. Employer is not required to inform Bidders of how Bids were ranked in the evaluation process.
IB 28.6	Following new Sub Clause is added after IB 28.5: The Employer's evaluation of a Bid will exclude and not take into account Provincial sales Tax (PST).
IB 29.1	Add the words "for the respective Lot(s)" after the words "evaluated Bid Price" in 3rd line of this Sub-Clause. Add the following at the end of this Sub-Clause: "Provided further in case a Bidder is determined to be the lowest evaluated substantially responsive in more than one Lot, the aggregate requirements delineated under Sub-Clause IB.3 hereof shall apply."
IB 29.2	Following text is added at the end of Sub Clause 29.2 The Employer reserves the right to assess the capacity and capability of the Bidder, to successfully execute the scope of work covered under the Bidding Documents within stipulated completion period. This assessment may interalia include for (i) document verification; (ii) details of work executed, work in hand, anticipated in future; (iii) details of tools & plant; (iv) availability of requisite key personnel (v) financial resources; (vi) details of quality system in

	place; (vii) past experience and performance; (viii) customer feedback (ix) Bank's feedback etc.
IB 30.1	The Employer reserves the right to reject any bid on the following accounts, apart from those mentioned in the bidding documents: i. Bid is not received by the due date and time specified. ii. Bid is not accompanied by Bid security as specified in the document; Bid security is inadequate; Bid guarantee is not in the specified format. iii. Bid does not cover the complete scope of work. iv. Bid does not contain all required particulars as per Schedules & Forms prescribed in the bidding documents. v. Deviations, conditionality or reservations have been introduced to any part of the bidding documents which may not be acceptable to the Employer in its sole discretion. vi. Bidder does not respond promptly and thoroughly to the request for supplementary information required for the evaluation of his Bid. vii. Bid does not meet minimum acceptable standards of completeness, consistency and detail. viii. Bid received from any Black listed Firm / Contractor. If at any time it is found that a material misrepresentation of facts is made or uncovered; the information submitted by the bidder concerning his qualification was false and materially inaccurate or incomplete. If the bidder is the Lead Member of a consortium, then the entire consortium may be disqualified/rejected.
IB 32.1	The Bidder shall furnish an unconditional Performance Security, equal to ten percent (10%) of the Contract Price in the form prescribed in the conditions of Contract.
IB 33	Text of Clause IB.33 is deleted and substituted as follows: Within fourteen (14) days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the successful bidder shall depute its representative duly authorized for formal signing of the Contract Agreement, Form of which is provided in the Bidding Documents.
IB 37	The following clause is hereby added: -
37.1	(GRIEVANCE REDRESSAL & COMPLAINT REVIEW MECHANISM) Any party can file its written complaint against the eligibility parameters or any other terms and conditions prescribed in the prequalification or bidding documents found contrary to provision of Procurement Regulatory Framework, and the same shall be addressed by the GRC well before the bid submission deadline.
37.1	Any Bidder feeling aggrieved by any act of the procuring agency after the submission of his bid may lodge a written complaint concerning his grievances not later than seven days of the announcement of technical evaluation report and five days after issuance of final evaluation report.

37.2	In case, the complaint is filed against the technical evaluation report, the GRC shall suspend the procurement proceedings.
37.3	In case, the complaint is filed after the issuance of the final evaluation report, the complainant cannot raise any objection on technical evaluation of the report: Provided that the complainant may raise the objection on any part of the final evaluation report in case where single stage one envelop bidding procedure is adopted.
37.4	The GRC, in both the cases shall investigate and decide upon the complaint within ten days of its receipt.
37.5	Any bidder or the procuring agency not satisfied with the decision of the GRC may file Appeal before the Appellate Committee of the Authority on prescribed format after depositing the Prescribed fee.
37.6	The Committee, upon receipt of the Appeal against the decision of the GRC complete in all respect shall serve notices in writing upon all the parties to appeal.
37.7	The committee shall call the record from the concerned procuring agency or the GRC as the case may be, and the same shall be provided within prescribed time.
37.8	The committee may after examination of the relevant record and hearing all the concerned parties, shall decide the complaint within fifteen (15) days of receipt of the Appeal.
37.9	The decision of the Committee shall be in writing and shall be signed by the Head and each Member of the Committee. The decision of the committee shall be final
IB 38	The following Clause is hereby inserted: - (Mechanism of Blacklisting) 38.1. The Procuring Agency shall bar for not more than the time prescribed in Rule-19 of the Public Procurement Rules, 2004, from participating in their respective procurement proceedings, bidder or contractor who either: i. Involved in corrupt and fraudulent practices as defined in Rule-2 of Public Procurement Rules; ii. Fails to perform his contractual obligations; iii. Fails to abide by the its securing declaration; and iv. Submits false information (or) hides information on Beneficial Ownership Declaration Performa under S.R.O 592(I)/2022.
38.2	The show cause notice shall contain: (a) precise allegation, against the bidder or contractor; (b) the maximum period for which the Procuring Agency proposes to debar the bidder or contractor from participating in any public procurement of the Procuring Agency; and (c) the statement, if needed, about the intention of the Procuring Agency to make a request to the Authority for debarring the bidder or contractor from participating in public procurements of all the procuring agencies.

38.3	The procuring agency shall give minimum of seven days to the bidder or contractor for submission of written reply of the show cause notice
38.4	In case, the bidder or contractor fails to submit written reply within the requisite time, the Procuring Agency may issue notice for personal hearing to the bidder or contractor/ authorize representative of the bidder or contractor and the procuring agency shall decide the matter on the basis of available record and personal hearing, if availed.
38.5	In case the bidder or contractor submits written reply of the show cause notice, the Procuring Agency may decide to file the matter or direct issuance of a notice to the bidder or contractor for personal hearing.
38.6	The Procuring Agency shall give minimum of seven days to the bidder or contractor for appearance before the specified officer of the Procuring Agency for personal hearing. The specified officer shall decide the matter on the basis of the available record and personal hearing of the bidder or contractor, if availed
38.7	The procuring Agency shall decide the matter within fifteen days from the date of personal hearing unless the personal hearing is adjourned to a next date and in such an eventuality, the period of personal hearing shall be reckoned from the last date of personal hearing.
38.8	The Procuring Agency shall communicate to the bidder or contractor the order of debarring the bidder or contractor from participating in any public procurement with a statement that the bidder or contractor may, within thirty days, prefer a representation against the order before the Authority.
38.9	Such blacklisting or barring action shall be communicated by the procuring agency to the Authority and respective bidder or bidders in the form of decision containing the grounds for such action. The same shall be publicized by the Authority after examining the record whether the procedure defined in blacklisting and debarment mechanism has been adhered to by the procuring agency.
38.10	The bidder may file the review petition before the Review Petition Committee Authority within thirty days of communication of such blacklisting or barring action after depositing the prescribed fee and in accordance with "Procedure of filing and disposal of review petition under Rule-19(3) Regulations, 2021". The Committee shall evaluate the case and decide within ninety days of filing of review petition
38.11	The committee shall serve a notice in writing upon all respondent of the review petition. The notices shall be accompanied by the copies of review petition and all attached documents of the review petition including the decision of the procuring agency. The parties may file written statements along with essential documents in support of their contentions. The Committee may pass such order on the representation may deem fit.

38.12	The Authority on the basis of decision made by the committee either may debar a bidder or contractor from participating in any public procurement process of all or some of the procuring agencies for such period as the deemed appropriate or acquit the bidder from the allegations. The decision of the Authority shall be final.

Annexure - 1 to Bidding Data Sheet

FORMAT FOR POWER OF ATTORNEY FOR SIGNING OF BID**POWER OF ATTORNEY**

Know all men by these presents, we _____ (name and address of the registered office of the Bidder) do hereby constitute, appoint and authorize Mr. / Ms.

_____ R/o _____ (name and address of residence) who is presently employed with us and holding the position of _____, as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to the bid of the (please state the name and address of the bidder) for Bidding Document No. [_____] (the "tender"), including signing and submission of all documents and providing information / responses to National Grid Company of Pakistan Limited, representing us in all matters in connection with our bid for the said tender.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and agree that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

For

(Signature)

(Name, Title, Email ID and Address)

Accepted

.....(Signature)

(Name, Title, Email ID and Address of the Attorney)

ACKNOWLEDGMENT

Before me, a Notary Public for and in the City of _____, this _____ of _____ 2020 personally came and appeared:

NAME

IDENTIFICATION DOCUMENT

Known to me to be the same person/s who executed the foregoing Special Power of Attorney in favor of _____, and acknowledged to me the same is/are his/her/their free and voluntary act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal, the date and place above written.

NOTARY PUBLIC

Annexure - 2 to Bidding Data Sheet

A. FORM OF UNDERTAKING BY THE JOINT VENTURE PARTNERS**(On Company's Letter Head)**

THIS JOINT DEED OF UNDERTAKING executed on this..... day of..... Two Thousand
 andby..... a company incorporated under the
 laws of and having its Registered Office at.....
 (hereinafter called the "Party No.1" which expression shall include its successors, executors and
 permitted assigns) and M/s.....a company incorporated under the laws
 of..... and having its Registered Office at..... (hereinafter called the
 "Party No.2" which expression shall include its successors, executors and permitted assigns
) and M/s.....a Company incorporated under the laws of.....
 and having its Registered Office at..... (hereinafter called the
 "Party No.3" which expression shall include its successors, executors and permitted assigns) for
 the purpose of making a bid and entering into a contract [hereinafter called the "Contract" {in
 case of award)] against the Identification No.....for _____
 associated with _____ of
 (hereinafter called the "**Employer**").

WHEREAS the Party No.1, Party No.2 and Party No.3 have entered into an Agreement
 dated..... AND WHEREAS the Employer invited bids for the design, manufacture, Supply
 of Equipment Materials stipulated in the bidding documents under _____
 _____ associated with _____.

AND WHEREAS Clause 2, Section-ITB and 'Qualification & Evaluation Requirement of the
 Bidder' (clause 13, 24 & 26 of ITB), and technical provisions forming part of the bidding
 documents, inter-alia, stipulates that an Undertaking of two or more qualified partners, meeting
 the requirements of 'Qualification & Evaluation Requirement of the Bidder', as applicable may
 bid, provided, the Joint Venture fulfills all other requirements under Clause 2, 13, 24 & 26 of ITB
 and in such a case, the Letter of Bids (Bid Form) shall be signed by the Partner -In Charge so as
 to legally bind all the Partners of the Joint Venture, who will be jointly and severally liable to
 perform the Contract and all obligations hereunder.

The above clause further states that this Undertaking shall be attached to the bid and the
 Contract performance guarantee will be as per the format enclosed with the bidding document
 without any restrictions or liability for either party.

AND WHEREAS the bid is being submitted to the Employer vide proposal No.....dated.....
 by Party No.1 based on this Undertaking between all the parties; under these presents and the
 bid in accordance with the requirements of Clause 2, 13, 24 & 26 (Section-ITB) has been signed
 by all the parties.

NOW THIS UNDERTAKING WITNESSETH AS UNDER:

In consideration of the above premises and agreements all the parties of this Deed of
 Undertaking do hereby declare and undertake:

1. In requirement of the award of the Contract by the Employer to the Joint Venture Partners, we, the Parties do hereby undertake that M/s..... the Party No.1, shall act as Lead Partner and further declare and confirm that we the parties to the Joint Venture shall jointly and severally be bound unto the Employer for the successful performance of the Contract and shall be fully responsible for the design, manufacture, Supply, and successful performance of the equipment in accordance with the Contract:
2. In case of any breach or default of the said Contract by any of the parties to the Joint Venture, the party(s) do hereby undertake to be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.
3. Further, if the Employer suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the equipment in meeting the performances guaranteed as per the specification in terms of the Contract, the Party(s) of these presents undertake to promptly make good such loss or damages caused to the Employer, on its demand without any demur. It shall not be necessary or obligatory for the Employer to proceed against Lead Partner to these presents before proceeding against or dealing with the other Party(s), the Employer can proceed against any of the parties who shall be jointly and severally liable for the performance and all other liabilities/obligations under the Contract to the Employer.
4. The financial liability of the Parties of this Deed of Undertaking to the Employer, with respect to any of the claims arising out of the performance or non-performance of the obligations set forth in this Deed of Undertaking, read in conjunction with the relevant conditions of the Contract shall, however not be limited in any way so as to restrict or limit the liabilities or obligations of any of the Parties of this Deed of Undertaking.
5. It is expressly understood and agreed between the Parties to this Undertaking that the responsibilities and obligations of each of the Parties shall be as delineated in Annexure attached with this undertaking. It is further undertaken by the parties that the above sharing of responsibilities and obligations shall not in any way be a limitation of joint and several responsibilities of the Parties under the Contract.
6. It is also understood that this Undertaking is provided for the purposes of undertaking joint and several liabilities of the partners to the Joint Venture for submission of the bid and performance of the Contract if awarded and that this Undertaking shall not be deemed to give rise to any additional liabilities or obligations, in any manner or any law, on any of the Parties to this Undertaking or on the Joint Venture, other than the express provisions of the Contract.
7. This Undertaking shall be construed and interpreted in accordance with the provisions of the Contract.
8. In case of an award of a Contract, we the parties to this Deed of Undertaking do hereby agree that we shall be jointly and severally responsible for furnishing a Contract

performance security from a bank in favour of the Employer in the currency/currencies of the Contract.

9. It is further agreed that this Deed of Undertaking shall be irrevocable and shall form an integral part of the bid and shall continue to be enforceable till the Employer discharges the same or upon the completion of the Contract in accordance with its provisions, whichever is earlier. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF, the Parties to this Deed of Undertaking have through their authorized representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above.

Common Seal of
has been affixed in my/ our
presence pursuant to Board of
Director's Resolution dated

For Lead Partner (Party No.-1)
For and on behalf of M/s
.....

Name

Designation

Signature

(Signature of the authorized
representative)

WITNESS :

I.

II.

Common Seal of
has been affixed in my/ our
presence pursuant to Board of
Director's Resolution dated

For Party No.-2
For and on behalf of M/s.....

(Signature of the authorized
representative)

Name

Designation

Signature

WITNESS :

I.

II.

Common Seal of
has been affixed in my/ our
presence pursuant to Board of
Director's Resolution dated

For Party No.-3
For and on behalf of M/s.
.....

Name

Designation

Signature

(Signature of the authorized
representative)

WITNESS :

I.

II.

Notes:

1. In the event that the successful Bidder is a joint venture formed of two or more companies, the Employer requires that the parties to the joint venture accept joint and several liabilities for all obligations under the Contract.
2. The maximum number of J.V partners is three (03).

Annexure - 3 to Bidding Data Sheet

B. FORM OF LETTER OF INTENT BY JV PARTNERS TO ENTER INTO JV AGREEMENT

THIS LETTER OF INTENT signed on this..... day of..... Two Thousand and by..... a company incorporate under the laws of and having its Registered Office at..... (hereinafter called the "Party No.1" which expression shall include its successors, executors and permitted assigns) and M/s.....a company incorporated under the laws of..... and having its Registered Office at..... (hereinafter called the "Party No.2" which expression shall include its successors, executors and permitted assigns) and M/s..... a Company incorporated under the laws of and having its Registered Office at..... (hereinafter called the "Party No.3" which expression shall include its successors, executors and permitted assigns) for the purpose of making a bid and entering into a contract [hereinafter called the "Contract" (in case of award)] against the Specification No.....for associated with of (hereinafter called the "**Employer**").

WHEREAS the Party No.1, Party No.2 and Party No.3 intend to enter into a Joint Venture Agreement

AND WHEREAS the Employer invited bids as per the above mentioned Specification for the design, manufacture, Supply of Equipment Materials stipulated in the bidding documents under associated with

AND WHEREAS Clause 2, Section-ITB and 'Qualification & Evaluation Requirement of the Bidder'(clause 13, 24 & 26 of ITB), and technical provisions forming part of the bidding documents, inter-alia, stipulates that two or more qualified partners, meeting the requirements of Clause 2, Section-ITB and 'Qualification & Evaluation Requirement of the Bidder'(clause 13, 24 & 26 of ITB), as applicable may bid, provided, they submit a Letter of Intent to enter into Joint Venture Agreement and the Joint Venture Partners fulfill all other requirements under Clause 2, Section-ITB and 'Qualification & Evaluation Requirement of the Bidder'(clause 13, 24 & 26 of ITB), and technical provisions forming part of the bidding documents and in such a case, the Letter of Bid (Bid Form) shall be signed by all the proposed partners so as to legally bind all the Partners of the Joint Venture, who will be jointly and severally liable to perform the Contract by entering into Joint Venture Agreement as per proforma specified in this Section IV. Bidding Forms of the Bidding Documents which will be legally binding on all partners and all obligations hereunder.

The above clause further states that this Letter of Intent shall be attached to the bid and the Contract performance guarantee will be as per the format enclosed with the bidding document without any restrictions or liability for either party.

AND WHEREAS the bid is being submitted to the Employer vide proposal No.....dated..... by Party No.1 based on this Letter of Intent between all the parties; under these presents and the bid

in accordance with the requirements of Clause 4.1, Section-ITB and 'Qualification Requirement of the Bidder', Section-Evaluation and Qualification Criteria, has been signed by all the parties.

NOW THIS UNDERTAKING WITNESSED AS UNDER:

In consideration of the above premises and agreements all the parties of this Letter of Intent do hereby declare and undertake:

1. In requirement of the award of the Contract by the Employer to the Joint Venture Partners, we, the Parties do hereby undertake that M/s..... the Party No.1, shall act as Lead Partner and further declare and confirm that we the parties to the Joint Venture shall jointly and severally be bound unto the Employer for the successful performance of the Contract and shall be fully responsible for the design, manufacture, Supply, and successful performance of the equipment in accordance with the Contract for which we shall enter into Joint Venture Agreement as per proforma specified in this Section IV. Bidding Forms of the Bidding Documents which will be legally binding on all partners:
2. If the Contract is awarded to Joint Venture then in case of any breach or default of the said Contract by any of the parties to the Joint Venture, the party(s) will be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.
3. Further, if the Employer suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the equipment in meeting the performances guaranteed as per the specification in terms of the Contract, the Party(s) of these presents will promptly make good such loss or damages caused to the Employer, on its demand without any demur. It shall not be necessary or obligatory for the Employer to proceed against Lead Partner to these presents before proceeding against or dealing with the other Party(s), the Employer can proceed against any of the parties who shall be jointly and severally liable for the performance and all other liabilities/obligations under the Contract to the Employer.
4. The financial liability of the Parties of the Deed of Undertaking to the Employer in the event of award of Contract on the Joint Venture, with respect to any of the claims rising out of the performance or non-performance of the obligations set forth in the Deed of Undertaking, read in conjunction with the relevant conditions of the Contract shall, however not be limited in any way so as to restrict or limit the liabilities or obligations of any of the Parties of the Deed of Undertaking.
5. It is expressly understood and agreed between the Parties to this Letter of Intent that the responsibilities and obligations of each of the Parties shall be as delineated in Annexure attached with this Letter of Intent. It is further undertaken by the parties that the above sharing of responsibilities and obligations shall not in any way be a limitation of joint and several responsibilities of the Parties under the Contract in the event of award on Joint Venture.
6. It is also understood that this Letter of Intent is provided for the purposes of undertaking joint and several liabilities of the partners to the Joint Venture for submission of the bid

and performance of the Contract if awarded and that this Letter of Intent shall not be deemed to give rise to any additional liabilities or obligations, in any manner or any law, on any of the Parties to this Letter of Intent or on the Joint Venture, other than the express provisions of the Contract.

7. This Letter of Intent shall be construed and interpreted in accordance with the provisions of the Contract.
8. In case of an award of a Contract, we the parties to this Letter of Intent do hereby agree that we shall enter into Joint Venture Agreement as per proforma specified in this Section IV. Bidding Forms of the Bidding Documents which will be legally binding on all partners and we shall be jointly and severally responsible for furnishing a Contract performance security from a bank in favour of the Employer in the currency / currencies of the Contract.
9. It is further agreed that this Letter of Intent shall be irrevocable and shall form an integral part of the bid. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF, the Parties to this Letter of Intent have through their authorized representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above.

Common Seal of
has been affixed in my/ our
presence pursuant to Board of
Director's Resolution dated

For Lead Partner (Party No.-1)
For and on behalf of M/s
.....

Name
Designation

Signature

(Signature of the authorized
representative)

WITNESS :

I.

II.

Common Seal of
has been affixed in my/ our
presence pursuant to Board of
Director's Resolution dated

For Party No.-2
For and on behalf of M/s.....

Name

(Signature of the authorized
representative)

Designation

Signature

WITNESS :

I.

II.

Common Seal of
has been affixed in my/ our
presence pursuant to Board of
Director's Resolution dated

For Party No.-3
For and on behalf of M/s.
.....

Name

(Signature of the authorized
representative)

Designation

Signature

WITNESS :

I.

II.

Notes:

1. In the event that the successful Bidder is a joint venture formed of two or more companies, the Employer requires that the parties to the joint venture accept joint and several liabilities for all obligations under the Contract.
2. The maximum number of J.V. partners is three (3).

Section -III: FORM OF TECHNICAL AND PRICE BID AND APPENDICES TO BID

Sr. No.	Description
1.	Form of Technical Bid
2.	Form of Financial Bid
Appendices to Bid	
3.	Appendix A to Bid: Special Stipulations
4.	Appendix B to Bid: Foreign Currency Requirements
5.	Appendix C to Bid: Price Adjustment
6.	Appendix D to Bid: Bill of Quantities
7.	Appendix E to Bid: Proposed Construction Schedule
8.	Appendix F to Bid: Method of Performing Works
9.	Appendix G to Bid: Proposed Personnel
10.	Appendix H to Bid: Equipment
11.	Appendix I to Bid: Construction Camp and Housing Facilities
12.	Appendix J to Bid: Organization Chart for Supervisory Staff
13.	Appendix K to Bid: List of Subcontractors
14.	Appendix L to Bid: Source of Material
15.	Appendix M to Bid: Estimated Progress Payments
16.	Appendix N to Bid: Deviations

- | | | |
|------|---------------------------|--|
| 17. | Appendix O to Bid: | Integrity Pact and ADB Integrity Covenant |
| 18. | Appendix P to Bid: | Bidder's Qualification Forms |
| | QF-1 | General Information |
| | QF-2 | Construction Experience |
| | QF-3 | Performance Certificate |
| | QF-4 | Current Contract Commitments |
| | QF-5 | Financial Data |
| | QF-6 | Annual Turnover Data |
| | QF-7 | Financial Resources |
| | QF-8 | Bank Certificate |
| | QF-9 | Pending Litigation |
| 19 | Appendix Q to Bid: | Undertaking for Bidder's Compliance with Project Safeguards Requirements |
| 20 . | Standard Forms | |
| | I | Bid Security (Bank Guarantee) |
| | II | Form of Performance Security |
| | III | Form of Contract Agreement |
| | IV | Mobilization Advance Guarantee/Bond |

Section III

Forms of Bid and Appendices to Bid

Form of Technical Bid

Bid Reference No. _____

(Name of Contract/Works)

To:

We, the undersigned, declare that:

- (a) We have examined the Bidding Documents including Instructions to Bidders, Bidding Data, Conditions of Contract, Contract Data, Specifications, Drawings, if any, Schedule of Prices and Addenda Nos. _____ in accordance with Instructions to Bidders (IB) 9 for the execution of the above-named Works, we, the undersigned, being a company doing business under the name _____ of _____ and _____ address _____ and being duly incorporated under the laws of Pakistan hereby offer to execute and complete such Works and remedy any defects therein in conformity with the said Documents including Addenda.
- (b) Our Bid consisting of the Technical Bid and the Price Bid shall be valid for a period of days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (c) As security for due performance of the under takings and obligations of our bid, we submit here with a Bid security, in the amount specified in Bidding Data Sheet, which is valid (at least) 28 days beyond validity of Bid itself.
- (d) We undertake, if our Bid is accepted, to commence the Works and to deliver and complete the Works comprised in the Contract within the time(s) stated in Contract Data.
- (e) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process, other than alternative offers submitted in accordance with IB16 (as applicable).
- (f) We agree to permit Employer or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them

audited by auditors. This permission is extended for verification of any information provided in our Technical Bid which comprises all documents enclosed herewith in accordance with IB.11.1 of the Bidding Data Sheet.

Name.....
.....

In the capacity
of.....

Signed.....
.....

Duly authorized to sign the Bid for and on behalf
of.....

Date.....

Address.....
.....

Form of Price Bid

Bid Reference No. _____

(Name of Contract/Works)

To:

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (IB)9;
- (b) The total price of our Bid, excluding any discounts offered including Addenda thereto for the Total Bid Price of Rupees

(Rupees _____)

or such other sum as may be ascertained in accordance with the said Documents.

- (c) The discounts offered and the methodology for their application is:
.....
- (d) Our Bid shall be valid for a period of days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (e) If our Bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;
- (f) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed and we do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other bidder for the Works.
- (g) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

- (h) We agree to permit Employer or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors. This permission is extended for verification of any information provided in our Technical Bid which comprises all documents enclosed herewith in accordance with IB.11.1 of the Bidding Data Sheet.
- (i) If awarded the contract, the person named below shall act as Contractor's Representative.
- (j) We do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other person or persons making a bid for the Works.

Name.....
.....

In the capacity
of.....

Signed.....
.....

Duly authorized to sign the Bid for and on behalf
of.....

Date.....

Address.....
.....

Witness:

Signature:

Name.....

Address.....
.....

Occupation:

Appendix-A to Bid

SPECIAL STIPULATIONS
Clause
Conditions of Contract

1.	Engineer's Authority to issue Variation in emergency	2.1	2% of the Contract Price stated in the Letter of Acceptance.
2.	Law Applicable	5.1(b)	The law to be applied is the law of Islamic Republic of Pakistan.
3.	Amount of Performance Security	10.1	10% of Contract Price stated in the Letter of Acceptance.
4.	Time for Furnishing Programme	14.1	Within 28 days from the date of receipt of Letter of Acceptance.
5.	Minimum amount of third-party Insurance	23.2	Rs. 1,000,000 per occurrence with number of occurrences unlimited.
6.	Time for Commencement	41.1	Within 30 days from the date of receipt of the letter of acceptance or the date of signing of the contract agreement whichever is earlier. Notice to Commence shall be issued by the Engineer.
7.	Time for Completion	43.1, 48.2	Lot-I: 243 days Lot-II: 243 days from the date of receipt of Engineer's Notice to Commence.
8.	a) Amount of Liquidated Damages	47.1	The maximum amount of liquidated damages shall be equal to 10% of Contract Price stated in the Letter of Acceptance. Liquidities damages shall be deducted from the contract amount for every day or part of a day, which will elapse between the dates on which the prescribed time expired and the date the work is completed at the rate specified in the contract agreement. The amount of the liquidated damages for each day of delay in completion of the whole of the works, or if applicable for any section thereof, shall be a sum equal to [10 % of the Accepted Contract Price of the works divided by one fourth of the number of days specified as completion time] In case facility / works are of independent of each other and part of the facility / works can be used for its intended purpose, the LD will only be applicable for the remaining part.
	b) Amount of Bonus	47.3	Not Applicable
9.	Defects Liability Period	49.1	365 days from the effective date of Taking Over Certificate.
10.	Percentage of Retention Money	60.2	10% of the amount of Interim Payment Certificate.
11.	Limit of Retention Money	60.2	10% of Contract Price stated in the Letter of Acceptance.
12.	Minimum amount of Interim Payment Certificates (Running Bills)	60.2	20% (at least) more than the amount of all applicable retentions and deductions on the said bill.
13.	Time of Payment from delivery of Engineer's Interim Payment Certificate to the Employer.	60.10	45 days.
14.	Mobilization Advance (Interest Free)	60.12	10% of the Contract Price stated in the letter of Acceptance
15.	Increase or Decrease of Cost	70.1	Shall be APPLICABLE as per formulas given in relevant clause.

FOREIGN CURRENCY REQUIREMENTS (Not Used)
(Not Applicable)

1. The Bidder may indicate here in below his requirements of foreign currency (if any), with reference to various inputs to the Works.
2. Foreign Currency Requirement as percentage of the Bid Price excluding Provisional Sums _____%.
3. Table of Exchange Rates

<u>Unit of Currency</u>	<u>Equivalent in Pak. Rupees</u>
Australian Dollar	-----
Euro	-----
Japanese Yen	-----
U.K. Pound	-----
U.S. Dollars	-----
-----	-----
-----	-----

**PRICE ADJUSTMENT UNDER CLAUSE 70
OF CONDITIONS OF CONTRACT**

The source of indices and the weightages or coefficients for use in the adjustment formula under Sub-Clause 70.1 shall be as follows:

Cost Element¹	Description	Weightages¹	Applicable Index
1	2	3	4
(i)	Fixed Portion (A)	0.25	-
(ii)	Local Labor per day Unskilled Labor (UL): Skilled Labor (L) :	0.15 (b) 0.10 (c)	Government of Pakistan (GoP), Pakistan Bureau of Statistics (PBS) Monthly Bulletin of Statistics -Intercity Consumer Prices for unskilled labor for Islamabad city ² -Intercity Consumer Prices for skilled labor for Islamabad city ²
(iii)	Cement (C): Ordinary Portland Cement (OPC) per metric ton representing all types of cement used in the Works	0.14 (d)	Government of Pakistan (GoP), Pakistan Bureau of Statistics (PBS) Monthly Bulletin of Statistics -Intercity Wholesale Prices of selected commodities for Islamabad city ²
(iv)	Reinforcing Steel Bars (S): ½ inch dia round MS bars per metric ton representing all types and dimensions of Steel Reinforcement used in the Works	0.18 (e)	Government of Pakistan (GoP), Pakistan Bureau of Statistics (PBS) Monthly Bulletin of Statistics -Intercity Wholesale Prices of Selected Commodities for Islamabad city ²

(v)	High Speed Diesel (HSD) per liter (D)	0.13 (f)	Retail Sale Price as notified by Pakistan State Oil (PSO) Limited on its website
(vi)	Altron Premium per liter (P)	0.05 (g)	Retail Sale Price as notified by Pakistan State Oil (PSO) Limited on its website
	Total	1.00	

Notes:

1. The base cost indices or prices shall be those prevailing on 28 days prior to the latest date for submission of Bids. Current (Revised) Indices or Prices shall be those prevailing on 28 days prior to the last day of billing month.
2. Any fluctuation in the indices or prices of materials other than those given above shall not be subject to adjustment of the Contract Price.

Initials of Signatory to Bid _____

Appendix-D to Bid**BILL OF QUANTITIES****A. Preamble****General**

1. The Schedule of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Drawings. The Schedules do not generally give a full description of the Services to be performed under each item. Bidders shall be deemed to have read the Technical Specifications and other sections of the Bidding Documents and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling in the rates and prices. The entered rates and prices shall be deemed to include for the full scope as aforesaid, including overheads and profit.
2. If bidders are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with IB 8 prior to submitting their bids.
3. The quantities given in the Schedule of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Contractor and verified by the Engineer and valued at the rates and prices entered in the priced Schedule of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix in accordance with provisions of the Contract.
4. The rates and prices entered in the priced Schedule of Quantities shall, except insofar as it is otherwise provided under the Contract include all costs of Contractor's plant, labor, supervision, materials, execution, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. Furthermore all duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to deadline for submission of Bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder. The price shall include all type of taxes except PST.
5. A rate or price shall be entered against each item in the priced Schedule of Quantities, whether quantities are stated or not. The cost of items against which the Contractor will have failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Schedule of Quantities.
6. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Schedule of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Works.

7. General directions and description of work and materials are not necessarily repeated nor summarized in the Schedule of Quantities. References to the relevant sections of the Bidding Documents shall be made before entering prices against each item in the priced Schedule of Quantities.
8. Contractor shall be responsible for arrangement of all consumable materials for execution of works within the prices quoted in Price schedules/BoQ.
9. Provisional sums if included and so designated in the Schedule of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Conditions of Contract.
10. As this a measurement type contract so quantities may increase or decrease and / or their types may vary resultantly the contract price may change. The Engineer is authorized to measure such work and accordingly approve the invoices. The Employer shall not stop payment merely it is beyond the price of the contract. However, such changes shall immediately be conveyed to Project Management Office (PMO) NGC / Change Control Board/ Steering Committee. In case any irregularity is found, the Employer shall reserve the right to withhold the payments and recover its loss from any amount due or to be due to the contractor besides other remedial measures.

Units & Abbreviations

11. Units of measurement, symbols and abbreviations expressed in the Bidding Documents shall comply with the System International Unites (SI Units).
12. The following abbreviations shall be used in the Price Schedules:

Abbreviation

Pakistani Rupees	PKR
Number	No.
Kilometre	km
Kilogram	kg
Cubic Meter	Cu.m
Provisional Sums	PS
Percent	%
Quantity	Qty

Pricing

13. Prices shall be filled in indelible ink, and any alterations necessary due to errors, etc., shall be initialed by the Bidder.

14. As specified in the Bid Data Sheet prices shall be subject to adjustment in accordance with the corresponding Appendix-C to Price Bid (Price Adjustment) to the Contract Agreement.
15. For each item, bidders shall complete each appropriate column in the respective Schedules, giving the price breakdown as indicated in the Schedules. Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in Section 6 (Employer's Requirements), Technical Specifications, Drawings or elsewhere in the Bidding Documents.
16. The TOTAL for each Schedule and TOTAL of the Grand Summary shall be deemed to be the total price for executing and completing the Facilities in accordance with the Contract, whether or not each individual item has been priced.
17. When requested by the Employer for the purposes of making payments or part payments, valuing variations or evaluating claims, or for such other purposes as the Employer may reasonably require, the Contractor shall provide the Employer with a breakdown of any composite or lump sum items included in the Schedules.
18. Except as otherwise expressly provided under the Conditions of Contract, the unit rates and lump sum amounts entered in the Price Schedules will be the rates at which the Contractor will be paid, and shall be deemed to include for the full scope and all costs incurred by the Contractor in the performance of the Facilities, the provision of services including his overheads, income tax, super tax, other indirect costs, profits and costs of accepting the general risks, liabilities and obligations set forth or implied in the Contract, except for such costs which are specified as reimbursable under the Contract.
19. Arithmetic errors will be corrected by the Employer as per ITB 31.
20. Price of any other item not specifically covered in the Price Schedules but is required for the completion, commissioning and operation of the overhead transmission line shall be deemed to be included in the Schedule of Quantities.
21. The Contractor of any Lot may be required by the Engineer/Employer to carry out foundation /installation work on any location falling in any other Lot.
22. The Contractor will be responsible for arrangement of all necessary security measures for protection of Plants, equipment, personnel and other assets of Contractor or Employer at site until taking over of works by the Employer.
23. The Contractor shall take all the safeguards at site for safety/security of men, material and machinery at his own responsibility and cost.

24. The Contractor shall make available and install [05] number of WEBCAMs alongside necessary storage of atleast 06 months and servers for continuous monitoring of each site activities. The Contractor will provide access to the Engineer and Employer's designated persons. The placing/location/coverage decision for the installation of WEBCAMs will be done with the consent of Engineer.

Appendix-D to Bid

B. WORK ITEMS

1. The Bill of Quantities are divided into separate schedules as follows:
Lot-I
Bill No. (A) Construction of Associated Civil Works
Bill No. (B) Installation/ Erection, Testing &Commissioning
Summary of Bill of Quantities

Lot-II
Bill No. (A) Construction of Associated Civil Works
Bill No. (B) Installation/ Erection, Testing &Commissioning
Summary of Bill of Quantities
2. Bidders shall price the Bill of Quantities in local currency only.

LOT-I: CIVIL WORKS, ERECTION, TESTING & COMMISSIONING FOR ADDITION OF 02 NOS. 220KV LINE BAYS AT 220/132KV NOWSHERA INDUSTRIAL GRID STATION

(A) BOQ FOR CIVIL WORKS					
Addition of 02 Nos. Line Bays at 220/132kV Nowshera Industrial Substation					
Sr.No	Description	Unit	Qty.	Unit Rate (PKR)	Total Price (PKR)
1	2	3	4	5	4*5
1	<u>Earth Work</u>				
1.1	Clearing and grubbing of the complete site area for bushes,vegetation, trees, roots and weeds etc. as per General Layout, Specifications and as directed by the Engineer including dismantling of any old civil works if any, disposal of debris away from site to any lead.	Lot	1		
1.2	Filling, levelling and compaction of the built-up substation area with fill material to raise the level of the area in horizontal layers of 200 mm thickness (max) compacted up to 95% modified Proctor Density as per approved Contour Plan and Specifications and as directed by the Employer representative				
1.2.1	Using borrow fill material as per NTDC Specification with compaction 95% proctor density with mechanical means with any lead and lift for raising (after clearing, grubbing of site, joint level survey will establish the backfilling quantity).	Cu.m	1,500		
1.2.2	Backfilling using excavated material from the other foundations on site or cutting material within the site with compaction 95% proctor density with mechanical means	Cu.m	1,000		

		Total of Item No.1			
2	220kV Equipment Foundation				
2.1	220kV Switchyard Equipment/Gantry Foundations:				
	Supply and Construction of Reinforced Cement Concrete work for Equipment's and Gantry foundations having minimum cylinder crushing strength of 210 kg/ cm ² at 28 days using Ordinary Portland Cement(OPC) / Type-V conforming to ASTM C-150 inclusive of excavation / cutting, dewatering (if any), lean concrete/P.C.C/blinding layer, reinforcement (Grade 60), shuttering, concreting, curing, bitumen coating (min two coats) below ± 0 Level on all concrete surfaces, compacted backfilling, leveling/ grading, slope protection (where necessary), removal of surplus earth from site area as directed by Engineer, installation of stubs / anchor bolts, capping & grouting under structure sole and in block-out etc.				
i.	220kV post insulator (PI) foundation as per drawing No. PDD/CG-543.	No.	8		
ii.	220kV Single Pole Circuit breakers (CB) foundations as per specifications and drawing No. PDD/CG-538.	Set	3		
iii.	220kV CT/CVT/CCVT/LT foundations as per specification and drawing No. PDD/CG-540	No.	20		
iv.	220kV Surge Arrester (SA) foundation as per specification and drawing No. PDD/CG-542.	No.	6		
v.	220kV Bus/Line DS foundations as per specification and drawing No. PDD/CG-539	Set.	8		
vi.	220kV high level gantry foundation (18.5+4 m) as per drawing No.PDD/CG-546	No.	4		
vii.	220kV low level gantry foundation (13m) as per drawing No.PDD/CG-547	No.	2		
viii.	220kV low level gantry foundation (13+5.5+4m) as per drawing No.PDD/CG-545	No.	2		
		Total of Item No.2			

	Construction of Equipment foundations, Cable trenches, Transformer way, Switch yard Fence & gate, Fire protection wall etc.				
	132kV Switchyard Equipment Foundations:				
3	Switchyard Cable Trenches:				
3.1	Providing RCC cable trenches type A, B, C and D inclusive of RCC trench covers (precast or cast in situ as per design), hot dip galvanized steel Cable trays or hangers, slope and Expansion joints shall be as per Specifications				
i.	Cable Trench Type-A	Li.m	10		
ii.	Cable Trench Type-B	Li.m	300		
iii.	Cable Trench Type-C	Li.m	50		
iv.	Cable Trench Type-D	Li.m	120		
3.2	Supply and construction of cable trench crossing under transformer way and switchyard path complete in all aspects as per specification and drawing				
i.	Culvert for trench Type-B	Li.m	9		
3.3	Supply and construction of MK foundation as per drawings no PDD/CG-162	No.	3		
3.4	Design, Supply and Construction of PCC Switchyard & Service Roads complete in all aspects as per specification and drawing No. PDW/TV-2609				
i.	3 m wide	Li.m	180		
3.5	Supply and laying of 230mm RCC pipes under road complete in all respects.	Li.m	40		

3.6	Construction of switchyard surface water / rain / storm water drainage with steel grating and cable trenches water drainage system, road crossings its disposal system, draw pits / soakage pits with its efficient disposal system having pumping arrangements , if required (pump having minimum power 2HP) to dispose water from switchyard to switchyard outside area approved by the Engineer complete in all respects including its connection with existing surface drainage as per Specifications and approved Drawing by Engineer	lot	1		
i.	220kV Switchyard New Line Bay				
	Total of Item No.3				
4	Dismantling of Existing Water drain				
i.	Dismantling of existing water drain and filling with the material as obtained from excavation of equipment foundations	cum	45		
	Total of Item No.4				
5	Gravel Work				
i.	Supply and placing of river run gravel 40 to 60mm size (in 200mm thick layer) including toe wall (if required) in switchyard area as specified and as directed by the Engineer.	cu.m	800		
ii.	Removal of river run gravel in switchyard area, washed and used in Switchyard as specified and as directed by the Engineer.	cu.m	150		
	Total of Item No.5				
6	Extra BOQ items				
i)	Excavation to any type of soil by any means.	cu.m	50		

ii)	Providing and laying Lean Concrete 140kg/cm2, using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, molds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.)	cu.m	20		
iii)	Providing and laying RCC 210 kg/cm2, using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, molds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.)	cu.m	20		
iv).	Providing of deformed steel bars of ASTM A-615 Grade 60 for reinforced cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars)	Kg	200		
v).	Providing and laying Fair Face plain brick work 229mm (9") thick in foundations, walls etc. as per drawings and specifications in 1:4 C.M	cu.m	15		
vi).	Providing and laying minimum 1/2" thick cement plaster in 1:4 C.M using ordinary Portland cement wherever required.	Sq.m	50		
	Total of Item No.6				
	Total of Item No.1,2,3,4,5 & 6				
	<u>Notes:</u> 1. The quantities mentioned in the BOQ are estimated quantities. The actual quantities may vary depending upon detailed engineering and approved drawings. However, the unit rates for material and service quoted in the BOQ/ bid shall remain firm and final. 2. The drawings mentioned in BOQ are just for estimation/tender purpose. Foundation design is subjected to change as per soil investigation report and site conditions. The offered unit rates shall be adjusted as per actual civil work quantities based on relevant BOQ items (Break up is to be provided by bidder)/extra BOQ items whichever is minimum.				

	3. The breakup of unit rates for each item/works quoted in BOQ shall be provided with bid in accordance with design drawings provided with tender and the work at site shall be executed as per construction drawings provided/approved by the Engineer. 4. If non BOQ item is required to be executed at site, then its rate will be taken from the “Miscellaneous Civil Works”. 5. Switchyard trenches shall be provided with gradual slope for proper disposal/ drainage of rain water keeping in view the safety of other equipment in the Switchyard. Switchyard paths/ roads shall be provided keeping in view the slope/ level of switchyard, future extension and movement of cranes and its clearance from equipment/ live parts. 6. Switchyard area shall be designed in appropriate levels if applicable as per contour plan and $\pm$zero level to be provided by NTDC to minimize cutting and filling with proper provision of rain water drainage. 7. Any other item deemed necessary by the bidder for the successful completion and smooth operation of the project and not quoted above may also be quoted separately and mentioned herewith prior to the Bid submission. 8. Any item/ sub-item and its quantity not mentioned above or not quoted separately by the bidder in his bid, shall not be paid after the award of the Contract to the successful bidder. 9. In case of discrepancy between unit price and total price, unit price shall prevail and the payment will be made accordingly. 10. The cost quoted for above Works shall include cost of labor and cost of all accessories/ material/ equipment required for successful completion and operation.
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(B) Installation/ Erection, Testing & Commissioning
Addition of 02 Nos. 220kV Line Bays at 220/132kV Nowshera Industrial Grid Station

Item	Description	Unit	Qty	Unit Price (PKR)	Total(PKR)	Inland Transportation (PKR)	Total Price including Inland Transportation (PKR)
1	2	3	4	5	6=5x4	7	8=6+7
A.	220kV Equipment						
1	Circuit Breakers: Assembly and erection of three pole, 220kV 2000A, 40kA 1 Sec, SF6 Circuit Breaker with steel supporting structure, LCC and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor and control/power wiring/cabling with local control cubicle as per details given in specifications and drawings.	Set	03				
2	Bus & Line Isolators: Assembly and erection of three pole, 220kV, 2000A, 40kA 3 Sec, Disconnecter switch with or without earthing blades along with steel supporting structure, LCC and all accessories and associated work including but not limited to main diaconnections using Al pipe/bundle conductor and control/ power wiring/cabling with local control cubicle as per details given in specifications and drawings.	Set	08				
3	Current Transformer: Assembly and erection of 220kV, single pole, 50kA 1 Sec, Current Transformer along with steel supporting structure, MK Box and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor as per details given in specifications and drawings.	No.	12				
4	Voltage Transformer: Assembly and erection of 220kV, single pole, CVT/CCVT along with steel supporting structure, MK and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor as per details given in specifications and drawings.	No.	08				

6	Surge Arrester: Assembly and erection of 220kV, single pole, Surge Arrester along with steel supporting structure and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor as per details given in specifications and drawings.	No.	06				
7	Post Insulator: Assembly and erection of 220kV, single pole, Post Insulators along with steel supporting structure and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor as per details given in specifications and drawings.	No.	08				
8	Assembly, Installation, erection, of Main Busbars and its equipment/strain bus connections using bundle conductor/Al. pipe with all accessories, associated hardware, string assemblies and jumpers complete as per specification and drawings.	Lot	1				
9	Assembly, Installation of 220kV over-head Strain Buses and equipment connection using bundle conductors with all accessories, associated hardware, string assemblies and jumpers complete as per specification and drawings.	Lot	1				
10	Assembly, Installation of over-head Shield Wire with all accessories and hardware for and supply of connectors/clamps for 220kV portion of switchyard complete as per specifications and drawings.	Lot	1				
11	Assembly and erection of Gantry Columns & Beams as mentioned below along with accessories and associated work as per drawing and specification.						
11.1	Beams						
	16 m	No.	05				
	18.5 m	No.	02				
11.2	Columns						
	(13+5.5+4)m	No.	02				
	(18.5+4)m	No.	04				
	13m	No.	02				
B.	Substation General Equipment						
1	Excavation, laying, thermite welding, filling and testing of substation underground earthing mesh for new scope of work Line-Line Dia in 220kV switchyard and its interconnection with existing Earthing Mesh, indoor equipment/outdoor equipment, control house building, control / relay room, switchyard door / fence etc. complete	Lot	1				

	as per specifications and drawings. For Substation earthing, NGC will only supply conductor. Supply of all other material including Moulds, Catridges, thimbles, earthing rods, lugs etc. are included in the scope of the contractor.						
2	Design, supply (including but not limited to all the Cables, Distribution Boxes, Circuit Breakers, Lights, Relays, Switches, Sockets, Sensors, Fittings & Fixtures, etc. required as per specification) , Installation, wiring and connections of complete switchyard lighting including all associated works as per specifications and approved drawings.	Lot	1				
3	Firefighting System Supply and installation of CO ₂ , DCP and Halotron extinguishers for switchyards as per prevailing NGC, NFPA and international practices:						
	i) CO ₂ 6kG Extinguisher	No	1				
	ii) Halotron, 4kG Extinguisher	No	1				
	iii) Dry Chemical Powder 6kG Extinguisher	No	1				
	iv) CO ₂ 30kG Extinguisher Cart	No	1				
	v) DCP 30kG Extinguisher Cart	No	1				
C.	Testing and Commissioning of each equipment installed in the yard and control house building for new Line-Line Dia/Extension works, complete in all respects as per instructions of Engineers	Lot	1				
D.	Environmental Management						
i.	Environmental /HSE Officer having bachelors/ masters in Environmental Sciences/Engineering with three (03) years of relevant experience for the whole project construction period.	For whole construction period	1				
ii.	Water quality monitoring / testing/analysis on quarterly basis for the whole project period at one location near construction site.		6				
iii.	Air quality monitoring / testing on quarterly basis for the whole project period at at one location near construction site.		6				

iv.	Noise monitoring /analysis/measurement on quarterly basis for the whole project period at at one location near construction site.		6				
v.	HSE tools like First Aid Kits, Personal Protective Equipment (PPE), Emergency and Safety Lights, Fire extinguishers, safety lights, etc.		L.sum				
vi.	Waste Management (waste segregation bins, Waste bins for medical waste, sharp containers, wheel barrows, waste disposal services etc.)		L.sum				
	Total (to be carried forward to summary of BOQ)						

Notes:

1. Civil Works Contractor will be responsible for civil works, installation, testing & commissioning on single responsibility basis except the scope for secondary equipment Contract mentioned in Section-VI.
2. The installation and cable works of all panels inherent to primary equipment will be responsibility of civil works Contractor.
3. The material will be allocated by Design (NGC). Once the material is received by the contractor, its safe handling and any shortage thereof shall be responsibility of the contractor.
4. The quantities mentioned in BOQ are estimated quantities. The actual quantities may vary depending upon detailed engineering and approved drawings. However, the unit rates for material and service quoted in the BOQ/ bid shall remain firm and final.
5. The breakup of unit rates for each item/works quoted in the BOQ shall be provided with the bid in accordance with the design drawings provided with the tender and the work at site shall be executed as per construction drawings provided/ approved by the Employer.
6. Any other item deemed necessary by the bidder for successful completion and smooth operation of the project and not quoted above may also be quoted separately and mentioned herewith prior to Bid submission.
7. Any other item/sub item and its quantity not mentioned above or not quoted separately by the bidder in his bid, shall not be paid after award of contract to the successful bidder.
8. In case of discrepancy between unit price and total price, unit price shall prevail and the payment will be made accordingly.
9. The cost quoted for above Works shall include cost of labor and cost of all accessories/ material/ equipment required for successful completion and operation.
10. All type of Transportation will be the responsibility of the Civil Works Contractor from any warehouse in Pakistan except secondary equipment's as mentioned in Section-VI. The bidder shall quote the inland transportation by considering the NGC warehouse Gatti, Faisalabad for evaluation purpose only. Moreover, after 28 days of signing of contract, the successful bidder shall provide the breakups and unit rates of inland transportation cost for each equipment as per metric ton per kilometer. In case, transportation is from a location different then designated (i.e. NTDC warehouse Gatti, Faisalabad) point, the Engineer shall determine the rates pursuant to Clause 52.1.

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11. The Transportation of spare/serviceable material from site to any designated NGC warehouse is responsibility of the Contractor. After issuance of material re-conciliation report, the Engineer will coordinate allocation and transportation of this material to the designated warehouse. Such transportation cost shall be paid to contractor as per M. Ton per km basis.

Name of Bidder _____

Signature of Bidder _____

LOT-II: CIVIL WORKS, ERECTION, TESTING & COMMISSIONING FOR ADDITION OF 02 NOS. 220KV LINE BAYS AT 500KV SHEIKH MUHAMMADI GRID STATION

(A) BOQ FOR CIVIL WORKS					
Addition of 02 Nos. Line Bays at 500kV Sheikh Muhammadi Grid station					
Sr.No	Description	Unit	Qty.	Unit Rate (PKR)	Total Price (PKR)
1	2	3	4	5	4*5
1	<u>Earth Work</u>				
1.1	Clearing and grubbing of the complete site area for bushes,vegetation, trees, roots and weeds etc. as per Drawings, Specifications and as directed by the Engineer including dismantling of any old civil works if any, disposal of debris away from site to any lead.	Lot	1		
1.2	Cutting, Filling, levelling and compaction of the built-up substation area with fill material to raise the level of the area in horizontal layers of 200 mm thickness (max) compacted up to 95% modified Proctor Density as per approved Contour Plan and Specifications and as directed by the Employer representative	Cu. m	4000		
	Total of Item No.1				
2	220kV Switchyard Equipment Foundations				

	Supply and Construction of Reinforced Cement Concrete work for Equipment's and Gantry foundations having minimum cylinder crushing strength of 211 kg/ cm ² at 28 days using Ordinary Portland Cement(OPC) / Type-V conforming to ASTM C-150 inclusive of excavation / cutting, dewatering (if any), lean concrete/P.C.C/blinding layer, reinforcement (Grade 60), shuttering, concreting, curing, bitumen coating (min two coats) below ± 0 Level on all concrete surfaces, compacted backfilling, leveling/ grading, slope protection (where necessary), removal of surplus earth from site area as directed by Engineer, installation of stubs / anchor bolts, capping & grouting under structure sole and in block-out etc.				
i.	220kV Single Pole Circuit breakers (CB) foundations as per specifications and drawing No. PDD/CG-538.	No.	9		
ii.	220kV Current Transformers (CT) foundations as per specification and drawing No. PDD/CG-540	No.	15		
iii.	220kV Surge Arrester (SA) foundation as per specification and drawing No. PDD/CG-542.	No.	6		
iv.	220kV Bus/Line DS foundations as per specification and drawing No. PDD/CG-539	Set.	8		
v.	220kV Post Insulator (PI) Foundation as per drawing No. PDD/CG-543	No.	5		
vi.	220kV high level gantry foundation (18.5+4 m) as per specification and drawing No. PDD/CG-546	No.	3		
vii.	220kV Gantry foundation (13+5.5+4m) as per specification and drawing No. PDD/CG-545	No.	3		
viii.	220kV low level gantry foundation (13+4m) as per specification and drawing No.PDD/CG-547	No.	3		
ix.	Supply and construction of MK foundation as per drawings no PDD/CG-162	No.	3		

x.	Providing RCC cable trenches type A, B, C and D inclusive of RCC trench covers (precast or cast in situ as per design), hot dip galvanized steel Cable trays or hangers, slope and Expansion joints shall be as per Specifications				
	Cable Trench Type-A	Li.m	5		
	Cable Trench Type-B	Li.m	5		
	Cable Trench Type-C	Li.m	5		
	Cable Trench Type-D	Li.m	20		
	Total of Item No.2				
3	PVC Pipes				
3.1	Supply and installation of PVC conduit approved by Engineer for carrying miscellaneous cables from cable trenches to equipment as specified.				
	i. 50mm (2 inch) dia along with accessories (i.e. bends, joints)	Li.m	200		
	ii. 100mm (4 inch) dia along with accessories (i.e. bends, joints)	Li.m	200		
	iii. 150mm (6 inch) dia along with accessories (i.e. bends, joints)	Li.m	150		
	Total of Item No. 3				
4	Gravel Work				
4.1	Removal of extension portion, if required	Cu.m	300		
4.2	Supply and placing of river run gravel 40 to 60mm size (in 200mm thick layer) including toe wall (if required) in switchyard area as specified and as directed by Engineer.	Cu.m	800		
	Total of Item No. 4				
5	<u>Drainage work</u>				

	Construction of switchyard surface water / rain / storm water drainage with steel grating and cable trenches water drainage system, road crossings its disposal system, draw pits / soakage pits with its efficient disposal system having pumping arrangements , if required (pump having minimum power 3HP) and RCC pipeline minimum dia 225mm (9 inch) with proper jointing and its testing after filling the line with water for 24 hrs and noting leakage if any and accordingly make the improvement) to dispose water from switchyard outside area approved by the Engineer complete in all respects including PVC/UPVC pipes with manhole with covers , connecting with existing drainage system if available, as per Specifications and approved Drawing as approved by Engineer	Lot	1		
	Total of Item No. 5				
6	CHB				
6.1	Any civil, mechanical & electrification works (Extension of CHB etc) required in control building	Lot	1		
	Total of Item No. 6				
7	Extra BOQ items				
7.1	Excavation to any type of soil by any means.	cu.m	500		
7.2	Providing and laying Lean Concrete 140kg/cm ² , using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, molds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.)	cu.m	150		
7.3	Providing and laying RCC 210 kg/cm ² , using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, molds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.)	cu.m	150		

7.4	Providing of deformed steel bars of ASTM A-615 Grade 60 for reinforced cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars)	Kg	2000		
7.5	Providing and laying brick work 229mm (9") thick in foundations, walls etc. s per drawings and specifications in 1:4 C.M	cu.m	112		
7.6	Providing and laying minimum 1/2" thick cement plaster in 1:4 C.M using ordinary Portland cement wherever required.	Sq.m	500		
7.7	P/F platform of 40x4 mm G.I strip flat and bottom of G.I. tee iron 50x100x6 mm fixing in position including the allied civil works complete in all respect as per specifications and drawing	No.	20		
7.8	Dismantling of existing fence complete in all respect	Li.m	140		
7.9	Providing fencing around switchyard area complete in all respect as per drawing No. PDW/TB-786.	Li.m	250		
7.10	Providing toe wall under fence complete in all respect as per drawing No. PDW/TZ-1163 (if required)	Li.m	100		
	Total of Item No. 7				
	Total of Item No.1,2,3,4,5,6 & 7				
	Notes: 1. The quantities mentioned in the BOQ are estimated quantities. The actual quantities may vary depending upon detailed engineering and approved drawings. However, the unit rates for material and service quoted in the BOQ/ bid shall remain firm and final. 2. The drawings mentioned in BOQ are just for estimation/tender purpose. Foundation design is subjected to change as per soil investigation report and site conditions. The offered unit rates shall be adjusted as per actual civil work quantities based on relevant BOQ items (Break up is to be provided by bidder)/extra BOQ items whichever is minimum. 3. The breakup of unit rates for each item/works quoted in BOQ shall be provided with bid in accordance with design drawings provided with tender and the work at site shall be executed as per construction drawings provided/approved by the Engineer. 4. If non BOQ item is required to be executed at site, then its rate will be taken from the "Miscellaneous Civil Works". 5. Switchyard trenches shall be provided with gradual slope for proper disposal/ drainage of rain water keeping in view the safety of other equipment in the Switchyard. 6. Switchyard paths/ roads shall be provided keeping in view the slope/ level of switchyard, future extension and movement of cranes and its clearance from equipment/ live parts.				

	7. Switchyard area shall be designed in appropriate levels if applicable as per contour plan and $\pm$zero level to be provided by NGC to minimize cutting and filling with proper provision of rain water drainage. 8. Any other item deemed necessary by the bidder for the successful completion and smooth operation of the project and not quoted above may also be quoted separately and mentioned herewith prior to the Bid submission. 9. Any item/ sub-item and its quantity not mentioned above or not quoted separately by the bidder in his bid, shall not be paid after the award of the Contract to the successful bidder. 10. In case of discrepancy between unit price and total price, unit price shall prevail and the payment will be made accordingly. 11. The cost quoted for above Works shall include cost of labor and cost of all accessories/ material/ equipment required for successful completion and operation.
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(B) Installation/ Erection, Testing & Commissioning Addition of 02 Nos. 220kV Line Bays at 500kV Sheikh Muhammadi Grid Station							
Item	Description	Unit	Qty	Unit Price (PKR)	Total(PKR)	Inland Transportation (PKR)	Total Price including Inland Transportation (PKR)
1	2	3	4	5	6=5x4	7	8=6+7
A	220kV Equipment						
1	Circuit Breakers: Assembly and erection of three pole, 245kV 2000A, 50kA 1 Sec, SF6 Circuit Breaker with bushings having extended creepage distance and terminal head (Flat, 125mm x 125mm), tin plated or silver plated copper) along-with steel supporting structures, anchor bolts, LCC and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor and control/power wiring/cabling with local control cubicle as per details given in relevant specifications and drawings.	Set	03				
2	Bus Disconnectors/Isolators: Assembly and erection of three pole, 245kV, 2000A, 50kA 3 Sec, Disconnector switch with bushings having extended creepage distance and terminal head (Flat 125x125x30mm, tin or silver plated Aluminum) without earthing switch along-with complete steel supporting structure, anchor bolts and earthing platforms, LCC and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor and control/ power wiring/cabling with local control cubicle as per details given in relevant specifications and drawings.	Set	06				
3	Line Disconnectors/Isolators: Assembly and erection of three pole, 245kV, 2000A, 50kA 3 Sec, Disconnector switch with bushings having extended creepage distance and terminal head (Flat 125x125x30mm, tin or silver plated Aluminum) with Power Operated Earthing switch along-with complete steel supporting structure, anchor bolts and earthing platforms, LCC and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor and control/ power wiring/cabling with local control cubicle as per details given in relevant specifications and drawings.	Set	02				
	Current Transformer: Assembly and erection of 245kV, single	No.	09				

4	pole, 50kA 1 Sec, 2400:1200:600/1A ratio, 5 core Current Transformers with bushings having extended creepage distance and terminal head (Horizontal Stud type, 60mm dia, 125mm in length, silver or tin plated copper) along with steel supporting structure, MK Box (1No. for each set of 03No. CTs) and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor and control/power wiring/cablings with local control cubicle as per details given in specifications and drawings.						
5	Coupling Capacitor Voltage Transformer (CCVT): Assembly and erection of 245kV, Single pole, 2 core, 220/√3kV /110/√3V/ 110/√3V voltage ratio, Min 6000pF Coupling Capacitor Voltage Transformer with bushings having extended creepage distance, terminal Head (Vertical stud type, 80mm in length, 30mm in dia, tin or silver plated copper) complete with power line carrier coupling facilities, connectors, marshaling box (1 for each set of 3 No. CCVTs), steel supporting structure, anchor bolts, nuts and washers etc and all other allied work including but not limited to main dia connections using Al pipe/bundle conductor as per details as per relevant specifications and drawings.	No.	04				
6	Capacitor Voltage Transformer (CVT): Assembly and erection of 245kV, Single pole, 2 core, 220/√3kV /110/√3V/ 110/√3V voltage ratio, Capacitor Voltage Transformer with bushings having extended creepage distance, terminal Head (Vertical stud type, 80mm in length, 30mm in dia, tin or silver plated copper) complete with marshaling box (1 for each set of 3 No. CVTs), steel supporting structure, anchor bolts, connectors, nuts and washers etc and all other allied work including but not limited to main dia connections using Al pipe/bundle conductor as per details as per relevant specifications and drawings.	No.	02				
7	Surge Arrester: Assembly and erection of 198kV, single pole, Surge Arrester, 50kA having extended creepage distance with surge counter/monitor, terminal head (Vertical type, 80mm in length, 30mm dia and tin or silver plated copper), corona ring, anchor bolts along- with steel supporting structure and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor as per details given in relevant specifications and drawings.	No.	06				
8	Post Insulator: Assembly and erection of 245kV, single pole, Post Insulators having extended creepage distance along-with steel supporting structure and all accessories and associated work including but not limited to main dia connections using Al pipe/bundle conductor as per details given in relevant	No.	04				

	specifications and drawings.						
9	Assembly, Installation, erection, of Main Busbars and its equipment/strain bus connections using bundle conductor/Al.pipe with all accessories, associated connectors, hardware, Tension string assemblies (With/without Turn buckle), Suspension string assemblies and jumpers complete as per specification and drawings.	Lot	1				
10	Assembly, Installation of 220kV over-head Strain Buses and equipment connection using bundle conductors with all accessories, associated connectors, hardware, Tension string assemblies (With/without Turn buckle), Suspension string assemblies and jumpers complete as per specification and drawings.	Lot	1				
11	Assembly, Installation, erection of over-head Shield Wire with all accessories and hardware for 220kV extended portion of switchyard including supply of necessary items, complete as per specifications and drawings.	Lot	1				
12	Assembly and erection of Gantry Columns & Beams as mentioned below along with accessories and associated work as per drawing and specification.						
12.1	Beams (For double Hawthorn Conductor) 16 m	No.	10				
12.2	Columns (For double Hawthorn Conductor) (13+5.5+4)m (18.5+4)m 13m	No. No. No.	03 03 04				
B	Substation General Equipment						
1	Excavation, laying, thermite welding, filling and testing of substation underground earthing mesh for new scope of work Line–Line Dia in 220kV switchyard and its interconnection with existing Earthing Mesh, indoor equipment/outdoor equipment, control house building, control / relay room, switchyard door / fence etc. complete as per specifications and drawings. For Substation earthing, NGC will only supply conductor. Supply of all other material including Moulds, Catridges, thimbles, earthing rods, lugs etc. are included in the scope of the contractor.	Lot	1				

2	Design, supply (including but not limited to all the Cables, Distribution Boxes, Circuit Breakers, Lights, Relays, Switches, Sockets, Sensors, Fittings & Fixtures, etc. required as per specification), Installation, wiring and connections of switchyard lighting (New Scope) including all associated works as per specifications and approved drawings.	Lot	1				
3	Firefighting System Supply and installation of CO ₂ , DCP and Halotron extinguishers for switchyards as per prevailing NGC, NFPA and international practices:						
	i) CO ₂ 6kG Extinguisher	No	1				
	ii) Halotron, 4kG Extinguisher	No	1				
	iii) Dry Chemical Powder 6kG Extinguisher	No	1				
	iv) CO ₂ 30kG Extinguisher Cart	No	1				
	v) DCP 30kG Extinguisher Cart	No	1				
C	Testing and Commissioning of each equipment installed in the yard and control house building for new Line-Line Dia/Extension works, complete in all respects as per instructions of Engineer	Lot	1				
D.	Environmental Management						
i.	Environmental /HSE Officer having bachelors/ masters in Environmental Sciences/Engineering with three (03) years of relevant experience for the whole project construction period.	For whole construction period	1				
ii.	Water quality monitoring / testing/analysis on quarterly basis for the whole project period at one location near construction site.		6				
iii.	Air quality monitoring / testing on quarterly basis for the whole project period at at one location near construction site.		6				
iv.	Noise monitoring /analysis/measurement on quarterly basis for the whole project period at at one location near construction site.		6				
v.	HSE tools like First Aid Kits, Personal Protective Equipment (PPE), Emergency and Safety Lights, Fire extinguishers, safety lights, etc.		L.sum				
vi.	Waste Management (waste segregation bins, Waste bins for medical waste, sharp containers, wheel barrows, waste disposal services etc.)		L.sum				

	Total (to be carried forward to summary of BOQ)	
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Notes:

1. Civil Works Contractor will be responsible for civil works, installation, testing & commissioning on single responsibility basis except the scope for secondary equipment Contract mentioned in Section-VI.
2. The installation and cable works of all panels inherent to primary equipment will be responsibility of civil works Contractor.
3. The material will be allocated by Design (NGC). Once the material is received by the contractor, its safe handling and any shortage thereof shall be responsibility of the contractor.
4. The quantities mentioned in BOQ are estimated quantities. The actual quantities may vary depending upon detailed engineering and approved drawings. However, the unit rates for material and service quoted in the BOQ/ bid shall remain firm and final.
5. The breakup of unit rates for each item/works quoted in the BOQ shall be provided with the bid in accordance with the design drawings provided with the tender and the work at site shall be executed as per construction drawings provided/ approved by the Employer.
6. Any other item deemed necessary by the bidder for successful completion and smooth operation of the project and not quoted above may also be quoted separately and mentioned herewith prior to Bid submission.
7. Any other item/sub item and its quantity not mentioned above or not quoted separately by the bidder in his bid, shall not be paid after award of contract to the successful bidder.
8. In case of discrepancy between unit price and total price, unit price shall prevail and the payment will be made accordingly
9. The cost quoted for above Works shall include cost of labor and cost of all accessories/ material/ equipment required for successful completion and operation.
10. All type of Transportation will be the responsibility of the Civil Works Contractor from any warehouse in Pakistan except secondary equipment's as mentioned in Section-VI. The bidder shall quote the inland transportation by considering the NGC warehouse Gatti, Faisalabad for evaluation purpose only. Moreover, after 28 days of signing of contract, the successful bidder shall provide the breakups and unit rates of inland transportation cost for each equipment as per metric ton per kilometer. In case, transportation is from a location different then designated (i.e. NGC warehouse Gatti, Faisalabad) point, the Engineer shall determine the rates pursuant to Clause 52.1.
11. The Transportation of spare/serviceable material from site to any designated NGC warehouse is responsibility of the Contractor. After issuance of material reconciliation report, the Engineer will coordinate allocation and transportation of this material to the designated warehouse. Such transportation cost shall be paid to contractor as per M. Ton per km basis

Name of Bidder _____

Signature of Bidder _____

**LOT-I: CIVIL WORKS, ERECTION, TESTING & COMMISSIONING FOR ADDITION OF 02 NOS. 220KV LINE BAYS AT
220/132KV NOWSHERA INDUSTRIAL GRID STATION**

SUMMARY OF BILL OF QUANTITIES

Item No.	Description	Total Price (Pak Rs.)
1.	BOQ OF CIVIL WORKS FOR EQUIPMENT FOUNDATION	
2.	BOQ FOR INSTALLATION/ERECTION TESTING & COMMISSIONING OF EQUIPMENT	
3.	PROVISIONAL SUM	10,500,000
GRAND TOTAL to be carried forward to Form of Price Bid		

Name of Bidder _____

Signature of Bidder _____

LOT-II: CIVIL WORKS, ERECTION, TESTING & COMMISSIONING FOR ADDITION OF 02 NOS. 220KV LINE BAYS AT 500KV SHEIKH MUHAMMADI GRID STATION**SUMMARY OF BILL OF QUANTITIES**

Item No.	Description	Total Price (Pak Rs.)
1.	BOQ OF CIVIL WORKS FOR EQUIPMENT FOUNDATION	
2.	BOQ FOR INSTALLATION/ERECTION TESTING & COMMISSIONING OF EQUIPMENT	
3.	PROVISIONAL SUM	11,900,000
GRAND TOTAL to be carried forward to Form of Price Bid		

Name of Bidder _____

Signature of Bidder _____

Appendix-E to Bid Sheet 1 of 2

PROPOSED CONSTRUCTION SCHEDULE

Pursuant to Sub-Clause 43.1 of the General Conditions of Contract, the Works shall be completed on or before the date stated in Appendix-A to Bid. The Bidder shall provide as Appendix-E to Bid, the Construction Schedule in the bar chart (CPM, PERT or any other to be specified herein) showing the sequence of work items and the period of time during which he proposes to complete the Works including the activities like mobilization, survey for staking, Civil Works (Foundations), Erection of Towers, Stringing, OPGW Splicing, testing and commissioning of Works to be executed under the Contract. It shall include but not limited to the following:

Sr. No.	Description of Work	Period in months from the effective date of contract
1.	Establishment of site office	
2.	Erection a) Commencement b) Completion	
3.	Testing & Pre-commissioning a) Commencement b) Completion	
4.	Commissioning	

To provide the accumulative effective of the activities per month, the bidder shall also provide the graph/ chart as following:

Sr. No.	Description	Days(Months)				
1.	Signing of contract	30	60	90	120	-----
2.	Commencement					
3.	Mobilization					
4.	Check Survey					
5.	Civil Works (Foundations)					
6.	Erection					
7.	Stringing					
8.	Testing & commissioning					

The proposed program of Works shall base on the Schedule of Implementation as per Bidding Documents.

**Appendix-E to Bid
Sheet 2 of 2**

Note: The bidder shall also indicate the construction crews employed to achieve the completion target for the following:

Type of Crews	No. of Crew employed	Expected Progress/month/crew*
Foundation Crew		
Piling Crew		
Erection Crew		
Stringing Crew		

*Mention the required time per tower of a crew to complete a certain activity e.g., foundation etc.

Note: *The Engineer while making his determination for extension of time under this clause will take due consideration of the (committed) resources to be deployed by the Contractor at site in accordance with this appendix*

Appendix-F to Bid**METHOD OF PERFORMING THE WORK**

The Bidder is required to submit a narrative outlining the method of performing the Work. The narrative should indicate in detail and include but not be limited to:

1. Organization Chart indicating head office and field office personnel involved in management and supervision, engineering, equipment maintenance and purchasing.
2. Detailed Work Plan depicting the detail of activity (atleast level-04) and the expectation of cash flows.
3. Mobilization in Pakistan, the type of facilities including personnel accommodation, office accommodation, provision for maintenance and for storage, communications, security and other services to be used.
4. The method of executing the Works, the procedures for installation of equipment and machinery and transportation of equipment and materials to the site.
5. Quality control / Quality assurance measures to be adopted including procedures to be followed for carrying out all tests required under specifications.

Note: *The Engineer while making his determination for extension of time under this clause will take due consideration of the (committed) resources to be deployed by the Contractor at site in accordance with this appendix*

Personnel**Form PER – 1: Proposed Personnel**

Bidders should provide the names of suitably qualified personnel to meet the specified requirements for each of the positions listed in Section 2. The data on their experience should be supplied using the Form below for each candidate.

1.	Title of position
	Name
2.	Title of position*
	Name
3.	Title of position*
	Name
4.	Title of position*
	Name
5.	Title of position*
	Name

Form PER - 2: Resume of Proposed Personnel

The Bidder shall provide all the information requested below. Fields with asterisk (*) shall be used for evaluation.

Position*		
Personnel information	Name	Date of birth
	Professional qualifications	
Present employment	Name of employer	
	Address of employer	
	Telephone	Contact (manager / personnel officer)
	Fax	E-mail
	Job title	Years with present employer

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From*	To*	Company, Project, Position and Relevant Technical and Management Experience*

Note: *The Engineer while making his determination for extension of time under this clause will take due consideration of the (committed) resources to be deployed by the Contractor at site in accordance with this appendix*

Appendix-H to Bid

EQUIPMENT

Form EQ – 1: List of Major Equipment – Related Items (for each Lot)

The Bidder will provide on Sheet 2 of this Appendix a list of all major equipment and related items, under separate heading for items owned, to be purchased or to be arranged on lease by him to carry out the Works. The information shall include make, type, capacity, and anticipated period of utilization for all equipment which shall be in sufficient detail to demonstrate fully that the equipment will meet all requirements of the Specifications.

Sr No.	Equipment Type and Characteristics	Minimum Number Required
1	Vibrator	01
2	Flatbed Compactor	02
3	Scaffolding	02
4	Crane	01
5	Material Lift Mixture	02
6	Mechanical excavators	03
7	Trucks/Loaders	04
8	General tools for tube connection	03
9	Instruments for testing & commissioning of 500kV AIS plant including protection & signaling	01 Set
10	Standard Instruments for erection of AIS plant	01 Set
11	Gas filling plant	01
12	General tools for erection of 500kV Equipment	01 Set
13	Relevant T&P and machinery required for successful testing & commissioning completion of the work	As per requirement

Note: The Engineer while making his determination for extension of time under this clause will take due consideration of the (committed) resources to be deployed by the Contractor at site in accordance with this appendix

Form EQ – 2: List of Major Equipment

Owned Purchased or Leased	Description of Unit (Make, Model, Year)	Capacity / Rating	Condition	Present Location or Source	Date of Delivery at Site	Period of Work on Project
1	2	3	4	5	6	7
a. Owned						
b. To be Purchased						
c. To be arranged on Lease						

* Foundation work will involve both dry type foundation and water logged foundation equipment.

Appendix-I to Bid**CONSTRUCTION CAMP AND HOUSING FACILITIES**

The Contractor in accordance with Clause 34 of the Conditions of Contract shall provide description of his construction camp's facilities and staff housing requirements.

The Contractor shall be responsible for pumps, electrical power, water and electrical distribution systems, and sewerage system including all fittings, pipes and other items necessary for servicing the Contractor's construction camp.

The Bidder shall list or explain his plans for providing these facilities for the service of the Contract as follows:

1. Site Preparation (clearing, land preparation, etc.).
2. Provision of Services.
 - a) Power (expected power load, etc.).
 - b) Water (required amount and system proposed).
 - c) Sanitation (sewage disposal system, etc.).
3. Construction of Facilities
 - a) Contractor's Office. Workshop and Work Areas (areas required and proposed layout, type of construction of buildings, etc.).
 - b) Warehouses and Storage Areas (area required, type of construction and layout).
 - c) Housing and Staff Facilities (Plans for housing for proposed staff, layout, type of construction, etc.).
4. Construction Equipment Assembly and Preparation (detailed plans for carrying out this activity).
5. Other Items Proposed (Security services, etc.).
6. Detail of testing Lab with testing equipment etc.

Appendix-J to Bid

ORGANIZATION CHART
FOR THE
SUPERVISORY STAFF AND LABOR

The Bidder shall provide Organization Chart for the supervisory staff and labor hereunder which shall meet the requirements of each construction activity. For this purpose, the Bidder shall ensure that he shall at least deploy the following personnel for the key positions for each Lot meeting the experience requirements as listed out hereunder:

Sr No.	Position	Relevant Construction Experience [years]
1	Project Manager	10
2	Construction Manager	07
3	Site Engineer Civil	07
4	Site Engineer Electrical	07
5	Plant erectors	07
6	Testing & Commissioning Engineer	07
7	Environmental Safeguard Expert	1-2

The above personnel shall be graduate engineers registered with Pakistan Engineering Council or equivalent except Environmental / HSE Officer who should have Master's Degree in Environmental Sciences/Engineering with 1-2 years relevant experience)

Initials of Signatory to Bid_____

Appendix-K to Bid**LIST OF SUBCONTRACTORS**

I/We intend to subcontract the following parts of the Work to subcontractors. In my/our opinion, the subcontractors named hereunder are reliable and competent to perform that part of the work for which each is listed.

Enclosed are documentation outlining experience of subcontractors, the curriculum vitae and experience of their key personnel who will be assigned to the Contract, equipment to be supplied by them, size, location and type of contracts carried out in the past.

Part of Works (Give Details)	Subcontractor (With Complete Address)
1	2

Note:- The subcontractor will not be replaced without prior approval of the Employer.

Appendix-L to Bid**SOURCES OF MATERIAL
LIST OF MATERIALS LIKE CEMENT, REINFORCING STEEL**

The bidder shall list in this Schedule the names of materials forming part of tower foundations such as cement, reinforcing steel which he intends to procure in connection with this Contract along with the names and complete addresses of the sources.

Name of Goods/Material/ Equipment Name of Factory	Address	

Use additional sheets if required.

Appendix-M To Bid**ESTIMATED PROGRESS PAYMENTS**

Bidder's estimate of the value of work which would be executed by him during each of the periods stated below, based on his Program of Works and the Rates in the Schedule of Prices,

Period	Amounts (Rs.)
Ist Month	
2 nd Month	
3rd Month	
4th Month	
5th Month	
6th Month	
7th Month	
8th Month	
9th Month	
10th Month	
11th Month	
12th Month	
13th Month	
14th Month	
15th Month	
16th Month	
17th Month	
18th Month	
Total Bid Price	

Initials of Signatory to Bid:

Appendix-N to Bid**DEVIATIONS****Form D1-Deviations from Contractual Conditions**

Deviations if any, which the bidder has taken to the Contractual Conditions in preparation of his bid, must be listed below.

Sr. No.	Clause No. /Section No.	Deviations
---------	-------------------------	------------

Note: Attach additional sheets, if necessary.

Form D2-Deviations from Technical Conditions

Deviations if any, which the bidder has taken to the Technical Provisions in preparation of his bid, must be listed below.

Sr. No.	Clause No. /Section No.	Deviations
---------	-------------------------	------------

Note: Attach additional sheets, if necessary.

Appendix-O to Bid

INTEGRITY PACT

**DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC.
PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS
IN CONTRACTS WORTH RS. 10.00 MILLION OR MORE**

Contract No. _____ Dated _____

Contract Value: **+10 million**

Contract Title: _____

[Name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan (GoP) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoP through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Supplier] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [name of Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

Name of Buyer:

.....

Signature:

.....

[Seal]

Name of Seller/Supplier:

Signature:

[Seal]

ADB Integrity Covenant

1. The ADB Integrity Covenant applies throughout the procurement process and performance/execution process of the Contract (if awarded).
2. Firms and individuals, including but not limited to Bidders, suppliers, Contractors(if awarded), agents, subcontractors, subconsultants, service providers, subsuppliers, manufacturers (including their respective officers, directors, employees and personnel) participating in the procurement and performance/execution of the Contract are required to observe the highest standard of ethics, as applicable and in accordance with Asian Development Bank's Anticorruption Policy (1998, as amended from time to time). We acknowledge that we have read and understand ADB's Anticorruption Policy and Integrity Principles and Guidelines (2015, as amended from time to time).
3. For the purpose of provision 2, the terms are set forth below as follows:
 - (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
 - (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;
 - (v) "abuse" means theft, waste, or improper use of assets related to ADB-related activity, either committed intentionally or through reckless disregard;
 - (vi) "conflict of interest" means any situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations;
 - (vii) "integrity violation" means any act, as defined under ADB's Integrity Principles and Guidelines (2015, as amended from time to time), which violates ADB's Anticorruption Policy, including (i) to (vi) above and the following: obstructive practice, violations of ADB sanctions, retaliation against whistleblowers or witnesses, and other violations of ADB's Anticorruption Policy, including failure to adhere to the highest ethical standard.
4. Pursuant to provision 2, ADB will impose remedial actions on a firm or an individual at any time, in accordance with ADB's Anticorruption Policy and Integrity Principles and Guidelines, including declaring ineligible, either indefinitely or for a stated period of time, to participate ³in ADB-financed, -administered, or -supported activities, or to benefit from an ADB-financed, -administered, or -supported contract, financially or otherwise, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations.
5. All Bidders, consultants, Contractors (if awarded), suppliers, manufacturers, service providers, and other third parties engaged or involved in the procurement and execution/performance of the Contract and their respective officers, directors, employees and personnel, are obliged to

³ Whether as a Contractor, Subcontractor, Consultant, Manufacturer or Supplier, or Service Provider; or in any other capacity (different names are used depending on the particular Bidding Document).

cooperate fully in any investigation when requested by ADB to do so. As determined on a case by case basis by ADB, such cooperation includes, but is not limited to, the following:

- (a) being available to be interviewed and replying fully and truthfully to all questions asked;
- (b) providing ADB with any items requested that are within the party's control including, but not limited to, documents and other physical objects;
- (c) upon written request by ADB, authorizing other related entities to release directly to ADB such information that is specifically and materially related, directly or indirectly, to the said entities or issues which are the subject of the investigation;
- (d) cooperating with all reasonable requests to search or physically inspect their person and/or work areas, including files, electronic databases, and personal property used on ADB activities, or that utilizes ADB's Information and Communications Technology (ICT) resources or systems (including mobile phones, personal electronic devices, and electronic storage devices such as external disk drives);
- (e) cooperating in any testing requested by ADB, including but not limited to, fingerprint identification, handwriting analysis, and physical examination and analysis; and
- (f) preserving and protecting confidentiality of all information discussed with, and as required by, ADB.

6. All Bidders, consultants, Contractors (if awarded) and suppliers shall require their officers, directors, employees, personnel, agents to ensure that, in its contracts with its sub-consultants, subcontractors, and other third parties engaged or involved in the procurement and execution/performance of the Contract, and other third parties similarly are obliged to cooperate fully in any investigation when requested by ADB to do so.

We, the undersigned, declare that:

7. We, our directors, key officers, key personnel, including any subcontractor, consultants, subconsultants, manufacturers, service providers or supplier for any part of the Contract, do not have any conflict of interest in accordance with IB 3.2.

If there is any conflict of interest, please state details:

Parties involved in the conflict of interest: _____

Details about the conflict of interest: _____

8. At any time following submission of our Bid, we shall permit, and shall cause our joint venture partners, directors, key officers, key personnel, associates, parent company, affiliates or subsidiaries, including any subcontractors, consultants, subconsultants, manufacturers, service providers or suppliers for any part of the Bid and/or Contract (if awarded) to permit ADB or its representative to inspect our site, assets, accounts and records and other documents relating to the Bid submission and performance/execution of the Contract (if awarded) and to have them audited by auditors appointed by ADB. We understand that failure of this obligation may constitute obstructive practice that may result in debarment and/or contract termination. This provision 8 shall survive termination and/or expiration of the Contract (if awarded).

9. The Bidder or Contractor (if awarded) undertakes that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the Form of Price Bid and Integrity Pact, have been given or received in connection with the procurement process or in the contract execution/performance.
10. Our firm, joint venture partners, our respective direct and indirect shareholders, directors, key officers, key personnel, associates, parent company, affiliates or subsidiaries, including any subcontractors, consultants, subconsultants, manufacturers, service providers or Suppliers for any part of the contract, are not subject to, or not controlled by any entity or individual that is subject to a temporary suspension or a debarment imposed by the Asian Development Bank; or a debarment imposed by the Asian Development Bank in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the Asian Development Bank and other multilateral development banks. If we become subject to such temporary suspension and debarment during the procurement and performance/execution of the Contract, we shall inform the Employer.
11. Our firm, joint venture partners, associates, parent company, affiliates or subsidiaries, including any Subcontractors, consultants, subconsultants, manufacturers, service providers or suppliers, key officers, directors and key personnel are not from a country which is prohibited to export goods or services to, or receive any payments from the Employer's country and/or are not prohibited to receive payments for particular goods or services by the Employer's country by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. We shall inform the Employer if the situation described in this declaration 11 occurs during the procurement and execution/performance of the Contract.
12. Regardless of whether the Contract will be awarded to us, we shall preserve all accounts, records and other documents related to Bid submission for at least 3 years from the date of submission of the bid or the period prescribed in applicable law, whichever is longer. If we are awarded the Contract, we shall preserve all accounts, records and other documents related to the procurement and performance/execution of the Contract for at least 5 years after completing the works contemplated in the relevant Contract or the period prescribed in applicable law, whichever is longer.
13. We certify on behalf of the Bidder, that the information provided in the bid has been fully reviewed, given in good faith, and to the best of our knowledge is true and complete. We understand that it is our obligation to inform the Employer of any changes to the information as and when it becomes known to us. We understand that any misrepresentation that knowingly or recklessly misleads or attempts to mislead may lead to the automatic rejection of the Bid or cancellation of the Contract, if awarded; and may result in remedial actions, in accordance with ADB's Anticorruption Policy (1998, as amended to date) and Integrity Principles and Guidelines (2015, as amended from time to time).

Name of Buyer:

Signature:
[Seal]

Name of Seller/Supplier:

Signature:
[Seal]

Appendix-P to Bid**BIDDER'S QUALIFICATION FORMS**

QF-1	General Information
QF-2	Construction Experience
QF-3	Performance Certificate
QF-4	Current Contract Commitments
QF-5	Financial Data
QF-6	Annual Turnover Data
QF-7	Financial Resources
QF-8	Bank Certificate
QF-9	Pending Litigation

Note:-

1. These forms shall be filled up and furnished by the Bidder and its Joint Venture partner(s), if any.
2. If necessary, additional sheets may be added to the forms. Each page of each form should be clearly marked in the right top corner as follows: Form QF1, page 1; Form QF1, page 2, etc.
3. Some forms will require attachments. Such attachments should be clearly marked as follows: Attachment 1 to Form QF1, Attachment 2 to Form QF1, etc.

Form QF-1: General Information

Bidder and its Joint Venture Partner(s) and/or Subcontractors are requested to complete the information in this form. Nationally information of Bidders should also be provided.

1.	Name of Bidder	
2.	Head office address	
3.	Local office address (if any)	
4.	Telephone	Contract
5.	Facsimile	e-mail
6.	Place of incorporation/registration	Year of incorporation/registration
7.	Main lines of Business	
	1.	Since:
	2.	Since:
	3.	Since:
	4.	Since:

Note:

Copies of following credentials shall be attached:

- (a) Copy of incorporation/registration certificate
- (b) Organization chart
- (c) PEC registration certificate in the appropriate category

Signature and Seal of Bidder:

Form QF-2: Construction Experience

Note: To be filled in accordance with criteria described in clause IB3.1 (b) Section-II of the bidding documents

(For a period of Last 10 Years)

Name of the Project:

Order Placed by (full address of Employer)	Order No. and date	Description of Works	Value of order	Date of completion as per contract	Date of actual completion	Remarks indicating reasons for late completion, if any	Has the project been running satisfactorily? (Attach a certificate from the Employer)	Contact person along with Telephone No., Fax No. and email address

Signature and Seal of the Bidder.....

Place:

Date:

Form QF-3: Performance Certificate

It is to certify that M/s. _____ has conducted the following works against mentioned project.

Sr.No.	Contract No. & Date	Designation & address of order placing authority/User	Name of Project	Description of Works	Date of Commencement	Date of Completion

The above services/Works have been performed against our Project and their performance is found satisfactory.

Date of issuing _____

Signature of issuing authority with seal
Name and designation of issuing authority
Address along with Email, Phone No. and
Fax of issuing authority

Note:

- i. In case of those bidders who have provided services to NGC shall furnish the details of such works in the above Performa which shall be signed by their authorized signatory along with seal and certificate is not required from the Employer in this respect.

In case the performance certificate is not verifiable through the given contact address and email, the bid may be rejected.

Form QF-4: Current Contract Commitments

Bidders (or each Joint Venture partner) should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name below:

Joint Venture Partner: _____

Current Contract Commitments							
No.	Name of Contract	Employer's Contact (Address, Tel, Fax)	Total Contract Value	Contract Completion Date	Outstanding Contract Value (X) ^a	Remaining Contract Period in months (Y) ^b	Monthly Financial Resources Requirement (X/Y)
1							
2							
3							
4							
Total Monthly Financial Requirement for Current Contract Commitments							\$

^a Remaining outstanding contract values to be calculated from 28 days prior to the bid submission deadline (\$ equivalent based on the foreign exchange rate as of the same date).

^b Remaining contract period to be calculated from 28 days prior to bid submission deadline.

^c The monthly commitments calculated from above table will be multiplied with a factor (proposed "3") to calculate the total commitments for 03 months.

Form QF-5: Financial Data

Financial Data for Previous 5 Years			
Particular			
Total Assets			
Total Liabilities			
Net Worth			
Current Assets			
Current Liabilities			
Information from Income Statement			
Total Revenues			
Profits Before Taxes			
Profits After Taxes			
Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the last five years, as indicated above, complying with the following conditions.			
- All such documents reflect the financial situation of the Bidder and not sister or parent companies. - Historic financial statements must be audited by a certified accountant. - Historic Financial statements must be complete, including all notes to the financial statements. - Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).			

Signature and Seal of the bidder:

Form QF-6: Annual Turnover Data

Name of Bidder/Joint Venture Partner:

Bidder and its Joint Venture Partner(s) are requested to complete the information in this form separately. The information supplied should be the annual turnover of the Bidder, in terms of the amounts billed to clients for each year for work in progress or completed. In case of a joint venture, a copy of the Joint Venture Agreement must be attached. The average Annual Turnover may include turnover of affiliates and subsidiaries to the extent of shareholding percentage of bidding company provided the turnover is accrued from similar business activity as the bidding company.

Use a separate sheet for bidder and its Joint Venture partner(s).

Annual turnover data for the following last five (05) fiscal years			
Year	Amount Currency	Exchange Rate	Equivalent Amount (in the currency of Bid)
Average Annual Turnover			

Signature and Seal of Bidder:

Form QF-7: Financial Resources

Form FIN – 3: Availability of Financial Resources

Bidders shall specify proposed sources of financing, such as liquid assets, lines of credit and other financial means to meet the Bidder's financial requirements for

- (a) its current contract commitments calculated on three (03) months basis, and
- (b) the subject contract.

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name below:

Joint Venture Partner: _____

Financial Resources		
No.	Source of financing	Amount (\$ equivalent)
1	Liquid Assets	
2	Credit Line ^a	
3	Other Financial Resources	
Total Available Financial Resources		

^a To be substantiated by a letter from the bank issuing the line of credit.

[Note: No credit line after opening of bids shall be acceptable. Any withdrawal of the credit lines from the bidder's creditors during validity of bid shall be considered a withdrawal of bid]

Form QF-8: Bank Certificate

This is to certify that M/s..... is a reputed company with a good financial standing.

If the contract for the work, namely,..... is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs..... to meet their working capital requirements for executing the above contract.

Signature of Senior Bank Manager:_____

Name of the Senior Bank Manager:_____

Address of the Bank:_____

Stamp of the Bank

Note: Certificate should be on the letter head of the bank.

▪ **Change the text as follows for Joint Venture:**

This is to certify that M/s..... who has formed a JV with M/s.....and M/s.....for participating in this bid, is a reputed company with a good financial standing.

If the contract for the work, namely,..... is awarded to the above Joint Venture, we shall be able to provide overdraft/credit facilities to the extent of Rs..... to M/s..... to meet the working capital requirements for executing the above contract.

[This should be given by each of the JV members in proportion to their financial participation.]

Form QF-9: Pending Litigation

Each Bidder or member of a JV must fill in this form

Pending Litigation					
Year	Name of Other Party(s)	Matter of Dispute	Litigation where (Court/ arbitration)	Amount involved	Value of pending claim as a %age of net worth

Signature and Seal of the bidder:

Appendix-Q to Bid**Undertaking for Bidder's Compliance with Project Safeguards Requirements**

We, *[insert name of bidder]* hereby affirm our full understanding of, and commitment to, all applicable environmental, social, health, and safety (ESHS) safeguards requirements of the Asian Development Bank, National Grid Company of Pakistan Limited, and the Government of Pakistan. We undertake to implement all safeguard measures in a timely and effective manner, allocate adequate resources, and ensure strict compliance with the ADB Safeguard Policy Statement 2009 and approved project safeguard documents (EIA / IEE / ESMP / RP etc.) throughout the project lifecycle. We further commit to continuous monitoring, transparent reporting, and proactive engagement with stakeholders to achieve high standards of environmental and social performance.

Signature and Seal of Bidder:

Date:

STANDARD FORMS

BID SECURITY (Bank Guarantee)
(Provide Bid Security for each Lot Separately)

Security Executed on _____ (Date)

Name of Surety (Bank) with address _____
(Scheduled Bank in Pakistan)

Name of Principal (Bidder) with Address: _____

Guaranteed Amount/Sum of Security Rupees _____ (Rs. _____)

Bid Reference No. _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bid and at the request of the said Principal (Bidder) we, the Surety above named, are held and firmly bound unto _____ (Hereinafter called the 'Employer') in the sum 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 Bidder has submitted the accompanying Bid dated ____ for Bid No. ____ for ____ (Particulars of Bid) to the said Employer; and

WHEREAS, the Employer has required as a condition for considering said Bid that the Bidder furnishes a Bid Security in the above said sum to the Employer, conditioned as under:

- (1) That the Bid Security shall remain in force up to and including the date 28 days after the deadline for validity of bids as stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Surety is hereby waived;
- (2) That the Bid Security of unsuccessful Bidders will be returned by the Employer after expiry of its validity or upon signing of the Contract Agreement; and
- (3) That in the event of failure of the successful Bidder to execute the proposed Contract Agreement, involvement in Corrupt and/or fraudulent practices and/or furnish the required Performance Security, the entire said sum be paid immediately to the said Employer pursuant to Clause 19.6 of the Instructions to Bidders for the successful Bidder's failure to perform.

NOW THEREFORE, if the successful Bidder shall, within the period specified therefor, on the prescribed form presented to him for signature enter into a formal Contract with the said Employer in accordance with his Bid as accepted and furnish within fourteen (14) days of his being requested to do so, a Performance Security with good and sufficient surety, as may be required, upon the form prescribed by the said Employer for the faithful performance and proper fulfillment of the said Contract or in the event of non-withdrawal of the said Bid within the time specified for its validity then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

PROVIDED THAT the Surety shall forthwith pay the Employer the said sum upon first written demand of the Employer (without cavil or argument) and without recourse to the Principal or any other third party in the necessity any proceeding whatever judicial or otherwise irrespective of any dispute, difference or disagreement between the Bidder and the Employer or contestation by any other party/person. We agree that for the purpose of this Bid Bond, the Employer shall be the sole and exclusive judge for determining whether events listed in ____ above have occurred and any written demand made in the manner stipulated herein by the Employer shall be conclusive evidence of the occurrence of one or more of the events listed above. We shall at all times be bound to the first written demand of the Employer to pay the Employer forthwith the amount hereby agreed and without requiring the Employer to prove or to show grounds or reasons for such demand, notice of which shall be sent by the Employer by registered post duly addressed to the Surety at its address given above.

PROVIDED ALSO THAT the Employer shall be the sole and final judge for deciding whether the Principal (Bidder) has duly performed his obligations to sign the Contract Agreement and to furnish the requisite Performance Security within the time stated above, or has defaulted in fulfilling the said requirements and the Surety shall pay without

objection the said sum upon demand from the Employer forthwith and without any reference to the Principal (Bidder) or any other person.

IN WITNESS, WHEREOF, the above bounden Surety has executed the instrument under its seal on the date indicated above, the name and seal of the Surety being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

Witness:

1. _____

Corporate Secretary (Seal)

2. _____

Name, Title & Address
Name, Title & Address

Guarantor (Bank)

Signature _____

Name _____

Title _____

Corporate Guarantor (Seal)

FORM OF PERFORMANCE SECURITY
(Bank Guarantee)

Guarantee No. _____

Executed on _____

Expiry date _____

Guarantee Amount _____

[Letter by the Guarantor to the Employer]

Name of Guarantor (Bank) with address:

(Scheduled Bank in Pakistan)

Name of Principal (Supplier or Contractor) with address:

Guaranteed Amount/Sum of Security against services/works/contracts (express in words and figures) _____.

(Hereinafter referred to as the "Bank/Guarantor" which expression shall be deemed to include its respective successors-in-interest and assignee and shall be deemed as well to include any financial institutions which may subsequently become the party).

Letter of Acceptance No. _____ Dated _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bidding Documents and above said Letter of Acceptance (hereinafter called the Documents) and at the request of the said Principal we, the Guarantor above named, are held and firmly bound unto the _____ (hereinafter called the Employer) in the Guaranteed Amount/Sum stated above for the payment of which sum well and truly to be made to the said Employer, 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 has accepted the Employer's above said Letter of Acceptance for

_____ (Name of Contract) for the _____
_____ (Project detail etc.)

NOW THEREFORE, if the Principal (Supplier or Contractor as applicable) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents to which reference is here made for all purposes during the original terms of the said Documents and any extensions thereof that may be granted by the Employer, with or without notice to the Guarantor, which notice is, hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract and of any and all modifications of said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue till the issuance of Warranty Certificate in accordance with Clause ____, Warranty, of Conditions of Contract.

Our total liability under this Guarantee is limited to the Sum stated herein above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee which Sum we irrevocably and unconditionally agree to pay immediately upon any request for payment or demand received on which/the end ____ (date), failing which we shall be discharged of our liability, if any, under this Guarantee.

We, _____ (the Guarantor), waiving all objections and defenses under the Contract, do hereby unconditionally, irrevocably and independently guarantee and undertake to pay to the Employer without protest, demur, delay and without reference, notice or recourse to contractor to any other person upon the Employer's first written demand without cavil or arguments and without requiring the Employer to prove or to show grounds or reasons for such demand and hereby expressly waive all rights to deny our obligation to the Employer irrespective of any dispute, difference, ongoing litigation, arbitration proceeding or disagreement between ____ and ____ , or contestations by any other party or person, any Sum or Sums up to the :lmount stated above, against the Employer's written declaration that the Principal has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to Employer's designated Bank & Account Number.

PROVIDED ALSO THAT the Employer shall be the sole, exclusive and final judge for deciding whether the Principal has duly performed his obligations under the Contract or has defaulted in fulfilling said obligations and any written demand to the Guarantor made in the manners specified above shall be conclusive evidence of failure to comply with,. ____ and the Guarantor shall pay without objection any Sum or Sums up to the amount stated above upon first written demand from the Employer forthwith and without any reference to the Principal or any other person.

The Guarantee shall be a continuing security and shall remain in operation until ____ after the expiration, termination of the contract or any extension thereto.

PROVIDED FURTHER THAT until the expiry date of the Guarantee, the Employer shall be entitled to present written demand(s) to the Guarantor in the manner specified above for any amount up to the aggregate Guaranteed Amount. The Guarantor agrees that nothing in this Guarantee shall bar the Employer from presenting multiple written demands to the Guarantor, provided that the amount claimed in the written demand(s) shall not collectively exceed the aggregate Guaranteed Amount.

IN WITNESS, WHEREOF, the above-bounden Guarantor has executed this Instrument under its seal on the date indicated above, the name and; corporate seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Witness:

Guarantor (Bank)

1. _____

Corporate Secretary (Seal)

Signature _____
Name _____

Title _____

2. _____

Name, Title & Address

Corporate Guarantor (Seal)

FORM OF CONTRACT AGREEMENT

THIS CONTRACT AGREEMENT (hereinafter called the "Agreement") made on the _____ day of _____ (month) 20____ between _____ (hereafter called the "Employer") of the one part and _____ (hereafter called the "Contractor") of the other part.

WHEREAS the Employer is desirous that certain Works, viz _____ should be executed by the Contractor and has accepted a Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

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 after incorporating addenda, if any, except those parts relating to Instructions to Bidders shall be deemed to form and be read and construed as part of this Agreement, viz:
 - (a) The Contract Agreement;
 - (b) The Letter of Acceptance;
 - (c) The completed Form of Bid;
 - (d) Special Stipulations (Appendix-A to Bid);
 - (e) The Particular Conditions of Contract;
 - (f) The General Conditions;
 - (g) The priced Bill of Quantities;
 - (h) The completed Appendices to Bid;
 - (i) The Drawings;
 - (j) The Specifications.
 - (k) _____ (any other)
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy defects therein in conformity and in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works as per provisions of the Contract, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be executed on the day, month and year first before written in accordance with their respective laws.

Signature of the Contactor

Signature of Employer

NOR-138W2-2026

FOB-71

(Seal)

(Seal)

Signed, Sealed and Delivered in the presence of:

Witness:

Witness:

(Name, Title and Address)

(Name, Title and Address)

MOBILIZATION ADVANCE GUARANTEE/BOND

Guarantee No. _____ Date _____

WHEREAS _____ (hereinafter called the 'Employer') has entered into a Contract for

_____ (Particulars of Contract)

with _____ (hereinafter called the "Contractor").

AND WHEREAS, the Employer has agreed to advance to the Contractor, at the Contractor's request, an amount of Rupees _____ (Rs _____) which amount shall be advanced to the Contractor as per provisions of the Contract.

AND WHEREAS, the Employer has asked the Contractor to furnish Guarantee to secure the mobilization advance for the performance of his obligations under the said Contract.

AND WHEREAS, _____
(Scheduled Bank in Pakistan or Insurance Company acceptable to the Employer)
(hereinafter called the "Guarantor") at the request of the Contractor and in consideration of the Employer agreeing to make the above advance to the Contractor, has agreed to furnish the said Guarantee.

NOW, THEREFORE, the Guarantor hereby guarantees that the Contractor shall use the advance for the purpose of above mentioned Contract and if he fails and commits default in fulfilment of any of his obligations for which the advance payment is made, the Guarantor shall be liable to the Employer for payment not exceeding the aforementioned amount.

Notice in writing of any default, of which the Employer shall be the sole and final judge, on the part of the Contractor, shall be given by the Employer to the Guarantor, and on such first written demand, payment shall be made by the Guarantor of all sums then due under this Guarantee without any reference to the Contractor and without any objection.

This Guarantee shall remain in force until the advance is fully adjusted against payments from the Interim Payment Certificates of the Contractor or until _____ whichever is earlier.

(Date)

The Guarantor's liability under this Guarantee shall not in any case exceed the sum of Rupees _____ (Rs _____).

This Guarantee shall remain valid up to the aforesaid date and shall be null and void after the aforesaid date or earlier if the advance made to the Contractor is fully adjusted against payments from Interim Payment Certificates of the Contractor provided that the Guarantor agrees that the aforesaid period of validity shall be deemed to be extended if on the above mentioned date the advance payment is not fully adjusted.

GUARANTOR

1.	Signature	_____
2.	Name	_____
3.	Title	_____

WITNESS

1. _____

Corporate Secretary (Seal)

2. _____
(Name Title & Address)

Corporate Guarantor (Seal)

Section IV

General Conditions of Contract

SECTION-IV GENERAL CONDITIONS OF CONTRACT

This bidding document follows the FIDIC conditions of contract for construction works. The Conditions of Contract Comprise of two Sections: Section-IV – General Conditions of Contract, and Section-V – Special Conditions of Contract.

All the general Conditions shall be as per the FIDIC documents indicated below. These shall be read along with the Particular Conditions of Contract for interpretation. In case of any discrepancy between these General Conditions of Contract and the Particular Conditions of the Contract of Section-V, the provisions under the latter shall govern.

FIDIC

FEDERATION INTERNATIONALE DES INGENIEURS – CONSEILS

CONDITIONS OF CONTRACT FOR WORKS OF CIVIL ENGINEERING CONSTRUCTION

FOURTH EDITION 1987

Reprinted 1988 with editorial amendments

Reprinted 1992 with editorial amendments

Section V

Special Conditions of Contract

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SPECIAL CONDITIONS OF CONTRACT**(Mandatory Provisions not to be Amended / Substituted except as instructed by PEC)****1.1 Definitions****A. (a) (i) The Employer is: National Grid Company of Pakistan Limited**

Represented by: _____,

Address: 8th Floor, Shaheen Complex, Edgerton Road, Lahore

Telephone No. 92-42-99202597

- (a) (iv) For Lot-I, The Engineer is: **Chief Engineer (EHV-I), North NGC , Islamabad**
2nd Floor WAPDA building, Khayaban Soharwardy, sector G/7-1, Islamabad
Phone: +92-51-9216495
Fax: +92-51-9216495

or any other competent person appointed by the Employer, and notified to the Contractor, to act in replacement of the Engineer. Provided always that except in cases of professional misconduct, the outgoing Engineers is to formulate his certifications/recommendations in relation to all outstanding matters, disputes and claims relating to the execution of the Works during his tenure.

- (a)(vi) The following sub-clause 1.1 (a)(vi) is added after sub-clause 1.1(a)(v):

“Bidder or Tenderer” means any person or persons, company, corporation, firm or joint venture submitting a Bid or Tender.

- (b)(v) The following is added at the end of the paragraph:

The word “Tender” is synonymous with “Bid” and the word “Tender Documents” with “Bidding Documents”.

- (b)(ix) The following paragraph is added:

“Programme” means the programme to be submitted by the Contractor in accordance with Sub-Clause 14.1 and any approved revisions thereto.

- (e)(i) The text is deleted and substituted with the following:

“Contract Price” means the sum stated in the Letter of Acceptance as payable to the Contractor for the execution and completion of the Works subject to such additions thereto or deductions there from as may be made and remedying of any defects therein in accordance with the provisions of the Contract.

- (h) The following paragraphs are added:

“Environmental Management Plan” or EMP means the environmental management plan for the site, including any update thereto, incorporated in the environmental audit (EA).

“Environmental Audit” or EA means the environmental audit for the sites, including any update thereto, prepared and submitted by the Employer.

“Semi-annual environmental safeguards monitoring report” or SAESMR means the report prepared by Employer on a bi-annual basis and verified by an external monitoring expert to provide an update on overall progress in environmental safeguards implementation at the project level, including the status of environmental safeguards implementation progress, site handover status and need for corrective actions (if any).

2.1 Engineer's Duties and Authority

With reference to Sub-Clause 2.1(b), the following provisions shall also apply;

The Engineer shall obtain the specific approval of the Employer before carrying out his duties in accordance with the following Clauses:

- (i) Consenting to the sub-letting of any part of the Works under Sub-Clause 4.1 “Subcontracting”.
- (ii) Certifying additional cost determined under Sub-Clause 12.2 “Not Foreseeable Physical Obstructions or Conditions”.
- (iii) Any action under Clause 10 “Performance Security” and Clauses 21,23,24 & 25 “Insurance” of sorts.
- (iv) Any action under Clause 40 “Suspension”.
- (v) Any action under Clause 44 “Extension of Time for Completion”.
- (vi) Any action under Clause 47 “Liquidated Damages for Delay” or Payment of Bonus for Early Completion of Works (PCC Sub-Clause 47.3).
- (vii) Issuance of “Taking over Certificate” under Clause 48.
- (viii) Issuing a Variation Order under Clause 51, except:
 - a) in an emergency* situation, as stated here below, or
 - b) if such variation would increase the Contract Price by less than the amount stated in the Appendix-A to Bid.
- (ix) Fixing rates or prices under Clause 52.
- (x) Extra payment as a result of Contractor’s claims under Clause 53.
- (xi) Release of Retention Money to the Contractor under Sub-Clause 60.3 “Payment of Retention Money”.
- (xii) Issuance of “Final Payment Certificate” under Sub-Clause 60.8.
- (xiii) Issuance of “Defect Liability Certificate” under Sub-Clause 62.1.

- (xiv) Any change in the ratios of Contract currency proportions and payments thereof under Clause 72 "Currency and Rate of Exchange".

(Note: Employer may further vary according to need of the project)

* (If in the opinion of the Engineer an emergency occurs affecting the safety of life or of the Works or of adjoining property, the Engineer may, without relieving the Contractor of any of his duties and responsibilities under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer.)

2.3 Engineer's Authority to delegate:

The following paragraph is added:

The Director Generals (Substation Engineering/Civil & Structural Engineering/Protection & Control Engineering/Telecom Engineering) of NGC shall act as representative of Engineer for providing in house Engineering Services including but not limited to the following:

- a) Preparation of electrical and civil works drawings/design
- b) Review & approval of technical data/ drawings/design
- c) Interpretation of the bidding documents
- d) Site visits for attending any technical problem if necessary
- e) Resolution of disputes
- f) Review & approval of all technical matters
- g) Allocation of equipment and material

The following Sub-Clauses 2.7 and 2.8 are added:

2.7 Engineer Not Liable

Approval, reviews and inspection by the Engineer of any part of the Works does not relieve the Contractor from his sole responsibility and liability for the supply of materials, plant and equipment for construction of the Works and their parts in accordance with the Contract and neither the Engineer's authority to act nor any decision made by him in good faith as provided for under the Contract whether to exercise or not to exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any Subcontractor, any of their representatives or employees or any other person performing any portion of the Works.

2.8 Replacement of the Engineer

If the Employer intends to replace the Engineer, the Employer shall, not less than 14 days before the intended date of replacement, give notice to the Contractor, of the name, address and relevant experience of the intended replacement Engineer. The Employer shall not replace the Engineer with a person against whom the Contractor raises reasonable objection by notice to the Employer, with supporting particulars.

5.1 Language(s) and Law

- (a) The Contract Documents shall be drawn up in the English language.
- (b) The Contract shall be subject to the Laws of Islamic Republic of Pakistan.

5.2 Priority of Contract Documents

The documents listed at (1) to (6) of the Sub-Clause are deleted and substituted with the following:

- (1) The Contract Agreement (if completed);
- (2) The Letter of Acceptance;
- (3) The completed Form of Bid;
- (4) Special Stipulations (Appendix-A to Bid);
- (5) The Special Conditions of Contract;
- (6) The General Conditions;
- (7) The priced Bill of Quantities;
- (8) The completed Appendices to Bid;
- (9) The Specifications
- (10) The Drawings;

All Drawings and Specifications shall be interpreted in conformity with the Contract and these Conditions. Addendum, if any, shall be deemed to have been incorporated at the appropriate places in the documents forming the Contract. If any ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction which shall be binding.

The Contractor shall be responsible for provision of (13) Nos. Copies of the Contract Agreement free of charge. The documents shall be arranged in the aforementioned sequence and provided to Employer within 10 days of signing of Contract Agreement.

6.1 Custody and supply of Drawings & Documents

The contractor shall supply a soft copy of such drawings in source file and any other format specified by the Engineer.

The following Sub-Clauses 6.6 and 6.7 are added:

6.6 Shop Drawings

The Contractor shall submit to the Engineer for review 3 copies of all shop and erection drawings applicable to this Contract as per provision of relevant Sub-Clause of the Contract.

Review and approval by the Engineer shall not be construed as a complete check but will indicate only that the general method of construction and detailing is satisfactory and that the Engineer's review or approval shall not relieve the Contractor of any of his responsibilities under the Contract.

6.7 As-Built Drawings

At the completion of the Works under the Contract, the Contractor shall furnish to the Engineer 6 copies and one reproducible of all drawings amended to conform to the Works as built. The price of such Drawings shall be deemed to be included in the Contract Price.

10.1 Performance Security

The text is deleted and substituted with the following:

The Contractor shall provide Performance Security to the Employer in the prescribed form. The said Security shall be furnished or caused to be furnished by the Contractor within 14 days after the receipt of the Letter of Acceptance. The Performance Security shall be of an amount equal to 10% of the Contract Price stated in the Letter of Acceptance. Such Security shall, at the option of the bidder, be in the form of bank guarantee from any Scheduled Bank in Pakistan. The cost of complying with requirements of this Sub-Clause shall be borne by the Contractor.

The following Sub-Clause 10.4 is added:

10.4 Performance Security Binding on Variations and Changes

Performance Security shall remain valid and applicable as interpreted from the conditions of Contract and amendments on account of time/scope/cost/quality variations. Further, In case of a change in Contract Price by a factor of more than 15% on account of reasons stipulated in Clause-55 of Conditions of Contract, the Performance Security shall be liable for revision.

11.1 Inspection of Site

Bidder shall inspect the site, examine and obtain all information required and satisfy himself regarding matters and things such as access to site, communication, transport, right of way, the type and number of equipment and facilities required for the satisfactory completion of work, the quantity of various sections of the work, the availability of local labour, availability and rates of materials, local working conditions, uncertainties of weather, obstructions and hindrances that may arise etc., which may affect the work or cost thereof, before submission of his bid. Ignorance of site conditions shall not be accepted by the owner as basis for any claim for compensation. The submission of a bid by the bidder will be construed as evidence that such an examination was made and any later claims/disputes in regard to rates quoted shall not be entertained or considered by the owner.

If any temporary feeder road within site is considered essential for the proper execution of the work this shall have to be formed by the Contractor at his own cost with the prior approval of the Engineer. The Contractor shall organize his own arrangement to transport his equipment, men and materials in such a manner that the completion period will not be exceeded on any account.

The rates quoted by Bidder shall be based on his own knowledge and judgement of the conditions and hazards involved and shall not be based on any representations to the Engineer.

1.2 Not Foreseeable Physical Obstructions or Conditions

Following clauses are added after GCC 12.2:

12.3 Unforeseeable environment risks or impacts

- In addition to any of the not foreseeable physical obstructions or conditions noted in Sub-Clause 12.2, the Contractor shall provide the Engineer with a written notice of any unanticipated environmental risks or impacts that arise during construction, implementation or operation of the Plant or the Works, which were not considered in the environmental audit, the environmental management plan attached hereto as Annexure [I].

12.4: The Contractor shall comply with (i) the measures and requirements relevant to the Contractor which are set forth in the EA and EMP hereto as Appendix [I], and (ii) any corrective or preventative actions set out in safeguards monitoring reports that the Employer will prepare from time to time to monitor the implementation of the safeguards measures.

14.1 Programme to be submitted

The Contractor shall submit a detailed time programme to the Engineer within 28 days after receipt of Letter of Acceptance.

The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations.

Each programme shall be in the form of bar chart or a CPM chart identifying the critical activities and include:

- a) The order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, delivery to Site, construction, erection and testing.
- b) Each of these stages for work by each nominated subcontractor
- c) The sequence and timing of site inspections and tests specified in the Contract, and a supporting report which includes:
 - i) A general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and
 - ii) Details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.

Unless the Engineer, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities.

If, at any time, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer in accordance with this Sub-Clause.

The period between the Program updates will be 30 days. If the contractor fails to submit an updated program in time, any payment due for his current bills will be withheld till the submission of such programme.

14.3 Cash Flow Estimate to be submitted

The detailed Cash Flow Estimate shall be submitted within 21 days from the date of receipt of Letter of Acceptance

The following Sub-Clause 14.5 is added:

14.5 Monthly Progress Report

During the period of the Contract, the Contractor shall submit to the Engineer not later than the 8th day of the following month, copies of Monthly Progress Reports covering:

- (1) A Construction Schedule indicating the monthly progress in percentage;
- (2) Description of all work carried out since the last report;
- (3) Description of the work planned for the next 56 days sufficiently detailed to enable the Engineer to determine his programme of inspection and testing;
- (4) Monthly summary of daily job record;
- (5) Photographs to illustrate the status of progress on the Site.
- (6) Information about problems and difficulties encountered, if any, and proposals to overcome the same.
- (7) Charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, delivery of material to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor.
- (8) The details described in Sub-Clause 35.1 [Return of labor & Contractor's Equipment]
- (9) Copies of quality assurance documents, test results and certificates of Materials.
- (10) List of notices given under Sub-Clause 68.1[Notice to Contractor] and notices given under Sub-Clause 68.2[Notice to Employer & Engineer].
- (11) Safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations.
- (12) Comparisons of actual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

Following sub-clause 14.5 (13) is added:

- (13) Environmental safeguards related reporting, including semiannual safeguards monitoring reports.

These progress reports will be submitted as per the following distribution list:

- (1) G.M. Project Delivery (North), NGC

- (2) Executive Director (Supply Chain) NGC
- (3) CE (EHV-I), NGC Concerned
- (4) Director General (SS Engineering), NGC
- (5) PD (EHV) NGC Concerned
- (6) XEN (EHV) NGC Concerned

During the period of the Contract, the Contractor shall keep a daily record of the work progress, which shall be made available to the Engineer as and when requested. The daily record shall include particulars of weather conditions, number of men working, deliveries of materials, quantity, location and assignment of Contractor's equipment.

Following clause is added after GCC 14.5 for contract management plan:

- 14.6 Contract management plan:** The detailed reporting requirements are presented in the Contract Management Plan (CMP) template, in **Annexure [II]**. The Contractor, the Project Manager and Supervision Consultant will use a dedicated web-based dashboard system for reporting, which will be based on the CMP structure. The system is provided free of charge by the Employer." The Contractor will submit a monthly report to the Employer using web-based project monitoring software to create & submit the monthly report through the web-based dashboard system.

15.1 Contractor's Superintendence

The Contractor's authorised representative and his other professional engineers working at Site shall register themselves with the Pakistan Engineering Council.

The Contractor's authorized representative at Site shall be authorized to exercise adequate administrative and financial powers on behalf of the Contractor so as to achieve completion of the Works as per the Contract.

The following Sub-Clauses 15.2 is added:

15.2 Language Ability of Contractor's Representative

The Contractor's authorized representative shall be fluent in the English language. Alternately an interpreter with ability of English language shall be provided by the Contractor on full time basis.

The following Sub-Clauses 16.3 and 16.4 are added:

16.3 Language Ability of Superintending Staff of Contractor

A reasonable proportion of the Contractor's superintending staff shall have a working knowledge of the English language. If the Contractor's superintending staffs is not fluent in English language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer.

16.4 Employment of Local Personnel

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour from sources within Pakistan.

The following Sub-Clauses 19.3 and 19.4 are added:

19.3 Safety Precautions

In order to provide for the safety, health and welfare of persons, and for prevention of damage of any kind, all operations for the purposes of or in connection with the Contract shall be carried out in compliance with the Safety Requirements of the Government of Pakistan with such modifications thereto as the Engineer may authorise or direct and the Contractor shall take or cause to be taken such further measures and comply with such further requirements as the Engineer may determine to be reasonably necessary for such purpose.

The Contractor shall make, maintain and submit reports to the Engineer concerning safety, health and welfare of persons and damage to property, as the Engineer may from time to time prescribe.

19.4 Lighting Work at Night

In the event of work being carried out at night, the Contractor shall at his own cost, provide and maintain such good and sufficient light as will enable the work to proceed satisfactorily and without danger. The approaches to the Site and the Works where the night-work is being carried out shall be sufficiently lighted. All arrangement adopted for such lighting shall be to the satisfaction of the Engineer's Representative.

The following Sub-Clause 19.5 is added:

19.5 Protection of the Environment

- The Contractor shall comply with all applicable national, provincial, and local environmental laws and regulations.
- The Contractor shall (a) establish an operational system for managing environmental impacts, (b) carry out all of the monitoring and mitigation measures relevant to the Contractor set forth in the Audit, the Environmental Management Plan, attached hereto as Annexure [I] and (c) allocate a budget to ensure that such measures are carried out. The Contractor shall submit quarterly reports on the carrying out of such measures to the Employer.
- More particularly, the Contractor shall comply with (i) the measures and requirements set forth in the EA, and the EMP attached hereto as Appendix [A]; and (ii) any corrective or preventative actions set out in safeguards monitoring reports that the Employer will prepare from time to time to monitor implementation of the EA and the EMP.

The Contractor shall allocate a budget for compliance with these measures, requirements and actions.

The following Sub-Clauses 19.6, 19.7 and 19.8 are added:

19.6 Environmental Safeguards

Contractor(s) shall ensure that:

- (a) An Environmental Safeguard Expert is appointed with relevant educational background and experience within 28 days of the Effective Date. The CVs of the applicants for the position should be shared with the Employer for approval
- (b) Site Specific EMP, Waste Management Plan and Environmental Management & Monitoring Plan (EMMP) implementation plan shall be submitted to the Employer for approval before mobilization to Site.
- (c) The EMP is implemented in all aspects;
- (d) All mitigation and monitoring measures identified in the EA, and EMMP are incorporated in detailed design and implemented during construction/operation of the Project Facilities;
- (e) All subcontracts under the project shall contain provisions complying with this paragraph (d)
- (f) Sufficient budget is made available for all such environmental and social measures mentioned in this paragraph (d);
- (g) The Employer is provided with a written notice of any unanticipated environmental, risks or impacts that arise during construction, implementation or operation of project that were not considered in the EA or the EMP.
- (h) All invoices/amounts claimed by contractor(s) in lieu of Environment & Social Safeguards Management would be sent to the Employer for verification.
- (i) Monthly and quarterly monitoring & implementation reports are submitted to the Employer in the form agreed with the Employer
- (j) Personal protective equipment (safety helmets, hard helmets, safety gloves, safety shoes, safety glasses, safety vests etc.) are provided by the Contractor to all the workers at Site before commencement of the relevant works.
- (k) Safety signs and awareness material printed in Urdu & English languages (4 x 6 feet Panaflexes) are placed & visible at project Site.
- (l) Pathways, other local infrastructure (sewerage line, water transporting system/pipes, rainwater drainage system etc.) damaged due to construction activity at the project site and agricultural land are fully restored to at least pre-project condition upon the completion of construction works.
- (m) Proper sanitation facilities and clean drinking water are provided to anyone working on Site.
- (n) Water tests, air quality monitoring, noise measurement are conducted on quarterly basis by EPA approved lab (NOC for selected lab must be issued by the Employer before conducting tests) and records provided to the Employer.
- ~~(o) All conditions set forth in an Environmental approval/NOC issued by respective environmental protection agency (EPA) are complied with.~~
- (p) Upon completion of construction works, the Contractor shall restore all affected lands to its pre-work conditions or better, before returning lands to affected persons to be verified by a project completion/safeguard monitoring reports.

19.7 Safeguards

- a) Information at worksites on risks of sexually transmitted diseases and HIV/AIDS is disseminated for those employed during construction, and take measures to protect workers from protect workers from potential exposure to sexually transmitted diseases;

- b) There is no differentiation between men and women wages or benefits for work of equal value; and
- c) It abstains from child labor;

20.4 Employer's Risks

The Employer's risks are:

Notwithstanding anything contained (in GCC 20.4), the Employer shall not be responsible, compensate or bear any kind of risk/liability whatsoever in nature.

21.1 Insurance of Works and Contractor's Equipment

The minimum insurance amounts and deductibles shall be:

- (a) For the Works and Materials: Full value of material.
- (b) For loss or damage to Equipment: Full value of the loss/damage.
- (c) For loss or damage to property (except the Works, Materials, and Equipment) in connection with Contract: Full value of loss/damage to property
- (d) For personal injury or death:
 - i) of the Contractor's employees: In accordance with such applicable laws in Pakistan
 - ii) of other people: In accordance with such applicable laws in Pakistan

21.4 Exclusions

The text is deleted and substituted with the following:

There shall be no obligation for the insurances in Sub-Clause 21.1 to include loss or damage caused by the risks listed under Sub-Clause 20.4 sub paragraph (a) to (h).

25.1 Evidence and Terms of Insurance Covers

In line-04 of paragraph-1, the words "including premium payment plan and paid premium receipts (PPRs)" are added after words "To the Employer".

Following paragraph is added at the end of existing para to form part of Clause:-

"In case of failure of the Contractor to arrange insurance covers as per required terms before commencement of works, the Employer reserves right to arrange the necessary covers by itself and recover the costs from Contractor's payments including Interim Payment Certificates and Retention Monies under Clause 60"

25.4 Compliance with Policy Conditions

Delete the text and substitute with the following:

"In the event that the Contractor fails to comply with conditions imposed by the insurance policies affected pursuant to the contract, the Contractor shall indemnify the employer against all losses and claims arising from such failure."

The following Sub-Clause 25.5 is added:

25.5 Insurance Company

The Contractor shall be obliged to place all insurances relating to the Contract (including, but not limited to, the insurances referred to in Clauses 21, 23 and 24) with either National Insurance Company of Pakistan or any other insurance company operating in Pakistan and acceptable to the Employer.

Costs of such insurances shall be borne by the Contractor.

The Contractor shall procure and submit the insurance cover before Date of Commencement. In case of failure, the contractor shall be fully responsible for any event and loss and shall indemnify as per insurance cover to be arranged. Furthermore, the Employer also reserves the right to procure the insurance policies at risk and cost of the Contractor.

The following Sub-Clause 31.3 is added:

31.3 Co-operation with other Contractors

During the execution of the Works, the Contractor shall co-operate fully with other contractors working for the Employer at and in the vicinity of the Site and also shall provide adequate precautionary facilities not to make himself a nuisance to local residents and other contractors.

The following Sub-Clauses 34.2 to 34.12 are added:

34.2 Rates of Wages and Conditions of Labour

The Contractor shall pay rates of wages and observe conditions of labour not less favourable than those established for the trade or industry where the work is carried out subject to GCC 34.13 to GCC 34.17. In the absence of any rates of wages or conditions of labour so established, the Contractor shall pay rates of wages and observe conditions of labour which are not less favourable than the general level of wages and conditions observed by other employers whose general circumstances in the trade or in industry in which the Contractor is engaged are similar.

34.3 Employment of Persons in the Service of Others

The Contractor shall not recruit his staff and labour from amongst the persons in the services of the Employer or the Engineer; except with the prior written consent of the Employer or the Engineer, as the case may be.

34.4 Housing for Labour

Save insofar as the Contract otherwise provides, the Contractor shall provide and maintain such housing accommodation and amenities as he may consider necessary for all his supervisory staff and labour, employed for the purposes of or in connection with the Contract including all fencing, electricity supply, sanitation, cookhouses, fire prevention, water supply and other requirements in connection with such housing

accommodation or amenities. On completion of the Contract, these facilities shall be handed over to the Employer or if the Employer so desires, the temporary camps or housing provided by the Contractor shall be removed and the Site reinstated to its original condition, all to the approval of the Engineer.

34.5 Health and Safety

Due precautions shall be taken by the Contractor, and at his own cost, to ensure the health and safety of his staff and labour at all times throughout the period of the Contract and to provide a safe work environment. The Contractor shall further ensure that suitable arrangements are made for the prevention of epidemics and for all necessary welfare and hygiene requirements. The Contractor shall conduct health and safety programs for workers employed under the project and shall include information on the trafficking of women and the risk of sexually transmitted diseases, including HIV/AIDs in such programs.

34.6 Epidemics

In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities, for purpose of dealing with and overcoming the same.

34.7 Supply of Water

The Contractor shall, so far as is reasonably practicable, having regard to local conditions, provide on the Site, to the satisfaction of the Engineer or his representative, adequate supply of drinking and other water for the use of his staff and labour.

34.8 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Statutes, Ordinances and Government Regulations or Orders for the time being in force, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or suffer any such importation, sale, gift, barter or disposal by his Subcontractors, agents, staff or labour.

34.9 Arms and Ammunition

The Contractor shall not give, or otherwise dispose of to any person or persons, any arms or ammunition of any kind or permit or suffer the same as aforesaid.

34.10 Festivals and Religious Customs

The Contractor shall in all dealings with his staff and labour have due regard to all recognised festivals, days of rest and religious and other customs.

34.11 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst staff and labour and for the preservation of peace and protection of persons and property in the neighbourhood of the Works against the same.

34.12 Compliance by Subcontractors

The Contractor shall be responsible for compliance by his Subcontractors of the provisions of this Clause.

The following Clauses GCC 34.13, 34.14, 34.15, 34.16 & 34.17 are added:

34.13 Prohibition of Harmful Child Labour

The Contractor shall not employ any child to perform any work, including work that is economically exploitative, or is likely to be hazardous to, or interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development. "Child" means a child below the statutory minimum age of 14 specified under the laws of Pakistan.

34.14 Prohibition of Forced or Compulsory Labour

The Contractor shall not employ forced labour, which consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labour, such as indentured labour, bonded labour or similar labour-contracting arrangements.

34.15 Labour Laws

The Contractor shall not make employment decisions based upon personal characteristics unrelated to job requirements. The Contractor shall base the employment relationship upon equal opportunity and fair treatment, and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment or retirement and discipline. Where relevant labour laws are silent on nondiscrimination in employment, the Contractor shall meet this Sub-Clause's requirements. Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the inherent requirements of the job shall not be deemed discrimination.

34.16 Worker's Organizations

In countries where the relevant labour laws recognize workers' rights to form and to join workers' organisations of their choosing without interference and to bargain collectively, the Contractor shall comply with such laws. Where the relevant labour laws substantially restrict workers' organisations, the Contractor shall enable alternative means for the Contractor's Personnel to express their grievances and protect their rights regarding working conditions and terms of employment. In either case described above, and where the relevant labour laws are silent, the Contractor shall not discourage the Contractor's staff, consultants, contractors and agents (Contractor's Personnel) from forming or joining workers' organisations of their choosing or from bargaining collectively, and shall not discriminate or retaliate against

the Contractor's Personnel who participate, or seek to participate, in such organisations and bargain collectively. The Contractor shall engage with such workers' representatives. Workers' organisations are expected to fairly represent the workers in the workforce.

34.17 Holidays and Local Laws

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

35.1 Returns of Labour and Contractor's Equipment

The Contractor shall submit, to the Engineer, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Engineer, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking Over Certificate for the Works.

The following Sub-Clauses 35.2 and 35.3 are added:

35.2 Records of Safety and Health

The Contractor shall maintain such records and make such reports concerning safety, health and welfare of persons and damage to property as the Engineer may from time to time prescribe.

35.3 Reporting of Accidents

The Contractor shall report to the Engineer details of any accident as soon as possible after its occurrence. In the case of any fatality or serious accident, the Contractor shall, in addition, notify the Engineer immediately by the quickest available means.

The following Sub-Clause 36.6 is added:

36.6 Use of Pakistani Materials and Services

The Contractor shall, so far as may be consistent with the Contract, make the maximum use of materials, supplies, plant and equipment indigenous to or produced or fabricated in Pakistan and services, available in Pakistan provided such materials, supplies, plant, equipment and services shall be of required standard.

41.1 Commencement of Works

The text is deleted and substituted with the following:

The Contractor shall commence the Works on Site within the period named in Appendix-A to Bid. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay.

44.1 Extension of Time for Completion

The Existing Text of the provision is deleted and replaced with the following.

The Contractor shall be entitled subject to Clause 44.2 to an extension of the Time for Completion if and to the extent that completion for the purposes of Clause 43.1 & 48.2 is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed) or other substantial change in the quantity of an item of work included in the Contract,*
- (b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,*
- (c) exceptionally adverse climatic conditions,*
- (d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or*
- (e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors on the Site.*

If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Engineer in accordance with Clause 44.2. The Engineer shall after due consultation with the Employer and the Contractor, determine the amount of such extension and shall notify the Employer and Contractor accordingly. The Engineer while making his determination for extension of time under this clause will take due consideration of the (committed) resources to be deployed by the Contractor at site in accordance with Appendix-E, F, G & H to bid. While determining each extension of time under this Clause, the Engineer shall review previous determinations and may increase, but shall not decrease, the total extension of time.

The Engineer shall make his determinations and notify the finalized/approved determination within reasonable time but not later than 90 days after submission of interim/final particulars by the Contractor in pursuance of this Clause as per prevalent SoPs .

46.2 Progress Reports

The Contractor shall submit to Engineer and Employer the daily, weekly, monthly progress reports and cash flow projections on the format approved by the Engineer. The monthly reports shall be submitted within 05 days from completion of the respective month.

The following Sub-Clause 47.3 is added:

47.3 Bonus for Early Completion of Works

No bonus is admissible for the project.

48.2 Taking Over of Sections or Parts

For the purposes of para (a) of this Sub-Clause, separate Times for Completion shall be provided in the Appendix-A to Bid "Special Stipulations".

49.2 Completion of Outstanding Works and Remedying Defects

The following sub-clause is included at end of existing text

- c) Provide detailed Completion Report alongwith As built data/drawings, material reconciliation reports and Hard and Soft Copies of site records/data to the Engineer for information and approval prior to expiry of Defect Liability Period. One copy shall also be provided to Employer for reference.
- d) Return balance/surplus materials to designated NGC warehouses as per material re-conciliation reports dully approved by the Engineer. All Coordination in allocation and handing over of material will be carried out through Engineer of the Project.

The following Sub-Clause 49.5 is added:

49.5 Extensions of Defects Liability Period

The provisions of this Sub-Clause shall apply to all replacements or renewals of plant and equipment carried out by the Contractor to remedy defects and damage as if the replacements and renewals had been taken over on the date they were completed. The Defects Liability Period for the Works shall be extended by a period equal to the period during which the Works cannot be used by reason of a defect or damage. If only a part of the Works is affected the Defects Liability Period shall be extended only for that part. In neither case shall the Defects Liability Period extend beyond two (2) years from the date of taking over.

51.1 Variations

The Sub-Clause (a), (b), (c), (d), (e) & (f) are deleted and replaced with following text

- (a) changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation if and to the extent that change is due to Clause 55.1 and 56.1),
- (b) changes to the quality and other characteristics of any item of work,
- (c) changes to the levels, positions and/or dimensions of any part of the Works,
- (d) omission of any work unless it is to be carried out by others,
- (e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or
- (f) Changes to the sequence or timing of the execution of the Works.

51.2 Instructions for Variations

At the end of the first sentence, after the word "Engineer", the words "in writing "are added.

52.1 Valuation of Variations

In the tenth line, after the words "Engineer shall" the following is added:

Within a period not exceeding one-eighth of the completion time subject to a minimum of 56 days from the date of disagreement whichever is later.

53.4 Failure to Comply

This Sub-Clause is deleted in its entirety.

54.5 Conditions of Hire of Contractor's Equipment

The following paragraph is added:

The Contractor shall, upon request by the Engineer at any time in relation to any item of hired Contractor's Equipment, forthwith notify the Engineer in writing the name and address of the Owner of the equipment and shall certify that the agreement for the hire thereof contains a provision in accordance with the requirements set forth above.

The following Sub-Clauses 59.4 & 59.5 are added:

59.4 Payments to Nominated Subcontractors

The Contractor shall pay to the nominated Subcontractor the amounts which the Engineer certifies to be due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with Clause 58 [Provisional Sums], except as stated in Sub-Clause 59.5 [Certification of Payments].

59.5 Certification of Payments & Nominated Subcontractors

Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Engineer may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:

- a) submits reasonable evidence to the Engineer, or
- b)
 - i) satisfies the Engineer in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and
 - ii) submits to the Engineer reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement,

Then the Employer may (at his sole discretion) pay direct to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall then repay, to the Employer, the amount which the nominated Subcontractor was directly paid by the Employer.

60.1 Monthly Statements

In the first line after the word “shall”, the following is added:

“on the basis of the joint measurement of work done under Clause 56.1,”

In Para (c) the words “the Appendix to Tender” are deleted and substituted with the words “Sub-Clause 60.11 (a)(6) hereof”.

(in case Clause 60.11 is applicable)

The Last Paragraph starting from word “Notwithstanding” and ending with word “Employer” is deleted

60.2 Monthly Payments

In the first line, “28” is substituted by “14”.

60.3 Payment of Retention Money

a) The following text is added at the end:

“In addition to above, release of this retention money is subject to issuance of GRN/SRS by In charge of designated NGC Warehouse for balance material of the project as per material reconciliation report along with certification from In charge of the Warehouse of completeness and healthiness of the returned material. The material reconciliation report shall be duly vetted by Chief Engineer (T/L) Design as per as-built profile of the project.”

60.10 Time for Payment

No interest is applicable on any delay at the part of the employer. Second Para starting from “In the event of failure” and ending on “under clause 69 otherwise” is deleted.

The following Sub-Clause 60.11, 60.12 & 60.13 is added:

60.11 Secured Advance on Materials

a) The Contractor shall be entitled to receive from the Employer Secured Advance against an indemnity bond acceptable to the Employer of such sum as the Engineer may consider proper in respect of non-perishable materials brought at the Site but not yet incorporated in the Permanent Works provided that:

- (1) The materials are in accordance with the Specifications for the Permanent Works;
- (2) Such materials have been delivered to the Site and are properly stored and protected against loss or damage or deterioration to the satisfaction of the Engineer but at the risk and cost of the Contractor;

- (3) The Contractor's records of the requirements, orders, receipts and use of materials are kept in a form approved by the Engineer, and such records shall be available for inspection by the Engineer;
 - (4) The Contractor shall submit with his monthly statement the estimated value of the materials on Site together with such documents as may be required by the Engineer for the purpose of valuation of materials and providing evidence of ownership and payment therefor;
 - (5) Ownership of such materials shall be deemed to vest in the Employer and these materials shall not be removed from the Site or otherwise disposed of without written permission of the Employer; and
 - (6) The sum payable for such materials on Site shall not exceed 75 % of the (i) landed cost of imported materials, or (ii) ex-factory / ex-warehouse price of locally manufactured or produced materials, or (iii) market price of other materials.
- (b) The recovery of Secured Advance paid to the Contractor under the above provisions shall be affected from the monthly payments on actual consumption basis.

60.12 Financial Assistance to Contractor

Financial assistance shall be made available to the Contractor by the Employer by providing a Mobilization Advance in the following way:

- (a) An interest-free Mobilization Advance of 10 % of the Contract Price stated in the Letter of Acceptance shall be paid by the Employer to the Contractor in two equal parts upon submission by the Contractor of a Mobilization Advance Guarantee/Bond for the full amount of the Advance in the specified form from a Scheduled Bank in Pakistan.
 - (1) First part within 14 days after signing of the Contract Agreement or date of receipt of Engineer's Notice to Commence, whichever is earlier; and
 - (2) Second part within 42 days from the date of payment of the first part, subject to the satisfaction of the Engineer as to the state of mobilization of the Contractor.
- (b) The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Employer/Engineer.

- (c) The Mobilization Advance shall be adjusted through percentage deductions made at the rate of 10% of the amount of all Interim Payment Certificates until such time as the advance payment has been adjusted; provided that the advance payment shall be completely repaid to the time when 80% of the Contract Price has been certified for payment.
- (d) In case the part of advance payment remain unadjusted before completion of works/issuance of Taking Over Certificate under Clause 60.3 , the Contractor shall be bound to pay back the amount to the Employer within 28 days of receipt of notice from Employer. In case of non-receipt of payment, Employer has the right to recover from the balance payments due under the Contract including Retention Monies due under Clause 60.3.
- (e) The Bank Guarantee will remain effective until the advance payment has been full set off. However, such Guarantee shall be progressively reduced by the amount repaid by the Contractor as indicated in Interim Payment Certificates of the Engineer issued in accordance with provisions of this Contract (The amount will be assumed repaid only when the employer has paid the monies against Interim Payment Certificate and not merely on issuance of interim payment certificate). The advance payment shall not be subject to retention.

60.13 Employer's/Engineer's Right to withhold payments

- a) Notwithstanding the terms of Clause 60.2 & 60.3 or any other Clause of the Contract, no amount will be certified by the Engineer for payment/paid by Employer until the Performance Security/Advance Payment Security, if required under the Contract, has been provided by the Contractor, approved by the Employer and is valid for the required duration stated in the Contract Clause 10.2 and 60.12.
- b) In case of Contractor's non-compliance with reporting requirements under Clause-46.2 and insurance requirements under Clause 20 of Conditions of Contract.
- c) If there is any ambiguity in the payment/claim or Interim Payment Certificate, the Employer may withheld the payment to such extent and may process the remaining amount. In such case, the withheld amount may be included in the next Payment Certificate alongwith clarification for ambiguity pointed out by Employer.
- d) In case of Contractor's non-compliance with the laws/regulations of the tax authorities' (Federal/Provincial), the Employer reserves the right to withhold the payments for ensuring the necessary compliance.

63.1 Default of Contractor

The following para is added at the end of the Sub-Clause:

Provided further that in addition to the action taken by the Employer against the Contractor under this Clause, the Employer may also refer the case of default of the

Contractor to Pakistan Engineering Council for punitive action under the Construction and Operation of Engineering Works Bye-Laws 1987, as amended from time to time.

65.2 Special Risks

The text is deleted and substituted with the following:

The Special Risks are the risks defined under Sub-Clause 20.4 sub paragraph (a) to (h).

67.3 Arbitration

In the sixth to eight lines, the words "shall be finally settled appointed under such Rules" are deleted and substituted with the following:

shall be finally settled under the provisions of the Arbitration Act, 1940 as amended or any statutory modification or re-enactment thereof for the time being in force

The following paragraph is added:

The place of arbitration shall be Lahore, Pakistan.

68.1 Notices to Contractor

The following paragraph is added:

For the purposes of this Sub-Clause, the Contractor shall, immediately after receipt of Letter of Acceptance, intimate in writing to the Employer and the Engineer by registered post, the address of his principal place of business or any change in such address during the period of the Contract.

68.2 Notices to Employer and Engineer

For the purposes of this Sub-Clause, the respective addresses are:

- a) The Employer: National Transmission and Despatch Company (NGC)
8th Floor, Shaheen Complex,
Egerton Road, Lahore-Pakistan
Telephone No. 92-42-99202597

- b) The Engineer is: **Chief Engineer (EHV-I), NGC , Lahore**
2nd Floor WAPDA building, Khayaban Soharwardy, sector G/7-1, Islamabad
Phone: +92-51-9216495
Fax: +92-51-9216495
Email:ceehvisd@ntdc.com.pk

69.0 Default of Employer

This clause with all sub clauses is deleted in its entirety.

70.1 Increase or Decrease of Cost

Sub-Clause 70.1 is deleted in its entirety.

The amounts payable to the Contractor, pursuant to Sub-Clause 60.1, shall be adjusted in respect of the rise or fall in the cost of labor, materials, and other inputs to the Works, by applying to such amount the formula prescribed in this Sub-Clause.

(a) Other Changes in Cost

To the extent that full compensation for any rise or fall in costs to the Contractor is not covered by the provisions of this or other Clauses in the Contract, the unit rates and prices included in the Contract shall be deemed to include amounts to cover the contingency of such other rise or fall of costs.

(b) Adjustment Formula

The adjustment to the monthly statements in respect of changes in cost shall be determined from the following formula:-

$$P_n = A + b \frac{L_n}{L_o} + c \frac{M_n}{M_o} + d \frac{E_n}{E_o} + \dots$$

Where:

P_n is a price adjustment factor to be applied to the amount for the payment of the work carried out in the subject month, determined in accordance with Paragraph 60.1 (a), and with Paragraphs 60.1 (b) and (e), where any variations and day work are not otherwise subject to adjustment;

A is a constant, specified in Appendix-C to Bid, representing the nonadjustable portion in contractual payments;

b, c, d , etc., are weightages or coefficients representing the estimated proportion of each cost element (labour, cement and reinforcing steel etc.) in the Works or Sections thereof, net of Provisional Sums and Prime Cost; the sum of A, b, c, d , etc., shall be one;

L_n, M_n, E_n , etc., are the current cost indices or reference prices of the cost elements for month "n", determined pursuant to Sub-Clause 70.1(d), applicable to each cost element; and

L_o, M_o, E_o , etc., are the base cost indices or reference prices corresponding to the above cost elements at the date specified in Sub-Clause 70.1(d).

(c) Sources of Indices and Weightages

The sources of indices shall be those listed in Appendix-C to Bid, as approved by the Engineer. As the proposed basis for price adjustment, the Contractor shall have submitted with his bid the tabulation of Weightages and Source of Indices if different than those given in Appendix-C to Bid, which shall be subject to approval by the Engineer.

(d) Base, Current, and Provisional Indices

The base cost indices or prices shall be those prevailing on the day 28 days prior to the latest date for submission of bids. Current indices or prices shall be those prevailing on the day 28 days prior to the last day of the period to which a particular monthly statement is related. If at any time the current indices are not available, provisional indices as determined by the Engineer will be used, subject to subsequent correction of the amounts paid to the Contractor when the current indices become available.

(e) Adjustment after Completion

If the Contractor fails to complete the Works within the Time for Completion prescribed under Clause 43, adjustment of prices thereafter until the date of completion of the Works shall be made using either the indices or prices relating to the prescribed time for completion, or the current indices or prices, whichever is more favorable to the Employer, provided that if an extension of time is granted pursuant to Clause 44, the above provision shall apply only to adjustments made after the expiry of such extension of time.

(f) Weightages

The weightages for each of the factors of cost given in Appendix-C to Bid shall be adjusted if, in the opinion of the Engineer, they have been rendered unreasonable, unbalanced, or inapplicable as a result of varied or additional work executed or instructed under Clause 51. Such adjustment(s) shall have to be agreed in the variation order.

The following Sub-Clauses 73.1, 73.2, 74.1, 75.1, 76.1, 77.1 and 78.1 are added:

73.1 Payment of Income Tax

The Contractor, Subcontractors and their employees shall be responsible for payment of all their income tax, super tax and other taxes on income arising out of the Contract and the rates and prices stated in the Contract shall be deemed to cover all such taxes.

73.2 Customs Duty & Taxes Provincial Sales Tax

Contractor will submit the invoice inclusive of Provincial Sales Tax. Provincial Sales Tax shall be charged by the contractor and payments will be subject to income tax and sales tax withholding as per Rules mentioned in Federal or Respective Provincial Laws only to those entities appearing in Active Taxpayer list (ATL) for both income and Sales Tax.. Copy of sales tax return will be will be provided by the contractor. In case of non-registration with the relevant provincial authority, the tax will be deducted from the amount due or to be due to the contractor.

74.1 Integrity Pact and ADB Integrity Covenant

If the Contractor or any of his Subcontractors, agents or servants is found to have violated or involved in violation of the Integrity Pact and ADB Integrity Covenant signed by the Contractor as Appendix-O to his Bid, then the Employer shall be entitled to:

- (a) recover from the Contractor an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Contractor or any of his Subcontractors, agents or servants;
- (b) terminate the Contract; and
- (c) recover from the Contractor any loss or damage to the Employer as a result of such termination or of any other corrupt business practices of the Contractor or any of his Subcontractors, agents or servants.

The termination under Sub-Para (b) of this Sub-Clause shall proceed in the manner prescribed under Sub-Clauses 63.1 to 63.4 and the payment under Sub-Clause 63.3 shall be made after having deducted the amounts due to the Employer under Sub-Para (a) and (c) of this Sub-Clause.

75.1 Termination of Contract for Employer's Convenience

The Employer shall be entitled to terminate the Contract at any time for the Employer's convenience after giving 56 days prior notice to the Contractor, with a copy to the Engineer. In the event of such termination, the Contractor:

- (a) shall proceed as provided in Sub-Clause 65.7 hereof; and
- (b) shall be paid by the Employer as provided in Sub-Clause 65.8 hereof.

76.1 Liability of Contractor

The Contractor or his Subcontractors or assigns shall follow strictly, all relevant labour laws including the Workmen's Compensation Act and the Employer shall be fully indemnified for all claims, damages etc. arising out of any dispute between the Contractor, his Subcontractors or assigns and the labour employed by them.

77.1 Joint and Several Liabilities

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

78.1 Details to be Confidential

The Contractor shall treat the details of the Contract as private and confidential, save in so far as may be necessary for the purposes thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the prior consent in writing of the Employer or the Engineer. If any dispute arises as to the necessity of any publication or disclosure for the purpose of the Contract, the same shall be referred to the decision of the Engineer whose award shall be final.

SECTION VI

SPECIFICATIONS - SPECIAL PROVISIONS- EMPLOYER REQUIREMENTS

This Section contains the Specifications, the Drawings, Supplementary Information that describe the Works to be procured, Personnel Requirements and Equipment Requirements.

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Specifications.....	SP-27
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Specifications

(Please refer to Annexure-A of this document, provided as soft copy through Google drive link attached to this bidding document)

Drawings

**(Please refer to Annexure-B of this document provided as soft copy in through
Google drive link attached to this bidding document)**

Supplementary Information Regarding Works To Be Procured

1 ACQUAINTANCE WITH SITE

The Contractor shall be deemed to have inspected and examined the substation Site and its surroundings and information available in connection therewith before submitting his Bid, as to the form and nature thereof, including the subsurface conditions, the hydrological and climatic conditions, the extent and nature of work, goods and materials necessary for the completion of the Work, the means of access to the Site and the accommodation he may require and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his Bid.

2 DESCRIPTION OF PROJECT

Complete Civil Works, Transportation, Erection/Installation, Testing and Commissioning of following works in accordance with the Contract Documents and Drawings under NGC Own Resources:

Lot-I: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 220/132kV Nowshera Industrial Grid Station

Lot-II: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 500kV Sheikh Muhammadi Grid Station

2.1 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 work shall be executed, NGC shall, give to the Contractor possession of so much of the Site as may be required to enable the Contractor to commence and proceed in accordance with the program referred to in Clause 14.1 of General Conditions of Contract and otherwise in accordance with such reasonable proposals of the Contractor as he shall, by notice in writing to the Employer, make and will, from time to time as 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 due dispatch 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 Employer to give possession in accordance with the terms of this Clause the Employer shall grant an extension of time for the completion of the Work and certify such sum as, in his opinion, shall be fair to cover the expense incurred which sum shall be paid by NGC.

a. LOCATION OF SITES

Site is located at existing 220/132kV Nowshera Industrial Grid station for Lot-I & 500kV Sheikh Muhammadi Grid station for Lot-II. The same is shown in tender drawings (General Layout & switchyard layout plan). It is further informed that above details are tentative and subject to change.

3 SITE CONDITIONS

3.1 Site Conditions and Meteorological Data

- (1) The Site is subject to dust/thunder and insects and vermin are prevalent. Particular care in design and packing of Goods must therefore, be taken to prevent ingress and effect of wind, dust, insects and vermin and to ensure resistance to attack by insects and vermin.
- (2) NGC does not guarantee the correctness of any data provided herein nor any interpretations, deductions or conclusions relative to subsurface conditions at Site. The Contractor must form his own opinion of the character of the work and of the materials to be excavated. He must make his own interpretations, and satisfy himself by his own investigations and research regarding all conditions affecting the work to be done. The Contractor must assume all responsibility for deductions and conclusions as to the nature or conditions of the materials to be excavated and of doing other work affected by the geology at the Site.

4 MATERIAL AND WORKMANSHIP

4.1 Material and Workmanship

- (1) All materials, manufacture, testing and workmanship of material and Work, shall comply with the requirements of the Contract Documents. Material, Work or parts which are not covered by the Specifications given herein, shall comply with the applicable standards, rules, codes and regulations of the Internationally approved standardizing bodies as indicated in these Contract Documents.
- (2) The intent of these Specifications is that the materials and workmanship of Work under this Contract should be equal to or superior than those actually described herein. Reference to a brand or manufacture, if made, is only for the sake of comparison as to type, design, character or quality of the Goods or parts and materials described and not be interpreted as eliminating other Goods and materials of equal performance, quality and durability.
- (3) In choosing materials and their finishes due regard shall be given to the conditions prevailing at Site.
- (4) All matters relating as to the acceptability or otherwise of the Goods, Work and materials offered under this Contract shall be decided by the Employer whose decision shall be final.

4.2 Extent of Specifications

The extent of the Contract Documents is to provide for the Work herein specified to be fully complete in every detail for the function designated. All Goods, materials, fittings, accessories, apparatus, labour or services which are not specifically mentioned in the Contract Documents, but which, in the opinion of the Employer, are usual or necessary for the satisfactory completion of the Work shall be deemed to be included in the Contract Documents and shall be provided by the Contractor without extra cost to NGC.

5
5.1

WORKS BY CONTRACTOR (SCOPE)

Scope of work

Complete Civil Works, Transportation, Erection/Installation, Testing and Commissioning of following work in accordance with the Contract Documents, BOQ and Drawings under NGC Own Resources:

Lot-I: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 220/132kV Nowshera Industrial Grid Station

The scope of the work to be executed under this Contract comprises of but not limited to following:

1. Construction of equipment foundations, switchyard paths, trenches along with covers, draw pits, culverts and associated Civil Works etc., shifting of plant and equipment from NGC warehouses to the site of work(s), erection, testing and commissioning of equipment at 220/132kV Nowshera Industrial Grid station in accordance with the Contract Documents, BOQ and Drawings.
2. The main electrical equipment, included but not limited to that given at Clause 08 herein to be installed, tested and commissioned at the grid station will be provided by NGC, however, it will be the responsibility of the Contractor to transport the equipment from NGC Warehouses situated at Lahore and/or Multan and/or Faisalabad and/or Jamshoro and/or Hyderabad to the project site and store the same in a safe environment / custody till completion / installation of it and successful testing / commissioning of the project.
3. Erection and installation of the grid station hardware/equipment comprising of but not necessarily limited to the following:
 - a. Overhead strain/rigid bus work, line and transformer take-off conductors and shield wires.
 - b. Conductor/Rigid tubular equipment interconnection work.
 - c. Switchyard Lightning protection
 - d. Substation underground earthing system and its connection with equipment.
4. Providing and laying of gravel in switchyard.
5. Design, supply, installation testing and commissioning of switchyard lighting system as per tender specification and approved drawings/data. In this respect contractor will supply all material/equipment including but not limited to lights (Philips or equivalent make), cables, switches, sockets, circuit breakers, relays, boxes, sensors, control equipment, pipes/conduits, all fixture & fittings etc.
6. Construction of foundation for steel structures as detailed in relevant drawings, and erection of steel structures according to the approved drawings.
7. Any type of necessary extensions in existing trenches, control house building etc. (if required).
8. Any other work not mentioned above but deemed necessary by the Contractor or Employer for the completion of the work and its

successful/smooth operation will be considered a part of the scope of work under the Contract.

9. For all kinds of civil works the Contractor shall follow specifications revised, up to date referred in technical provisions of this tender but not limited to it.
10. Design (civil works) of the project is not a part of the scope. As such all the relevant civil work, drawings have been made a part of the bidding document. Any drawing missing will be provided to the successful bidder on if and when required basis.
11. The quantities mentioned in the BOQ are estimated quantities and are to be used for bid evaluation purpose only. The actual quantities can vary depending upon the approved design and soil bearing capacity. However, the unit rates for material and services quoted in the offer shall remain firm and final.
12. All necessary provisions in context of civil works shall be made/ carried out for ready connection of SCADA and Remote-control system if required.
13. To provide technical staff, labour, contractor's equipment and consumables in testing and commissioning of all Plant and accessories for satisfactory operation.

Installation, wiring/cabling, testing and commissioning of all secondary equipment along with their schemes including Marshaling Kiosks, Control Panels, Protection Panels, Synchronizing Panel, Event Recorder Panel, Fault Recorder, AC/DC Auxiliary supply panels, parallel operation of transformers, 11kV incoming/outgoing panels, Battery Chargers & all related protection/control schemes of switchyard equipment are not included in the scope of work. In the said context following works *are not included in scope* of this tender:

- a. Installation, wiring, testing and commissioning of control panels, relay panels, metering panels, marshaling Kiosk, AC/ DC Auxiliary Panels, event fault recorders, etc.
- b. Laying and connection of all cables for A.C. and D.C. distribution systems for auxiliaries of AIS plants except switchyard lighting system involved in the scope of work.
- c. Laying in trenches and connection & termination of all control cables, for control and protection systems.
- d. Necessary interconnection/interfacing wiring of all switchyard equipment and indoors panels.

The Contractor of the secondary equipment will be responsible for installation testing and commissioning of the same within the completion period of this Contract. However, timely installation, wiring, testing and commissioning of primary equipment ready for wiring/interconnection with secondary equipment, construction of trenches etc. and necessary coordination with Contractor responsible for the secondary work, is the responsibility of Contractor under this Contract. Any delay in this respect will be treated on the part of Contractor under this Contract. The contractor

will provide sufficient time, **at least 100 days**, in program referred to in **Clause 35 of General Conditions of Contract** for installation testing and commissioning of secondary equipment.

Lot-II: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line Bays at 500kV Sheikh Muhammadi Grid Station

The scope of the work to be executed under this Contract comprises of but not limited to following:

1. Construction of equipment foundations, switchyard paths, trenches along with covers, draw pits, culverts and associated Civil Works etc., shifting of plant and equipment from NGC warehouses to the site of work(s), erection, testing and commissioning of equipment at site(s) in accordance with the Contract Documents, BoQ and Drawings.
2. The main electrical equipment, included but not limited to that given at Clause 08 herein to be installed, tested and commissioned at the grid station will be provided by NGC, however, it will be the responsibility of the Contractor to transport the equipment from NGC Warehouses situated at Lahore and/or Multan and/or Faisalabad and/or Jamshoro and/or Hyderabad to the project site and store the same in a safe environment / custody till completion / installation of it and successful testing / commissioning of the project.
3. Erection and installation of the grid station hardware/equipment comprising of but not necessarily limited to the following:
 - a. Overhead strain/rigid bus work, line and transformer take-off conductors and shield wires.
 - b. Conductor/Rigid tubular equipment interconnection work.
 - c. Switchyard Lightning protection
 - d. Substation underground earthing system and its connection with equipment.
4. Providing and laying of gravel in switchyard.
5. Design, supply, installation testing and commissioning of switchyard lighting system as per tender specification and approved drawings/data. In this respect contractor will supply all material/equipment including but not limited to lights (Philips or equivalent make), cables, switches, sockets, circuit breakers, relays, boxes, sensors, control equipment, pipes/conduits, all fixture & fittings etc.
6. Construction of foundation for steel structures as detailed in relevant drawings, and erection of steel structures according to the approved drawings.
7. Any type of necessary extensions in existing trenches, control house building etc. (if required).

8. Any other work not mentioned above but deemed necessary by the Contractor or Employer for the completion of the work and its successful/smooth operation will be considered a part of the scope of work under the Contract.
9. For all kinds of civil works the Contractor shall follow specifications revised, up to date referred in technical provisions of this tender but not limited to it.
10. Design (civil works) of the project is not a part of the scope. As such all the relevant civil work, drawings have been made a part of the bidding document. Any drawing missing will be provided to the successful bidder on if and when required basis.
11. The quantities mentioned in the BoQ are estimated quantities and are to be used for bid evaluation purpose only. The actual quantities can vary depending upon the approved design and soil bearing capacity. However, the unit rates for material and services quoted in the offer shall remain firm and final.
12. All necessary provisions in context of civil works shall be made/ carried out for ready connection of SCADA and Remote-control system if required.
13. To provide technical staff, labour, contractor's equipment and consumables in testing and commissioning of all Plant and accessories for satisfactory operation.

Installation, wiring/cabling, testing and commissioning of all secondary equipment alongwith their schemes including Marshaling Kiosks, Control Panels, Protection Panels, Synchronizing Panel, Event Recorder Panel, Fault Recorder, AC/DC Auxiliary supply panels, parallel operation of transformers, 11kV incoming/outgoing panels, Battery Chargers & all related protection/control schemes of switchyard equipment are not included in the scope of work. In the said context following works are not included in scope of this tender:

- a. Installation, wiring, testing and commissioning of control panels, relay panels, metering panels, marshaling Kiosk, AC/ DC Auxiliary Panels, event fault recorders, etc.
- b. Laying and connection of all cables for A.C. and D.C. distribution systems for auxiliaries of AIS plants except switchyard lighting system involved in the scope of work.
- c. Laying in trenches and connection & termination of all control cables, for control and protection systems.
- d. Necessary interconnection/interfacing wiring of all switchyard equipment and indoors panels.

The Contractor of the secondary equipment will be responsible for installation testing and commissioning of the same within the completion period of this Contract. However, timely installation, wiring, testing and commissioning of primary equipment ready for wiring/interconnection with secondary equipment, construction of trenches etc. and necessary coordination with Contractor responsible for the secondary work, is the

responsibility of Contractor under this Contract. Any delay in this respect will be treated on the part of Contractor under this Contract. The contractor will provide sufficient time, **at least 100 days**, in program referred to in **Clause 35 of General Conditions of Contract** for installation testing and commissioning of secondary equipment.

5.2 DESCRIPTION OF THE WORK

The detailed scope is mentioned above in Clause 5.1. The quantities for both electrical and civil works have been indicated in Schedule of prices/BOQ. Single Line Diagrams, switchyard layouts and other relevant drawings will also help in understanding the scope of work for the substation.

5.3 EXTENT OF SPECIFICATIONS

5.3.1 The extent of the Contract Documents is to provide for the work herein specified to be fully complete in every detail for the function designated. All fittings, accessories, apparatus or labours, which are not specifically mentioned in the Contract Documents, but which, in the opinion of the Project Director are useful or necessary for the satisfactory completion of the work shall be deemed to be included in the Contract without extra charges to NGC. Where standard is specified other than national or International standards, which promise to confer equal or better quality, will also be acceptable providing that the copies of such standards and the English Translation are submitted with the bid.

5.3.2 The information pertaining to details of installation at Substation provided with these documents are for the general guidance of the Contractor only and any errors or omissions in this information shall neither absolve the Contractor from his responsibility of providing a functional and operative system fully conforming to the technical requirements of the system as specified or as can be reasonably inferred from the specifications, nor entitle him to claim by adjustments in prices or schedule on this account.

5.4 SITE CONDITIONS AND METEOROLOGICAL DATA

The sites are subject to high temperature, dust storms and insects and vermin are prevalent. Particular care in design must therefore, be used to prevent ingress of dust, insects and vermin and to ensure resistance to attack by insects and vermin therefore special care should be taken while designing foundations etc.

Meteorological data of the Substation in respect of the following parameters may be taken into account for designing purpose.

1.	Temperature, °C	Max Min
2.	No. of Thunder Storm days/year	Max Min

3.	No. of Fog days per year	Max Min
4.	No. of Rain fall days/year	Max Min
5.	No. of Drizzles/year	Max Min
6.	Relative humidity (%) yearly	Max Min
7.	Pressure in mill bars (Station Level)	Max Min
8.	Rain fall in a month, cm	Max Min
9.	Rain fall in 24 hours, cm	Max Min
10.	Wind, km/hour	Max

5.5 RECOMMENDED VALUES FOR DESIGN

The material to be installed in the switchyard and covered by these Specifications shall be for outdoor use and shall be suitable in every way for continuous service. The conditions under which it will operate are to be considered throughout.

5.6 AMBIENT TEMPERATURE

Maximum temperature	50 °C
Maximum average temperature For 24 hours period	35 °C
Minimum temperature	-2 °C

Relative Humidity

The relative humidity may approach 100 percent. During the monsoon high humidity may persist for many days along with temperature ranging from 30 °C to 40 °C.

Wind Loading

Wind maximum gusts velocity of 160 km/hr. For 5 seconds acting at a height of 10 meters above ground level.

5.7 Erection Equipment to be provided by NGC

No erection equipment or tool(s) shall be provided to the contractor by NGC for the works.

5.8 Relation of the Works to Existing Equipment

Except as otherwise specified or as constrained by the Contractor's standard design, the Works shall generally conform to equipment in layout, control functions and any other feature intrinsic to the orderly and safe operation of the substations as to which requirements the Contractor shall be responsible for satisfying himself. Prior to commencement of Works the Contractor shall visit the Site(s) to be knowledgeable of the detailed requirements.

6 DRAWINGS**6.1 Drawings in Contract****6.1.1 Specification Drawings**

The specification drawings contained in **Annexure-B** of the Bidding Documents show the scope of Work to be performed by the Contractor. These are only reference drawings.

6.1.2 Tender Drawings

The drawings provided in the tender shall not be used for execution of the Work unless the Employer gives specific instructions/ approval for such use.

6.1.3 Construction Drawings

The Work shall be performed in accordance with the detailed construction drawings.

The drawings provided with the bidding document are the reference drawings to be used for filling of BOQ only.

The actual construction / work drawings will be issued by the Engineer (Design office, NGC) to the successful bidder on, "if and when required" basis.

6.1.4 Detail Drawings

All the basic/ scope drawings, specifications, schemes and any other information shall be provided by the Employer to the successful contractor on if and when required basis in due time and in logical order to facilitate proper coordination. However, allied engineering drawings (electrical/mechanical), required for the successful completion of the project shall be responsibility of the contractor, but the contractor will be liable for the Employer's approval before the implementation of such drawings (allied drawings).

6.1.5 Drawings, Data and Instruction Manuals

The following working drawings shall be provided by Employer.

- i. Single Line Diagram
- ii. Switch Yard Layout
- iii. General Layout Plan
- iv. Foundation Plan
- v. Switch Yard Earthing Plan
- vi. Switchyard Lightning Protection Drawing
- vii. Substation control schematics
- viii. Control diagrams of circuit breakers and disconnectors
- ix. Substation protection schematics
- x. Constructional details regarding civil works of all electrical and mechanical equipment
- xi. Equipment layout drawings
- xii. Setting drawings
- xiii. Structural and architectural drawings of all civil works
- xiv. Interconnection wiring diagrams for all electrical equipment
- xv. Cable schedules
- xvi. Such other drawings as are required by the Employer to demonstrate that all parts of the Plant being erected conform to the requirements of the Specifications.

6.2 Data Other than Drawings

All of the applicable requirements of this Clause with reference to drawings shall be provided by the Employer and shall apply equally to catalogues, cuts, illustrations, printed specifications, or other data.

6.3 SUBMISSION AND APPROVALS

6.3.1 Drawings for Approval

Drawings for approval shall be distributed through international / national couriers to addresses and in number as specified in Clause 6.3.6 hereof.

All drawings submitted for approval shall be provided with a blank white space, approximately 90 mm in height by 120 mm in width, near the lower right-hand corner to be used for notations by the Engineer.

6.3.2 Approval of Drawings

(1) If the drawing provided by the Employer to the Contractor stamped "APPROVED" he may immediately proceed with the Work. Any drawing marked "APPROVED" by the Employer shall be known as an "Approved Drawing".

(2) If the drawing is returned to the Contractor stamped "APPROVED EXCEPT AS NOTED" he may proceed with the Work taking into account the corrections and comments noted on the drawing.

(3) If the Contractor does not agree with exceptions taken by the Engineer, the Contractor shall state in his letter of re-submission his reasons for not complying with the Engineer's exceptions. Revision number and date and description of change shall be shown on all drawings or calculations revised.

6.3.3 Work Prior to Provision of Drawings by NGC

Any work done prior to the supply of detailed work drawings by the contractor and approval of the same by Engineer/Employer, shall be at the Contractor's risk. The Employer shall have the right to request additional details and to require the Contractor to make any change in the design, which are necessary to conform to the provisions and intent of these Specifications and such changes shall be made without additional cost to NGC. The supply of drawings by the Employer shall not be construed as a complete check but will indicate only that the general method of construction and detailing is satisfactory. These drawings shall not be held to relieve the Contractor of the obligations to meet all the requirements of these Specifications or of the responsibility for the correctness of the drawings or for correct fit of assembled Goods furnished by the NGC.

6.3.4 Sequence of Submission

The sequence of submission of all drawings shall be such that all information is available for checking each drawing when it is received.

6.3.5 Drawings and Revisions

All issued drawings and data shall form a part of the Contract. If revisions are made after a drawing has been issued, the revised drawing shall be considered final and become a part of the contract.

6.3.6 Distribution of Drawings and Documents

The distribution of drawings and documents to be maintained by the contractor shall be as follows.

Documents	Employer		NGC/ Project Director	Total
	Head Office	Site Office:		
Construction schedules made in MS- Project .	2	1	1	4
Record (As-Built) Drawings	2	-	4	6
Reproducible transparency Record (As-Built) Drawings	1	-	1	2
Record (As-Built) Drawings on computer compact diskette (CD) using AutoCAD software	1	-	1	2
Codes and standards	1	-	1	2
Approved test procedure	1	2	2	5
Insurance Certificates	1	1	2	4
Receiving reports	1	1	2	4
Damage reports	1	1	2	4
Erection progress Reports	2	1	2	5

List of Construction and Erection Equipment	1	1	1	3
Operation & Maintenance Manual of Air Conditioning Plant /Units	3	-	12	15
Project Completion Reports	3	-	12	15
Correspondence to NGC	1	1	1	3
Correspondence to the Engineer's Head Office	1	1	1	3
Correspondence to the Engineer's Site Office	1	1	1	3

6.3.7 **Record Drawings (Not Applicable)**

The Contractor shall furnish to the Employer two (2) complete sets of all Record Drawings and Data prior to issue of the Taking-over Certificate. The Contractor shall also furnish to the Employer one (1) Mylar polyester base full size reproducible and one copy on computer compact diskette (CD) using AutoCAD, of all final Record and other drawings which, in the opinion of the Engineer, may be required for the erection, construction of civil Work operation and maintenance, for identification of parts and for ordering replacement parts and materials. The Mylar reproducible shall be 50/70 microns thick, double matte film, wash off film, printed on the front.

6.3.8 **OWNERSHIP OF DRAWINGS AND DATA ETC**

All the drawings, details, bill of materials and any other information or documents furnished by the Contractor shall become the property of NGC and shall be non-returnable. NGC will have the right to use this property.

7 **STANDARDS AND TYPICAL DESIGN**

7.1 **General**

The Specifications cite or imply International Standards and typical design for Work, Goods and materials. Other equivalent Standards and typical designs are equally acceptable provided that they in no way detract from the quality, safety, operability of the Work, Goods and materials furnished. However, when standards or typical design other than those cited or implied are offered by a bidder, he shall set forth in his bid the alternative standards proposed so that a direct comparison can be made before Contract Award. Each specific difference from the Specifications shall be clearly indicated by the bidder. If the bidder sets no alternatives forth, it will be assumed that Work, Goods and material will be in accordance with the International Standards and typical design as cited or implied in the Specifications.

Where the documents provide requirements for material or Goods or Work by specifying a standard such as, for example, one of the international standard organizations, which has its origin in one country, it is not the intention to restrict the requirements solely to that standard and that country. Other standards, including standards of other countries

will be accepted provided the requirements thereof in the sole opinion of the Engineer are at least equal to the requirements of the standards specified. The Bidder may propose to the Employer an equivalent standard other than that specified, in which case he shall submit the proposed standard and all other information required by the Employer and shall submit written demonstration that his proposed standard is equivalent to or superior to the one specified herein. The submission must be made in English language. Moreover the bidder shall also supply copy of the latest revision of the standards used in his design.

7.2 **Applicable Standards and Codes**

- (1) All Goods, materials, Work and design shall be generally in accordance with latest revision of the standards specified in the Technical Provisions except where specifically directed otherwise. If these Specifications conflict with any or all the standards stated in the Technical Provisions, these Specifications shall have precedence and shall govern.
- (2) In case deviation from the above standards is minor, the approval of the Employer may be given to the use of other national standards prevalent in the country of manufacture. No departure from the standard specified will be considered after the Contract has been awarded unless specific authorization is requested in writing from the Engineer.

8 **ELECTRICAL EQUIPMENT TO BE SUPPLIED BY NGC**

The substation equipment as per contract scope/BOQ/Schedule of prices-**Bill No. (B)** as per Appendix-D of Section-III shall be supplied to the Contractor by NGC for subject project as per requirement of scope. The exact dimensional details of the substation will be supplied later to the successful bidder.

9 **TRANSPORTATION AND PACKING**

9.1 **Packing**

- (1) The Contractor shall pack all parts of the Goods / materials (to be supplied by NGC) for transportation in accordance with the requirements of the Contract Documents and in the best possible manner to withstand damage or loss from repeated handling and extremes of climate during transport and storage at Site. All parts of the Goods and materials shall be packed so as to guarantee safe transportation of the Goods and materials from NGC stores to the Site under any conditions and limitations that may be encountered. The manner of packing shall be such that it protects the Goods, and other material against breakages, damages and losses from the factory until its arrival at its final destination at the Site.
- (2) The final packing shall be such that the weight and dimensions of packages are within reasonable limits in order to facilitate handling, storage and transportation.

9.2 **Lifting**

The method of lifting, type of equipment and type of slings, used for handling the conductor reels are subject to approval by the Engineer. The wooden reels are so constructed as to be supported either on an axle through the arbor hole or by the reel flange. When an axle supported from above lifts the reels, a spreader bar must be employed to prevent reel damage by inward pressure on reel flange. In no case shall metallic slings or other metallic equipment come in contact with conductor or overhead shield wire or ground wire.

9.3 **Slings**

If the use of slings is necessary, these shall be of a flexible type and preferably manila rope or other non-metallic materials. The use of steel wire, mesh or chain link slings is prohibited unless they are covered with rubber hose or some similar material.

9.4 **Cost of Transportation**

- (1) The contractor shall be responsible (bear the cost) for the transportation of goods/plant/equipment being supplied by NGC from its warehouses to the site. Majority of the said goods/plant/equipment being supplied by NGC will be from Lahore and/or Multan and/or Faisalabad and/or Jamshoro warehouses but not limited to. The Contractor shall insure these goods/plant/equipment from NGC warehouse to the site at the rate of 100% of the equipment cost.
- (2) The Contractor shall insure and transport the Goods, materials and his Equipment from its place of manufacture or origin to the Site and shall be solely responsible for selection of routes and carriers, and expediting in order that all shipments are safely and expeditiously transported to the Site.
- (3) The Contractor shall be solely responsible for satisfying himself at the time of transportation as to the adequacy of the road surfaces and structures. All costs related with reinforcement of roads, structures, diversions and the like, if any, should be borne by the Contractor. The Contractor shall advise the concerned authorities in advance of the proposed transit of the heaviest and largest items of Goods and Equipment and shall comply with instructions given by said authorities.
- (4) Within the limits imposed by law, the Contractor shall be entitled to utilize all the roads and other communication facilities existing in the country, to the same extent as any other user.

9.5 **Unloading and Storage at the Site**

- (1) The Contractor shall unload all Goods and other material (except Spare Parts) at the Site. Items for permanent installations shall be properly stored and shall be protected as required to prevent damage or deterioration of any type. Storage/ Stacking methods shall be such as to cause minimum inconvenience to others and shall be arranged to facilitate inspection.
- (2) All Goods and other material storage shall comply with the requirements of the Specifications or to the approval of the Engineer.

- (3) The Contractor shall be held responsible for all costs of damage to the equipment and steel structures (including replacement) after they are handed over to him at the NGC Stores. Before accepting material at the Store the Contractor shall ensure himself as to its acceptable condition, if, in the contractor's opinion some material is unacceptable, he shall so inform the Project Director.
- (4) Lifting of pieces, which are galvanized or painted, shall be by hand or by hemp rope on as approved by the Engineer, or by wire rope which is suitable covered with rubber or similar material lifting by steel chains is prohibited. Steel pieces shall not be dropped, thrown, or skidded over steel, concrete or rock surfaces.
- (5) When steel components are stored temporarily they shall be blocked on wood & separated to prevent damage.

9.6 **Ownership of Packing Materials**

All packing boxes, reels, shipping containers except those containers, which are not the property of the Contractor, planking covers, etc, shall become the property of NGC. All the packing materials shall be handed over to NGC immediately after storage requirements of the Goods or part thereof and other materials are over.

9.7 **Receiving Reports and/ or Damage Reports**

- (1) The Contractor shall prepare and submit receiving reports to NGC and the Employer to cover shipments received and checked at the job Site and/or storage area. Shipment on arrival at the job Site and/or storage area shall be unloaded, opened, and carefully checked by the Contractor in the presence of a designated representative of the Engineer / NGC for any loss and damages in transit. In the event of loss and/or damage, the Contractor shall immediately report to NGC/Engineer. Prompt action shall be taken by the Contractor with intimation to Engineer/NGC, to record and remedy the damaged or missing item(s) and it shall be ensured that the deliveries meet the final delivery dates and/or commissioning dates.
- (2) In all cases of irreparable damage, the Contractor shall immediately notify the original manufacturer(s) for re-manufacture and supply of the damaged part(s).

10 **SHOP INSPECTION AND ORDERS FOR MATERIALS**

10.1 **Inspection**

Unless otherwise authorized by the Employer no material or equipment shall be shipped / transported from its point of original manufacture or final shop assembly before it has been inspected and approved by the Engineer.

10.2 **Material Orders**

The Contractor shall, if requested, provide the Employer with un-priced copies of the Contractor's purchase orders for material or approved sub-contracted supply at the time any such orders are placed. The Contractor shall also provide the Employer with any other relevant information requested to ensure proper expediting and scheduling of the deliveries.

10.3 Acceptance of Materials

The approval by the Employer of any material or equipment prior to transportation shall in no way relieve the Contractor of any of his responsibilities for meeting all of the requirements of the Specifications and shall not prevent subsequent rejection if such material or equipment is later found to be defective or not conforming to the Specifications.

11 SCHEDULE, PROGRESS REPORTS AND MEETINGS

11.1 Schedule

The Contractor shall carry out the Work in accordance with the dates/ periods specified in Schedule provided by the contractor and approved by the Employer, which shall be provided. The Contractor shall regularly review the Schedule and notify the Employer promptly of any revisions, which in his view may be required from time to time.

11.2 Form of Schedule

The Schedule shall be a detailed CPM (critical path method) type, time scaled according to calendar dates and Project month numbers. The CPM for planning, scheduling, and controlling will be used for the Contract. The Contractor shall submit a schedule showing the logical sequence in which the Work will be carried out in sufficient detail to satisfy the Employer that the Work is thoroughly planned and meets all the requirements of the Contract Documents. In preparing the Schedule, the Contractor shall fully take into account the requirements (and possibilities) for inland transportation.

11.3 Erection/Construction

- (1) The delivery of components and parts of the Goods/ Material should be so estimated so as to permit erection work and construction work to proceed in an orderly manner so that the required Commissioning Dates can complete the Work. The Contractor in preparing and regularly reviewing the Schedule in respect of the erection work shall comply with the requirements of contract.
- (2) The Contractor shall promptly bring to the attention of the Employer any amendment to the Schedule, which in his view may at any time be required to ensure that the Commissioning Date/ Periods will be met.
- (3) Prior to steel erection, the Contractor shall examine the existing work on which this work is in any way dependent (that is, verify elevations & dimensions of foundations including anchor bolts & embedded angles) & report to the Site Engineer any errors on discrepancies that may affect the Contractor's work.

- (4) Should the Contractor encounter any foundation surfaces or anchor bolts & embedded parts, which do not match the structural steel he shall immediately notify the Site Engineer. If in the opinion of the Site Engineer the discrepancy is due to misplacement of the concrete, anchor bolts or embedded parts the Contractor will be required to rectify the defect, all at his own expense & to the satisfaction of the Engineer. If in the opinion of the Engineer, the discrepancy is due to faulty fabrication of the structural steel, then the rectification of the defect shall be the responsibility of the Manufacturer(s) of the Plant.
- (5) Unless otherwise specified, the Contractor shall assemble & erect the switchyard structures to the tolerance dictated by ASTM or equivalent DIN Standards.
- (6) The erection tolerance on a post insulator support structure & a lightning arrestor support structure shall be such that a plumb line passing through the centre of the bolt circle on the top plate of the structure shall pass within ± 6 mm of the location lines shown on the drawings. The anchor bolts in the structural foundation shall be located to within ± 6 mm of the location lines shown on the drawings.
- (7) The top plate of the Post Insulator support structures shall be aligned so that the center line of the plate shall be parallel to the longitudinal axis of the bus it is supporting, to a tolerance of 3 mm over the length of the plate.
- (8) The top plate of the bus support structure shall be level within 3 mm
- (9) All other structures shall be erected-plumb or level within plus or minus a tolerance or 1 in 1000 & according to ASTM OR EQUIVALENT DIN Standards.
- (10) The structural steel shall be assembled and erected in such a manner as to ensure that members are not subjected to any damage or undue stress.
- (11) Sections or portions of the structure shall be assembled and bolted on the ground so that they can readily be lifted in consecutive manner & connected together in the air to form a complete structure. Care shall be taken to prevent damage to the steel pieces or galvanizing thereof. The tools & method of assemble shall be subject to the approval of the Engineer but generally only flat non-adjustable or socket type wrenches shall be used.
- (12) During assemble & erection, reaming or holes is prohibited unless the Engineer gives his approval, which shall be based solely on deviations in the fabrication of the steel. The non alignment of holes in connecting members if due to faulty erection procedures shall be corrected by the Contractor at his own expense.

- (13) Driving of pins through the bolt holes for the purpose of enlarging the holes is prohibited.
- (14) Structures shall be erected in accordance with the erection drawings, plumb and true in all respects. Bolts shall be of the length specified & shall ensure that members rest on the shank of bolt.
- (15) The legs & principal bracings of all panels of the structure shall be erected & bolted at a lower elevation before proceeding to a higher level.
- (16) Members of each panel shall be installed as erection procedure. The Engineer must approve any deviation from this procedure in writing.
- (17) Punching: when instructed by the Site Engineer, bolt threads shall be punched with steel point or chisel at the surface of the tightened nut. Where lock nuts or lock washers are provided punching will not be required but the nuts shall be properly tightened.
- (18) Step Bolts: These shall be installed in each tower as it is erected.
- (19) Drifting / Filling: Holes shall not be enlarged by drifting / Filling
- (20) Installation of Bolts: Head of bolts shall be installed at the out side face of the structure whenever possible. Lock washers shall be used with all bolts. Bolts shall not be tightened with adjustable wrenches.
- (21) Nuts & bolts shall be tightened to an amount corresponding to the full effort of a man using a 300 mm ratchet wrench, or & instructed by Site Engineer.

11.4

Progress Reports

- (1) The Contractor within 15 days from the date of the Letter of Acceptance shall submit in writing for the approval of Employer a Schedule for the erection, testing and commissioning of the Goods/Material and construction of the associated civil work.
- (2) The submission to or approval by the Engineer/ NGC of such Schedule etc. shall not relieve the Contractor of any of his duties or responsibilities under the Contract.
- (3) At monthly intervals after submission of the Schedule, the Contractor shall submit to the Employer up to five (5) copies of a written detailed progress report in an approved form together with copies of the above mentioned Schedule indicating the stage reached in design, approval of drawings, ordering and procurement of materials, erection/construction, in percentage terms. Such monthly reports shall show the actual progress plotted against the scheduled progress. These reports shall be accompanied by such photographs, diagrams, bar charts, and

curves in approved standard form, as may be required by the Engineer. The reports shall be forwarded not later than the 8th of the subsequent month. The numbers of copies shall be as stipulated in the Specifications or as instructed by the Engineer.

- (4) The Employer shall at all reasonable times be afforded access to the Contractor and any Sub-Contractor's premises for the purpose of ascertaining progress.

11.5 Meetings

- (1) Soon after the date of signing of Contract, the Employer will, with the approval of NGC require a conference with NGC and the Contractor at a place mutually agreed upon, to discuss scheduling of drawings, and other similar problems, which may be pertinent to the completion of the Project.
- (2) At monthly intervals or from time to time during the execution of the Contract, the Employer may call meetings, either in his Offices or at the Contractor's Offices in Pakistan or NGC's office as is deemed necessary for the purpose of progress monitoring and proper execution of the Contract.
- (3) As required by the Engineer, responsible representatives of the Contractor shall attend such meetings.
- (4) All expenses incurred by the Contractor for attending such meetings shall be borne by the Contractor and shall not be reimbursable.

12. SITE FACILITIES AND SERVICES

Attention is drawn to the obligations of the Contractor to make his own arrangements at his own expense for Services or facilities provided to his employees. Any cost incurred by the Contractor in respect of any of such Site facilities or services under the Contract shall be deemed to be included in the rates and prices in the Price Schedule and no separate payment, therefore, will be made to the Contractor.

12.1 Accommodation

- (1) The Contractor shall provide and maintain at his cost residential accommodation and transportation facilities for his own use.
- (2) The Contractor shall provide and maintain such housing accommodation and amenities as he may consider necessary for all of his supervisory staff and labor employed for the purposes of or in connection with this Contract including all fencing, electricity, supply, sanitation, cook houses, fire prevention, water supply and other requirements in connection with such housing accommodation or amenities.

12.2 Site Offices

- (1) The Contractor shall carry out investigation, design and construction of the Site office required for execution of the work and

submit such design in writing to the Employer and obtain his approval.

- (2) The location of the site office will also be submitted to the Employer for approval prior to the construction of the same.
- (3) The Contractor shall, at his expense, carry out maintenance and management of the above office.
- (4) After completion of the work, the Contractor shall dismantle or leave the above office intact subject to the approval of the Engineer.

12.3 **Work yards and Storage Areas**

- (1) No storage site shall be provided by NGC to store Goods, materials or equipment. The Contractor shall procure, furnish, provide and arrange for all the necessary services and be responsible for the construction and maintenance of the necessary construction campus, offices and warehouses; and perform all other work necessary for completion of the Work described herein in strict conformance with these Specifications.
- (2) The Contractor shall provide his own watchman service to ensure security and safety of the Goods, materials and Work prior to NGC taking over the Work.

12.4 **Temporary Buildings**

- (1) The Contractor shall provide and maintain all temporary structures required including warehouses, changes, change houses for workmen, sheds, etc. He shall also provide his own field office complete with telephone so that he or his official representative can be contacted by NGC and/or Employer at all times.
- (2) Such temporary buildings and/or utilities shall remain the property of the Contractor and shall be removed by him at his expense upon the completion of the Work and the Site reinstated to its original condition, all to the approval of the Engineer.

13 **EXPEDITING**

The Contractor shall provide the Employer with un-priced copies of the Contractor's Purchase Orders for material or approved Subcontracted Work at the time any such orders are placed. The Contractor shall also provide the Employer with any other relevant information requested to ensure proper expediting and scheduling of the Work.

14 **PAYMENT FOR WORK REQUIRED BY SPECIAL PROVISIONS**

Unless expressly excluded, the cost of all work required by the "Special Provisions" shall be considered to be included in the price and amounts quoted in the "Price Schedule".

15 **COMMUNICATIONS TO THE ENGINEER**

Pursuant to the definition of Engineer, the Employer has established a Project Office at Lahore to which the Contractor shall address all communications for the approval of designs and drawings etc., as follows:

Director General (Substation Engineering) NGC
143 – WAPDA House,
Lahore - Pakistan.
Tel: +92-42-99202190
Fax: +92-42-99202502

Or

An Engineer (individual or firm) designated by the Employer.

The Employer will establish a Site Office to supervise the Site activities. The address of the Engineer's Office at Site shall be communicated to the Contractor at that stage.

16

TROPICALIZATION

General

In choosing materials and their finishes due regard shall be given to the weather conditions under which material may be called upon to work. Requirements are detailed below and in the technical provisions.

Metal

Iron and steel shall in general be painted or galvanized as appropriate. Painting shall be in accordance with the technical provisions. Indoor parts may alternatively have chromium or copper-nickel plating or other approved protective finish. Small-iron and steel parts (other than stainless steel) of all instruments and electrical equipment, the cores of electromagnets, and the metal parts of the relays and mechanism shall be treated in approved manner to prevent rust, cores etc. which are built up of lamination or cannot for any other reason be anti-rust treated, shall have all exposed parts thoroughly cleaned and heavily enameled, lacquered or compounded. When it is necessary to use dissimilar metal in Contact, these shall be so selected that the potential difference between them in the electro-chemical series is no greater than 0.5 volt. If this is not possible the contact surfaces of one or both of the metal shall be electro-plated or otherwise finished in such a manner that the potential difference is reduced to within the required limits, or, alternatively, the two metal shall be insulated from each other by an approved insulating material or a coating or approved varnish compound.

Screw, Nuts, Springs, Pivots etc.

The use of iron and steel shall be avoided in instruments and electrical relays wherever possible steel screws, when used, shall be zinc, cadmium or chromium plated or may be of corrosion resisting steel when plating is not possible owing to tolerance limitations. All wood screws shall be dull nickel plated brass or other approved finish. Instruments screws (except those forming part of a magnetic circuit) shall be of brass bronze. Springs shall be non-rusting material, e.g. phosphor bronze shall be silver, as far as

possible. Pivots and other parts for which nonferrous material is unsuitable shall be of an approved stainless steel, where possible.

Fabrics, Cork, Paper etc.

Fabrics, cork, paper and similar materials, which are not subsequently to be protected by impregnation, shall be adequately treated with an approved fungicide. Sleevings and fabrics treated with linseed oil, linseed oil varnishes shall not be used.

Wood

The use of wood in material shall be avoided. When used, wood work shall be of thoroughly seasoned teak or other approved wood which is resistant to fungal decay and free from shakes and warp, sap and wane, knots faults and other blemishes. All wood work shall be treated in approved manner to protect it against the ingress of moisture and from the growth of fungus and termite attack, unless it is naturally resistant to those causes of deterioration. All joints in wood work shall be dovetailed or tongued and pinned, if practicable. Metal fittings where used shall be of non-ferrous material.

Adhesives

Adhesives shall be specially selected to ensure the use of type, which are impervious to moisture, resistant to mould growth, and not subject to the ravages of insects. Synthetic resin cement only shall be used for jointing wood. Casein cement shall not be used.

17

Reference Drawing (Annexure-B) Tender Document

General Notes

- i) The drawings provided in the tender are only reference drawings and they shall not be used for execution of the Work unless the Employer/ Engineer gives specific instructions/ approval for such use.
- ii) The drawings contained in Annexure-B are the property of NGC/ WAPDA and are intended for the purpose of providing information to assist bidders in preparing proposal for bid. Use of these drawings for any purpose other than that intended is prohibited except with the express permission of NGC.
- iii) These drawings are included to define and illustrate the general design specifications detailed/ allied designing shall be the responsibility of the contractor and shall be subjected to the approval of the Engineer.
- iv) Bid drawings are not intended to show all details of equipment and shall not be interpreted as indicating any limitation to the scope of works. However, equipment shown on these drawings is included in the scope of work.
- v) The Contractor shall be responsible for ensuring proper functional requirements of the various equipment and shall be responsible for furnishing any additional pieces of equipment for making

modifications in the equipment as desired and/or approved by the Engineer, to achieve proper coordination with various components offered in the bid.

- vi) The Contractor shall supply all auxiliary equipment/material and devices, which are not listed but are necessary for proper performance of the systems described in the bid drawings and documents.

18 Health Safety and Environmental Requirements

- i) The contractor will hire one Environmental / HSE Officer for each lot, who will remain at site for whole construction period. He should possess Masters' Degree in Environmental Sciences / Environmental Engineering with 1-2 years of relevant experience. His CV will be shared with Environment and Social Impact Cell (ESIC) of NGC for approval.
- ii) Contractor will engage and EPA certified environmental laboratory for instrumental monitoring (Water, Air, Noise) at construction sites after every quarter at one monitoring point. The profile of lab will be shared with ESIC for approval.
- iii) The Environmental / HSE Officer will make sure; (a) the provision of proper PPEs to the workers and train them for their proper use. (b) prepare and submit the monthly and biannual progress reports to ESIC-NGC (c) there should be no bonded or child labor at site (d) to ensure strict compliance with ADB Core Labor Standards. (e) to prepare and submit waste management plan as well as HSE plan to ESIC before commencement of civil works.
- iv) The Contractor shall implement environmental mitigation, OHS measures, labor management procedures, and community safety measures throughout construction

ANNEXURES

https://drive.google.com/drive/folders/1_VbqQClgryCZd9EA1gTTRfiyp9v5k3Ks?usp=sharing

ANNEXURE-I

Environmental Management Plan (EMP)

NOR-138W2-2026

ENVIRONNEMENTAL MANAGEMENT PLAN (EMP) FOR EXTENSION/AUGMENTATION WORKS

**NOR-138W2-2026 (NGC Funded) - CIVIL WORKS, ERECTION, TESTING & COMMISSIONING
OF 220/132KV NOWSHERA INDUSTRIAL GRID STATION & 500kV SHEIKH MUHAMMADI
GRID STATION UNDER NGC OWN RESOURCES**

**Lot-I: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line
Bays at 220/132kV Nowshera Industrial Grid Station**

**Lot-II: Civil Works, Erection, Testing & Commissioning for Addition of 02 Nos. 220kV Line
Bays at 500kV Sheikh Muhammadi Grid Station**

NOR-138W2-2026

ENVIRONNEMENTAL MANAGEMENT PLAN (EMP) FOR EXTENSION/AUGMENTATION WORKS

Environme ntal Concern	Objectives	Mitigation Measures (MM) Recommended	Timing to Impleme nt MM	Location to Impleme nt MM	Resp imp MM	Resp mon MM
DESIGN STAGE						
1. Social Impac ts	To ensure that the adverse impacts on crops and trees are mitigated according to the LARP provisions.	1. No Impact, as the constriction activities will be within the boundary wall of existing grid stations and hence no social issue will rise.	-	-	-	-
2. Hydrol ogical Impact s	To minimize hydrological and drainage impacts during constructions .	1. The flow of waste water in the open space within the grid stations should cater far.	Before the commen cement of construct ion activities/ during designin g stage.	The existing grid stations areas.	NGC with the Desig n Consu ltant	NGC
3. Waste Dispos al	Ensure adequate disposal options for all waste including unsuitable soils, scrap metal.	1. Identify sufficient locations for disposal of transformer oils, unsuitable soils, scrap metal “cradle to grave”. 2. Include in contracts for unit rates for re-measurement for disposal. 3. Designate disposal sites in the contract and cost unit disposal rates accordingly. 4. Prepare a PCB spill handling procedure and equip such teams with special clothing, steel containers and solvents. 5.	1. Durin g design ing stage no later than pre- qualifi cation or tender negoti ations. 2. Includ e in the contra ct.	Locations approved by NGC and waste disposal local authorities .	NGC with the design consul tant	NGC and CSC
CONSTRUCTION STAGE						
1. Hydrolo gy and	To ensure the proper	1. Consideration of weather conditions	Prepare a	Within the existing	CSC or	NGC

Environmental Concern	Objectives	Mitigation Measures (MM) Recommended	Timing to Implement MM	Location to Implement MM	Responsible MM	Responsible MM
Drainage Aspects	implementation of hydrological/ drainage related mitigation measures.	when particular construction activities are undertaken. 2. Limitations on excavation depths in use of recharge areas for material exploitation or spoil disposal. 3. Use of landscaping as an integrated component of construction activity as an erosion control measure.	thorough plan to be approved by SC one month prior to a commencement of construction.	grid stations.	NGC to actively supervise and enforce	
2. Orientation for Contractors, and Workers	To ensure that the CSC, contractor and workers understand and have the capacity to ensure the environmental requirements and implementation of mitigation measures.	1. The environmental officer of contractor to monitor and progress all environmental statutory and recommended obligations. 2. Conduct special briefing for managers and / or on-site training for the contractors and workers on the environmental requirement of the project. Record attendance and achievement test. 3. Agreement on critical areas to be considered and necessary mitigation measures, among all parties who are involved in project activities. 4. Continuous progress review and refresher sessions to be followed.	Induction of all relevant staff required for implementation of EMP. At early stages of construction for all construction employees as far as reasonably practicable.	All staff members in all categories. Monthly induction and six month refresher course as necessary until contractor complies.	Contractor and the CSC and record details	NGC & CSC to observe and record success
3. Air Quality	To minimize effectively and avoid complaints due to the airborne particulate matter released to the atmosphere.	1. Control all dusty materials at source. 2. All heavy equipment and machinery shall be fitted in full compliance with the national and local regulations. (Relevant regulations are in the Motor vehicles fitness	During the construction stage.	Construction sites within the existing grid stations.	Contractor should maintain in acceptable standard CSC to	NGC/CSC

Environmental Concern	Objectives	Mitigation Measures (MM) Recommended	Timing to Implement MM	Location to Implement MM	Responsible MM	Responsible MM
		rules and Highway Act). 3. Fuel-efficient and well-maintained haulage trucks shall be employed to minimize exhaust emissions. 4. Vehicles transporting soil, sand and other construction materials shall be covered. 5. Limitations to speeds of such vehicles necessary. Transport through densely populated area should be avoided. 6. Spraying of bare areas with water. 7. Concrete plants to be controlled in line with statutory requirements should not be close to sensitive receptors.			supervise activities.	
4. Noise / Ground Vibration	To minimize noise level increases and ground vibrations during construction operations.	1. All heavy equipment and machinery shall be fitted in full compliance with the national and local regulations and with effective silencing apparatus to minimize noise. 2. As a rule, the operation of heavy equipment shall be conducted in daylight hours. 3. Hammer-type percussive pile driving operations shall be not be allowed at night time. 4. Construction equipment, which generates excessive noise, shall be enclosed or fitted with effective silencing apparatus to minimize noise. 5. Well-maintained haulage trucks will be	Maximum allowable noise levels should be below 80 dB (A) L_{eq} at the boundary of the construction site.	Construction sites within the existing grid stations.	Contractor should maintain in the acceptable standards CSC to supervise relevant activities.	NGC / CSC

Environmental Concern	Objectives	Mitigation Measures (MM) Recommended	Timing to Implement MM	Location to Implement MM	Responsible MM	Responsible MM
		used with speed controls. 6. Contractor shall take adequate measures to minimize noise nuisance in the vicinity of construction sites by way of adopting available acoustic methods.				
5. Exploitation Handling, Transportation and Storage of Construction Materials	To minimize contamination of the surroundings (Due to Implementation of works, concrete and crushing plants).	1. In order to minimize and or avoid adverse environmental impacts arising out of construction material exploitation, handling, transportation and storage measures to be taken 2. Conditions that apply for selecting sites for material exploitation. 3. Conditions that apply to timing and use of roads for material transport. 4. Conditions that apply for maintenance of vehicles used in material transport or construction. 5. Conditions that apply for selection of sites for material storage. 6. Conditions that apply for aggregate production. 7. Conditions that apply for handling hazardous or dangerous materials such as oil, lubricants and toxic chemicals.	Update monthly	Sites within the existing grid stations.	Contractor and CSC to agree format of reporting	NGC/CSC
6. Construction Waste Disposal	Minimize the impacts from the disposal of construction waste.	1. Waste management plan to be submitted to the CSC and approved by MC one month prior to starting works. 2. Estimating the amounts and types of construction waste to be generated by the project.	Update monthly	Waste disposal areas near the existing grid stations.	Contractor and CSC should supervise and take action	NGC/CSC

Environmental Concern	Objectives	Mitigation Measures (MM) Recommended	Timing to Implement MM	Location to Implement MM	Responsible MM	Responsible MM
		- Investigating whether the waste can be reused in the project or by other interested parties. - Identifying potential safe disposal sites close to the project or those designated sites in the contract. - Investigating the environmental conditions of the disposal sites and recommendation of most suitable and safest sites. - Used oil and lubricants shall be recovered and reused or removed from the site in full compliance with the national and local regulations. - Oily wastes must not be burned. Disposal location to be agreed with local authorities. - Machinery should be properly maintained to minimize oil spill during the construction. - Solid waste should be disposed at an approved solid waste facility, open burning is illegal and contrary to good environmental practice			to complete contractor's relevant activities according to EMP requirement & environmental standards.	
7. Work Camp Operation and Location	To ensure that the operation of work camps does not adversely affect the surrounding environment.	- Although, the labor camp will be located within the boundary wall of existing grid stations, but mitigation measures are required. - The labor should be allowed to use the Water and sanitary facilities available in the grid stations. - Solid waste and sewage shall be managed according to the	Update once a month	The contractor camp will be established within the boundary wall of existing grid stations.	Contractor	NGC/MC

Environmental Concern	Objectives	Mitigation Measures (MM) Recommended	Timing to Implement MM	Location to Implement MM	Responsible MM	Responsible MM
		national and local regulations. As a rule, solid waste must not be dumped, buried or burned at or near the project site, but shall be disposed off to the nearest sanitary landfill or site having complied with the necessary permission of local authority permission. 4. The Contractor shall organize and maintain a waste separation, collection and transport system. 5. The Contractor shall document that all liquid and solid hazardous and non-hazardous waste are separated, collected and disposed of according to the given requirements and regulations. 6. At the conclusion of the project, all debris and waste shall be removed. All temporary structures shall be removed.				
8. Loss of Trees and Vegetation Cover of the Areas for Towers and Temporary Work-space	To avoid several negative impacts due to removing of landmark, sentinel and specimen trees as well as green vegetation and surface cover.	As the construction activities are to be carried out on open space available within the boundary wall of existing grid stations, so no tree removal will be involved. But tree plantation should be done by this project at open areas within the grid station boundary wall.	After project completion.	At open areas within the grid station boundary wall.	Design consultant, Contractor and CSC	NGC/CSC
9. Safety Precautions for the Workers	To ensure safety of workers	1. Providing adequate warning signs. 2. Providing workers with skull guard or hard hat. 3. Contractor shall instruct his workers in health and safety matters,	Prior to commencement and during construction	Construction sites.	Contractor and CSC	NGC/CSC

Environmental Concern	Objectives	Mitigation Measures (MM) Recommended	Timing to Implement MM	Location to Implement MM	Responsible MM	Responsible MM
		and require the workers to use the provided safety equipment. 4. Establish all relevant safety measures as required by law and good engineering practices.				
10.Social Impacts	To ensure minimum impacts on the surrounding populations.	No social impact is likely to occur, as the construction activities will be carried out within the boundary wall of existing grid stations, labor camp and construction material will be within the boundary walls.	-	-	-	-

LARP = Land Acquisition and Resettlement Plan, APs = Affected Persons, TD = Temporary Drainage. EC = Erosion Control, WM = Waste Management, CSC = Construction Supervision Consultant, NEQS = National Environmental Quality Standards, MM = Mitigation Measure.

APPENDIX-II: ENVIRONMENTAL MONITORING PLAN FOR AUGMENTATION/EXTENSION WORKS

SR. NO.	MONITORING ACTIVITIES	RESPONSIBILITIES	TIMING FOR MONITORING
1	DESIGN STAGE		
1.1	Audit project bidding documents to ensure EMP is included	NGC through project implementation unit	Prior to issue of bidding documents.
1.2	Monitor contractor's detailed project design to ensure relevant environmental mitigation measures in EMP have been included	NGC with assistance of project implementation unit	Prior to NGC approval of contractor's detailed alignment survey.
1.3	Monitor the thorough implementation of detailed Environmental Guidelines for Construction Works, including procurement, management, works, closing operations	NGC with the assistance of management consultants	Prior to NGC approval of contractor's detailed designs.
1.4	Review the management plan for waste management	NGC with the assistance of management consultants	Prior to NGC approval of contractor's detailed designs.
1.5	Audit detailed designs of facilities and installations to ensure standard environmental safeguards/ mitigation measures (as identified in EMP) have been included	NGC with assistance of project implementation unit	Prior to NGC approval of contractor's detailed designs.
1.6	Monitor the performance of environmental training and briefings and of the environmental awareness of project staff and NGC	NGC with the assistance of management consultants	Continuous throughout the entire project period.
2	CONSTRUCTION PHASE		
2.1	Regular (monthly) monitoring and reporting (bi-annually to ADB) of contractor's compliance with contractual environmental mitigation measures	NGC with assistance of project implementation unit	Continuous throughout construction period.
3	OPERATION AND MAINTENANCE PHASE		
3.1	Inspections will include monitoring implementation of operational mitigation measures versus environmental criteria specified in EMP, waste management and operational noise.	NGC	As per NGC inspection schedules

ANNEXURE-II

Contract Management Plan (CMP)

Sample
MONTHLY PROGRESS REPORT
May 2024



1. Project Key Data

FORMAL PROJECT NAME

PROJECT SUMMARY

CONTRACT SCOPE

CONTRACT TYPE

EXICUTING AGENCY

MAIN CONTRACTOR / SUPPLIER

PROJECT MANAGEMENT
COMPANY

CONTRACT AMOUNT

COMPLETION DATE

CONTRACT SIGNING DATE

COMMENCEMENT DATE

2. Executive Summary

4. Contract Start-up Activities and Submittals

4.2 Residual Tender Stage Actions

Clause (*)	Description	Responsible Party	Planned Date	Actual Date	Comments
ITB 42.1	Issuance of Letter of Acceptance (LoA)				
ITB 19.6	Return Bid Security to Contractor				
ITB 43.2	Contract Agreement Signature				

4.3 Contract Requirements

Clause (*)	Description	Responsible Party	Planned Date	Actual Date	Comments
GCC 4.2	Provision of Performance Security				

4.4 Contract Activities Required Within 30 Days of Commencement Date

Clause (*)	Description	Responsible Party	Planned Date	Actual Date	Comments

5. Risk Management

Ref	Description	Impact Rating	Likelihood Rating	Risk Level	Mitigation Measure	Responsible Party	Comments

6. Project Monitoring

6.1 Project status as of September 27, 2023:

Project Status as of Date	
Commencement Date	
Completion Date	
Time Elapsed	
Planned Progress	
Actual Progress	
Expected Completion Date	

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Variance to Completion	
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6.2 Level 2 Program

Ref	Description	Original Program Milestone	Updated Completion Date	Variance
1				
2				
3				

6.3 Program Progress

6.4 Program Overview



Critical Path Forward

6.5 One Month Look Ahead

Target Description	Planned Date	Completion Date	Completed

7. Variations and Claims

7.1 Summary

Total Estimated Variations Cost	
Total Approved Variations Cost	
Total Variations Pending Approval Cost	
Total Claims Submitted Amount	
Total Claims Certified Amount	
Total Claims Pending Certification Amount	
Total Estimated Contract Cost Changes	
Total Approved Contract Cost Changes	

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Total Pending Contract Cost Changes	
Prior Contract Price	
Estimated Revised Contract Cost	
Approved Revised Contract Cost	

7.2 Variation Register

Ref	Variation Description	Date Instruction Issued	Estimated Variation Cost	Approved Variance Cost	Current Status
1					
2					

7.3 Claim Register

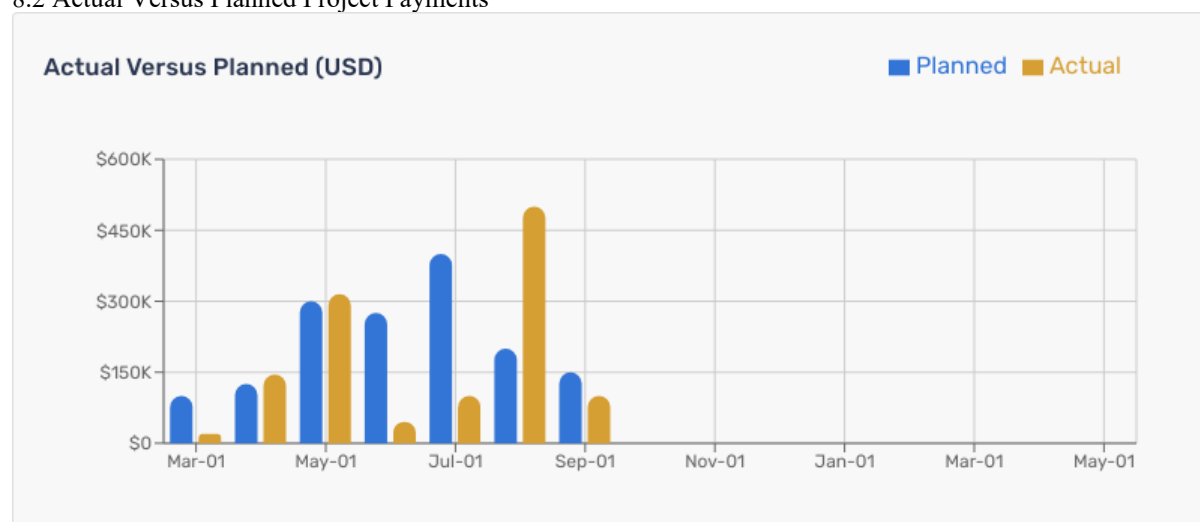
Ref	Description	Submission of Notice of Claim	Submission of Fully Detailed Claim	Claimed Amount	Amount Certified	Current Status
1						

8. Financial Management

8.1 Actual Project Payments

Description	Date	Cost
Total		1,225,000

8.2 Actual Versus Planned Project Payments



9. Disputes

Dispute Description	Dispute Status

10. Goods / Equipment

10.1 Goods / Equipment Packages Status

Description	FAT Status	Custom Clearance Status	Planned Delivery Date	Actual Delivery Date	Cost	Invoiced

11. Engineering / Design Documents

11.1 Engineering

Description	Percentage Complete	Name of Approver	Approval Stage	Design Document Cost	Invoiced

12. Environment, Social Health & Safety, and Security Related Obligations

12.6 Complaints (Grievances)

Name of Complainant	Complaint Description	Date Filed	Effected Person(s)	Responsible Party	Complaint Status

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13. Site Photographs

14. Completion of Work and Contract Closure Activities

Completion Activity Description	Planned Date	Achieved Date	Activity Completed

15. Contract Details

15.1 Contract Details & Key Dates

Contract Title	
Contract Number	
Contract Type	
Contract Scope	
Location	
Original Contract Amount	
Date of Issuance of Letter of Acceptance	
Contract Signing Date	
Contract Commencement Date	
Contract Effective Date	
Contract Project Start Date	
Contract Time for Completion (days)	
Original Contract Completion Date	
Financer	
Executing Agency	
Contractor / Supplier	
Design Consultant (if applicable)	
Project Manager	
Defects Liability Period / warranty	
ADB Loan Effectiveness Date	
ADB Loan Closing Date	

16. Communications and Reporting

16.1 Contact Details

Ref	Entity	Name	Title	Position	Phone	Email
Executing Agency		ORO				
Implementing Agency						
Contractor / Supplier						
Engineer / PMC						
Financer						
Dispute Board Members						
Other						

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