

GOVERNMENT OF KHYBER PAKHTUNKHWA

PESHAWAR DEVELOPMENT AUTHORITY

PESHAWAR

STANDARD BIDDING DOCUMENTS



“SOLARIZATION OF TUBEWELLS IN HAYATABAD AND REGI MODEL TOWN, PESHAWAR”.

Table of Contents.

1. Introduction	3
2. Instruction to Bidders.....	3-4
3. Technical and Financial Bids	4
4. Technical Evaluation Criteria	5
5. Bid security.....	6
6. Signing of contract.....	6
7. Contract data.....	7-26
8. Bid data sheet.....	27
9. BOQ	27-51

Introduction

The Peshawar Development Authority has the scope of developing housing societies. Hayatabad and Regi model town are the towns developed by PDA consisting of 7 phases and 5 Zones respectively. Feasibility survey has been done and the PC-1 has been prepared to install grid-tied solar systems and solar energy-driven pumps on the existing feasible tube wells (list attached below). The energy will be sourced either from the grid-tied inverter or through a dedicated off-grid solar system, depending on the operational requirements. In the case of solarization, the existing electrical connection will remain as a standby, with only the line rent paid to PESCO. The pumping machinery will be kept in reserve and will be deployed wherever necessary. After completing all the codel formalities the directorate of electrical intends to take the work in hand by inviting NIT for the following scope of work.

S #	Name of Works	Estimated Cost
1	Solarization of tube wells in Hayatabad and Regi model town, Peshawar	77.749 Million

This directorate invites sealed technical and financial bids on single stage-two envelope system in accordance with KPPRA rules 2014 from Firms / Contractors/companies enlisted with PDA and registered with Pakistan Engineering Council (PEC) who have paid their registration / renewal fee for the year 2024-25.

Instructions to bidders.

1. Technical and financial bids (Hard copy) duly completed, signed, stamped, sealed and in complete conformity with specification mentioned in standard bidding documents must be delivered to the undersigned office on or before 11:00AM 23/07/2025.
2. 2% (Two Percent) earnest money / Bid security of Engineer Estimated Cost must be accompanied in the shape of Call Deposit in the name of Director General, PDA from scheduled banks in accordance with the Rule 20(2) of KPPRA Rules 2014 and subsequent amendments (if any).
3. In light of the KPPRA Notification No. S.R.O (14): Vol1-24/2021-22, Dated 10/05/2022, the contractor quoting their bids up to limit of 10% below the Engineer Estimate shall submit bid security @ 2% only of Engineer Estimate.
4. The contractors quoting their bids more than 10% below up to 20% below on Engineer Estimated cost shall submit along with their bids 8% Additional Security of Engineers Estimated cost in the shape of Call Deposit in the name of the Director General, PDA from scheduled bank in addition to 2% bid security. If the bid is not accompanied with the required amount of additional security, then it will be considered as Non-Responsive and the 2% bid security shall be forfeited in favor of the Government and the second lowest bidder & so on will be considered accordingly.

5. Similarly, a contractor quoting bid more than 20% below shall submit with his bid an additional security on Engineer Estimated cost equal to the differential amount of submitted bid and Engineer Estimated along with detailed rate analysis. In case of more than 20% below bids, if the bid is not accompanied by the detailed rate analysis and/or required amount of Additional Security, then the said bid shall be considered as Non-Responsive. All the securities submitted along with such Non-Responsive bid shall be forfeited in favor of Government and the 2nd lowest bidder so on will be considered accordingly.
6. The technical bid will be opened in the office of the chairman in the presence of all procurement committee members, bidders or their authorized representatives on the day and time mentioned in NIT. In case the Bids/ proposals are not opened on the above mentioned date due to unforeseen reasons these shall be opened on the next working day at the same place and time.
7. Only up to Two Decimal Digits (0.00) will be considered for evaluation of the quoted Bid. If any document submitted along with bid documents found false/ bogus or expired, the registration of the Contractor / Firm shall stands cancelled / blacklisted.
8. In case the detailed rate analysis submitted with the bids is, in view of the Procuring Entity, not convincing, the Head of the Procuring Entity may declare such bids as Non-Responsive without any forfeiture of bid securities and record reason thereof.
9. Any item not reflected in the BOQ and required at site, shall be paid in accordance with MRS-2024/ prevailing market rates with the approval of the Competent Authority.
10. All the Government taxes (Federal, Provincial & any other) will be deducted as per prevailing Government policy.
11. All the bidders must be registered and in the Active tax payer list of the Khyber PukhtoonKhwa Revenue Authority, established under the Khyber PukhtoonKhwa Act, 2013 (KP Act No. XXI of 2013).
12. The bidders are instructed to submit bid as per KPPRA S.R.O.(10)/ vol: 1-18/2020-21 dated: 10-02-2021.

Technical and financial bid

Technical bid

Technical bid / proposal should accompany the following:

- a) Enlistment Order PDA (photocopy).
- b) National Identity Card (CNIC photocopy).
- c) Pakistan Engineering Council registration with relevant codes copy for calendar year 2024-2025.
- d) Form H of the Company / Firm.
- e) Documents showing general capabilities, financial soundness, general and relevant experience record, personnel capabilities, equipment capabilities etc as per technical evaluation criteria.
- f) Valid AEDB license.
- g) No litigation certificate and non-blacklisting certificate.
- h) Enlistment with electrical inspectorate of KP

Technical evaluation will be carried out in the office of chairman procurement committee on the basis of technical evaluation criteria given in bid solicitation document. Date and time of opening of Financial Bids will be announced after the approval of Technical Bids from the competent authority.

Financial bid

Financial bid will be submitted with requisite documents i-e: - E-Tender Form, BOQ, Active NTN/Income Tax Certificate & KPRA Registration (Active) and other required documents including 2% earnest money.

Technical Evaluation criteria

S. No	DESCRIPTION	MAXIMUM MARKS
1.	EXPERIENCE	40
i)	Incorporation of the Company / firm and address of the Registered Office. (5 Marks for each year).	15
i)	Completed Relevant nature of works in last 5 years (4 marks for each project of value equal to or more than 50M and 2 marks for each Project of value equal to or more than 20M). Work completion certificate is must.	15
ii)	Ongoing Relevant nature of Works (4 marks for each project of value equal to or more than 50M and 2 marks for each Project of value equal to or more than 20M).	10
2.	DEPARTMENTAL REGISTRATION/PRE QUALIFICATION (C&W, PHE, PEDO and any other works department) 3 marks for each registration/ Pre-qualification	12
3.	FINANCIAL	26
i)	Currently Credit Facility offered by the Bank (4marks for each 10 Million)	8
ii)	Income Tax Return for the last 3 years (3 marks for each year)	9
iii)	Audited reports with Annual Turnover for the last 3 years (3 marks for each year having equal or more than 50 M)	9
4.	EQUIPMENT	12
i)	Dumper Trucks / trolley 2Nos	2
ii)	Generator 1No	2
iii)	Multi meters 2Nos	2
iv)	Personal protective equipment sets for electrical work (5sets)	2
v)	Crane/Bucket elevator 2Nos	2
vi)	Survey equipment 1set	2
5.	PERSONNEL CAPABILITIES	10
i)	Project manager, BE Electrical with 5years Experience	2
ii)	Planning Engineer, BE Electrical with 5years Experience	2
iii)	Site Engineer, BE Electrical with 3years Experience/DAE Electrical with 5 years' Experience	2
iv)	Surveyor, DAE with 5 years' Experience	2
v)	Site supervisors 3 Nos	2
	TOTAL	100

- For each bidder, it is essential to obtain minimum 70 marks to be technically qualified and eligible for opening of his financial bid.
- For each bidder, it is essential to obtain 50% marks in each category

BID SECURITY

1. 2% (Two Percent) earnest money / Bid security of Engineer Estimated Cost must be accompanied in the shape of Call Deposit in the name of Director General, PDA from scheduled banks in accordance with the Rule 20(2) of KPPRA Rules 2014 and subsequent amendments (if any).
2. In light of the KPPRA Notification No. S.R.O (14): Vol1-24/2021-22, Dated 10/05/2022, the contractor quoting their bids up to limit of 10% below the Engineer Estimate shall submit bid security @ 2% only of Engineer Estimate.
3. The contractors quoting their bids more than 10% below up to 20% below on Engineer Estimated cost shall submit along with their bids 8% Additional Security of Engineers Estimated cost in the shape of Call Deposit in the name of the Director General, PDA from scheduled bank in addition to 2% bid security. If the bid is not accompanied with the required amount of additional security, then it will be considered as Non-Responsive and the 2% bid security shall be forfeited in favor of the Government and the second lowest bidder & so on will be considered accordingly.
4. Similarly, a contractor quoting bid more than 20% below shall submit with his bid an additional security on Engineer Estimated cost equal to the differential amount of submitted bid and Engineer Estimated along with detailed rate analysis. In case of more than 20% below bids, if the bid is not accompanied by the detailed rate analysis and/or required amount of Additional Security, then the said bid shall be considered as Non-Responsive. All the securities submitted along with such Non-Responsive bid shall be forfeited in favor of Government and the 2nd lowest bidder so on will be considered accordingly.
5. Bid security of the unsuccessful bidders shall be released as promptly as possible once the successful bidder signs the contract agreement.
6. The bid security of the successful bidder shall be returned after the completion of contract.
7. The bid security shall be forfeited:
 - ✓ If a bidder withdraws his bid during the period of bid validity
 - ✓ If the successful bidder fails to sign contract agreement within the time period mentioned in letter of award/ work order

SIGNING OF CONTRACT

1. Promptly after the issuance of letter of award/work order, the PDA shall send the successful bidder the form of contract.
2. The successful bidder shall sign, date and return the form of contract within the time period mentioned in letter of award/ work order.

CONDITIONS OF CONTRACT

1. GENERAL PROVISIONS

1.1 Definitions

In the Contract as defined below, the words and expressions defined shall have the following meanings assigned to them, except where the context requires otherwise:

The Contract

- 1.1.1 “Contract” means the Contract Agreement and the other documents listed in the Contract Data.
- 1.1.2 “Specifications” means the document as listed in the Contract Data, including Procuring Entity’s requirements in respect of design to be carried out by the Contractor (if any), and any Variation to such document.
- 1.1.3 “Drawings” means the Procuring Entity’s drawings of the Works as listed in the Contract Data, and any Variation to such drawings.

Persons

- 1.1.4 “Procuring Entity” means the person named in the Contract Data and the legal successors in title to this person, but not (except with the consent of the Contractor) any assignee.
- 1.1.5 “Contractor” means the person named in the Contract Data and the legal successors in title to this person, but not (except with the consent of the Procuring Entity) any assignee.
- 1.1.6 “Party” means either the Procuring Entity or the Contractor.

Dates, Times and Periods

- 1.1.7 “Commencement Date” means the date fourteen (14) days after the date the Contract comes into effect or any other date named in the Contract Data.
- 1.1.8 “Day” means a calendar day
- 1.1.9 “Time for Completion” means the time for completing the Works as stated in the Contract Data (or as extended under Sub-Clause 7.3), calculated from the Commencement Date.

Money and Payments

- 1.1.10 “Cost” means all expenditure properly incurred (or to be incurred) by the Contractor, whether on or off the Site, including overheads and similar charges

But does not include any allowance for profit.

Other Definitions

- 1.1.11 “Contractor’s Equipment” means all machinery, apparatus and other things required for the execution of the Works but does not include Materials or Plant intended to form part of the Works.
- 1.1.12 “Country” means the Islamic Republic of Pakistan.
- 1.1.13 “Province” means Khyber Pakhtunkhwa.
- 1.1.14 “Procuring Entity’s Risks” means those matters listed in Sub-Clause 6.1.
- 1.1.14 “Force Majeure” means an event or circumstance which makes performance of a Party’s obligations illegal or impracticable and which is beyond that Party’s reasonable control.
- 1.1.15 “Materials” means things of all kinds (other than Plant) to be supplied and incorporated in the Works by the Contractor.
- 1.1.16 “Plant” means the machinery and apparatus intended to form or forming part of the Works.
- 1.1.17 “Site” means the places provided by the Procuring Entity where the Works are to be executed, and any other places specified in the Contract as forming part of the Site.
- 1.1.18 “Variation” means a change which is instructed by the Engineer/Procuring Entity under Sub-Clause 10.1.
- 1.1.19 “Works” means any or all the works whether Supply, Installation, Construction etc. and design (if any) to be performed by the Contractor including temporary works and any variation thereof.
- 1.1.20 “Engineer” means the person, if any, notified by the Procuring Entity to act as Engineer for the purpose of the Contract and named as such in Contract Data.

1.2 Interpretation

Words importing persons or parties shall include firms and organizations. Words importing singular or one gender shall include plural or the other gender where the context requires.

1.3 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. If an ambiguity or discrepancy is found in the documents, the priority of the documents shall be in accordance with the order as listed in the Contract Data.

1.4 Law

The law of the Contract is the relevant Law of Khyber Pakhtunkhwa Province,

1.5 Communications

All Communications related to the Contract shall be in English language.

1.6 Statutory Obligations

The Contractor shall comply with the Laws of Islamic Republic of Pakistan and shall give all notices and pay all fees and other charges in respect of the Works.

2. THE PROCURING ENTITY

2.1 Provision of Site

The Procuring Entity shall provide the Site and right of access thereto at the times stated in the Contract Data.

2.2 Permits etc.

The Procuring Entity shall, if requested by the Contractor, assist him in applying for permits, licences or approvals which are required for the Works.

2.3 Engineer's/Procuring Entity's Instructions

The Contractor shall comply with all instructions given by the Procuring Entity or the Engineer, if notified by the Procuring Entity, in respect of the Works including the suspension of all or part of the Works.

2.4 Approvals

No approval or consent or absence of comment by the Engineer/Procuring Entity shall affect the Contractor's obligations.

3. ENGINEER'S/PROCURING ENTITY'S REPRESENTATIVES

3.1 Authorized Person

The Procuring Entity shall appoint a duly authorized person to act for him and on his behalf for the purposes of this Contract. Such authorized person shall be duly identified in the Contract Data or otherwise notified in writing to the Contractor as soon as he is so appointed. In either case the Procuring Entity shall notify the Contractor, in writing, the precise scope of the authority of such authorized person at the time of his appointment.

3.2 Engineer's/Procuring Entity's Representative

The name and address of Engineer's/Procuring Entity's Representative is given in Contract Data. However the Contractor shall be notified by the Engineer/Procuring Entity, the delegated duties and authority before the Commencement of Works.

4. THE CONTRACTOR

4.1 General Obligations

The Contractor shall carry out the Works properly and in accordance with the Contract. The Contractor shall provide all supervision, labour, Materials, Plant and Contractor's Equipment which may be required.

4.2 Contractor's Representative

The Contractor shall appoint a representative at site on full time basis to supervise the execution of work and to receive instructions on behalf of the Contractor but only after obtaining the consent of the Procuring Entity for such appointment which consent shall not be unreasonable withheld by the Procuring Entity. Such authorized representative may be substituted/replaced by the Contractor at any time during the Contract Period but only after obtaining the consent of the Procuring Entity as aforesaid.

4.3 Subcontracting

The Contractor shall not subcontract the whole of the Works. The Contractor shall not subcontract any part of the Works without the consent of the Procuring Entity.

4.4 Performance Security

The Contractor shall furnish to the Procuring Entity within fourteen (14) days after receipt of Letter of Acceptance a Performance Security at the option of the bidder, in the form of Bank Draft or Bank Guarantee for the amount and validity specified in Contract Data, in case the contract value is equal to or exceeds Rs.20.00 million. No Performance Security will be needed for contracts values less than Rs.20.00 million.

5. DESIGN BY CONTRACTOR

5.1 Contractor's Design

The Contractor shall carry out design to the extent specified, as referred to in the Contract Data. The Contractor shall promptly submit to the Engineer/Procuring Entity all designs prepared by him. Within fourteen (14) days of receipt the Engineer/Procuring Entity shall notify any comments or, if the design submitted is not in accordance with the Contract, shall reject it stating the reasons. The Contractor shall not construct any element of the Works designed by him within fourteen (14) days after the design has been submitted to the Engineer/Procuring

Entity or which has been rejected. Design that has been rejected shall be promptly amended and resubmitted. The Contractor shall resubmit all designs commented on taking these comments into account as necessary.

5.2 Responsibility for Design

The Contractor shall remain responsible for his bided design and the design under this Clause, both of which shall be fit for the intended purposes defined in the Contract and he shall also remain responsible for any infringement of any patent or copyright in respect of the same. The Engineer/Procuring Entity shall be responsible for the Specifications and Drawings.

6. PROCURING ENTITY'S RISKS

6.1 The Procuring Entity's Risks

The Procuring Entity's Risks are:-

- a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies, within the Country;
- b) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war, within the Country;
- c) riot, commotion or disorder by persons other than the Contractor's personnel and other employees including the personnel and employees of Sub-Contractors, affecting the Site and/or the Works;
- d) Ionizing radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive, or other hazardous properties of any explosive nuclear assembly or nuclear component of such an assembly, except to the extent to which the Contractor/Sub-Contractors may be responsible for the use of any radio-active material;
- e) Pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds;
- f) use or occupation by the Procuring Entity of any part of the Works, except as may be specified in the Contract;
- g) late handing over of sites, anomalies in drawings, late delivery of designs and drawings of any part of the Works by the Procuring Entity's personnel or by others for whom the Procuring Entity is responsible;
- h) a suspension under Sub-Clause 2.3 unless it is attributable to the Contractor's failure; and
- i) physical obstructions or physical conditions other than climatic conditions, encountered on the Site during the performance of the Works, for which the

Contractor immediately notified to the Procuring Entity and accepted by the Procuring Entity.

7. TIME FOR COMPLETION

7.1 Execution of the Works

The Contractor shall commence the Works on the Commencement Date and shall proceed expeditiously and without delay and shall complete the Works, subject to Sub-Clause 7.3 below, within the Time for Completion.

7.2 Program

Within the time stated in the Contract Data, the Contractor shall submit to the Engineer/Procuring Entity a program for the Works in the form stated in the Contract Data.

7.3 Extension of Time

The Contractor shall, within such time as may be reasonable under the circumstances, notify the Procuring Entity/Engineer of any event(s) falling within the scope of Sub-Clause 6.1 or 10.3 of these Conditions of Contract and request the Procuring Entity/Engineer for a reasonable extension in the time for the completion of Works. Subject to the aforesaid, the Procuring Entity/Engineer shall determine such reasonable extension in the time for the completion of Works as may be justified in the light of the details/particulars supplied by the Contractor in connection with the such determination by the Procuring Entity/Engineer within such period as may be prescribed by the Procuring Entity/Engineer for the same; and the Procuring Entity shall extend the Time for Completion as determined.

7.4 Late Completion

If the Contractor fails to complete the Works within the Time for Completion, the Contractor's only liability to the Procuring Entity for such failure shall be to pay the amount stated in the Contract Data for each day for which he fails to complete the Works.

8. TAKING-OVER

8.1 Completion

The Contractor may notify the Engineer/Procuring Entity when he considers that the Works are complete.

8.2 Taking-Over Notice

Within fourteen (14) days of the receipt of the said notice of completion from the Contractor the Procuring Entity/Engineer shall either takeover the completed Works and issue a Certificate of Completion to that effect or shall notify the Contractor his reasons for not taking-over the Works. While issuing the Certificate

of Completion as aforesaid, the Procuring Entity/Engineer may identify any outstanding items of work which the Contractor shall undertake during the Maintenance Period.

9. REMEDYING DEFECTS

9.1 Remediating Defects

The Contractor shall for a period stated in the Contract Data from the date of issue of the Certificate of Completion carry out, at no cost to the Procuring Entity, repair and rectification work which is necessitated by the earlier execution of poor quality of work or use of below specifications material in the execution of Works and which is so identified by the Procuring Entity/Engineer in writing within the said period. Upon expiry of the said period, and subject to the Contractor's faithfully performing his aforesaid obligations, the Procuring Entity/Engineer shall issue a Maintenance Certificate whereupon all obligations of the Contractor under this Contract shall come to an end.

Failure to remedy any such defects or complete outstanding work within a reasonable time shall entitle the Procuring Entity to carry out all necessary works at the Contractor's cost. However, the cost of remedying defects not attributable to the Contractor shall be valued as a Variation.

9.2 Uncovering and Testing

The Engineer/Procuring Entity may give instruction as to the uncovering and/or testing of any work. Unless as a result of an uncovering and/or testing it is established that the Contractor's design, Materials, Plant or workmanship are not in accordance with the Contract, the Contractor shall be paid for such uncovering and/or testing as a Variation in accordance with Sub-Clause 10.2.

10. VARIATIONS AND CLAIMS

10.1 Right to Vary

The Procuring Entity/Engineer may issue Variation Order(s) in writing. where for any reason it has not been possible for the Procuring Entity/Engineer to issue such Variations Order(s), the Contractor may confirm any verbal orders given by the Procuring Entity/Engineer in writing and if the same are not refuted/denied by the Procuring Entity/Engineer within seven (7) days of the receipt of such confirmation the same shall be deemed to be a Variation Orders for the purposes of this Sub-Clause.

10.2 Valuation of Variations

Variations shall be valued as follows:

- a) at a lump sum price agreed between the Parties, or
- b) where appropriate, at rates in the Contract, or

- c) in the absence of appropriate rates, the rates in the Contract shall be used as the basis for valuation, or failing which
- d) at appropriate new rates, as may be agreed or which the Engineer/Procuring Entity considers appropriate, or
- e) if the Engineer/Procuring Entity so instructs, at day work rates set out in the Contract Data for which the Contractor shall keep records of hours of labour and Contractor's Equipment, and of Materials, used.

10.3 **Early Warning**

The Contractor shall notify the Engineer/Procuring Entity in writing as soon as he is aware of any circumstance which may delay or disrupt the Works, or which may give rise to a claim for additional payment.

To the extent of the Contractor's failure to notify, which results to the Engineer/Procuring Entity being unable to keep all relevant records or not taking steps to minimize any delay, disruption, or Cost, or the value of any Variation, the Contractor's entitlement to extension of the Time for Completion or additional payment shall be reduced/rejected.

10.4. **Valuation of Claims**

If the Contractor incurs Cost as a result of any of the Procuring Entity's Risks, the Contractor shall be entitled to the amount of such Cost. If as a result of any Procuring Entity's Risk, it is necessary to change the Works, this shall be dealt with as a Variation subject to Contractor's notification for intention of claim to the Engineer/Procuring Entity within fourteen (14) days of the occurrence of cause.

10.5 **Variation and Claim Procedure**

The Contractor shall submit to the Engineer/Procuring Entity an itemized make-up of the value of variations and claims within twenty eight (28) days of the instruction or of the event giving rise to the claim. The Engineer/Procuring Entity shall check and if possible agree the value. In the absence of agreement, the Procuring Entity shall determine the value.

11. **CONTRACT PRICE AND PAYMENT**

11.1 (a) **Terms of Payments**

The amount due to the Contractor under any Interim Payment Certificate issued by the Engineer pursuant to this Clause, or to any other terms of the Contract, shall, subject to Clause 7.4 of Conditions of Contract (CoC) be paid by the Procuring Entity to the Contractor within 30 days after such Interim Payment Certificate has been jointly verified by Procuring Entity and Contractor, or, in the case of the Final Certificate referred to in Sub Clause 11.5 of CoC, within 60 days after such Final

Payment Certificate has been jointly verified by Procuring Entity and Contractor; Provided that the Interim Payment shall be caused in 42 days and Final Payment in 60 days in case of foreign funded project. In the event of the failure of the Procuring Entity to make payment within the times stated, the Procuring Entity shall pay to the Contractor compensation at the 28 days rate of KIBOR+2% per annum in local currency and LIBOR+1% for foreign currency, upon all sums unpaid from the date by which the same should have been paid. The provisions of this Sub-Clause are without prejudice to the Contractor's entitlement under Clause 12.2 CoC.

(b) **Valuation of the Works**

The Works shall be valued as provided for in the Contract Data, subject to Clause 10.

11.2 Monthly Statements

The Contractor shall be entitled to be paid at monthly intervals:

- a) the value of the Works executed; and
- b) The percentage of the value of Materials and Plant reasonably delivered to the Site, as stated in the Contract Data, subject to any additions or deductions which may be due.

The Contractor shall submit each month to the Engineer/Procuring Entity a statement showing the amounts to which he considers himself entitled.

11.3 Interim Payments

Within a period not exceeding seven (7) days from the date of submission of a statement for interim payment by the Contractor, the Engineer / Procuring Entity shall verify the same and within a period not exceeding thirty (30) days from the said date of submission by the Contractor, the Procuring Entity shall pay to the Contractor the sum verified by the Engineer less retention money at the rate stated in the Contract Data.

11.4 Retention

Retention money shall be paid by the Procuring Entity to the Contractor within fourteen (14) days after either the expiry of the period stated in the Contract Data, or the remedying of notified defects, or the completion of outstanding work, all as referred to in Sub-Clause 9.1, which ever is the later.

11.5 Final Payment

Within twenty one (21) days from the date of issuance of the Maintenance Certificate the Contractor shall submit a final account to the Engineer to verify and the Engineer shall verify the same within fourteen (14) days from the date of

Submission and forward the same to the Procuring Entity together with any documentation reasonably required to enable the Procuring Entity to ascertain the final contract value.

Within sixty (60) days from the date of receipt of the verified final account from the Engineer, the Procuring Entity shall pay to the Contractor any amount due to the Contractor. While making such payment the Procuring Entity may, for reasons to be given to the Contractor in writing, withhold any part or parts of the verified amount.

11.6 Currency

Payment shall be in the currency stated in the Contract Data.

12. DEFAULT

12.1 Default by Contractor

If the Contractor abandons the Works, refuses or fails to comply with a valid instruction of the Engineer/Procuring Entity or fails to proceed expeditiously and without delay, or is, despite a written complaint, in breach of the Contract, the Procuring Entity may give notice referring to this Sub-Clause and stating the default.

If the Contractor has not taken all practicable steps to remedy the default within fourteen (14) days after receipt of the Procuring Entity's notice, the Procuring Entity may by a second notice given within a further twenty one (21) days, terminate the Contract. The Contractor shall then demobilize from the Site leaving behind any Contractor's Equipment which the Procuring Entity instructs, in the second notice, to be used for the completion of the Works at the risk and cost of the Contractor.

12.2 Default by Procuring Entity

If the Procuring Entity fails to pay in accordance with the Contract, or is, despite a written complaint, in breach of the Contract, the Contractor may give notice referring to this Sub-Clause and stating the default. If the default is not remedied within fourteen (14) days after the Procuring Entity's receipt of this notice, the Contractor may suspend the execution of all or parts of the Works.

If the default is not remedied within twenty eight (28) days after the Procuring Entity's receipt of the Contractor's notice, the Contractor may by a second notice given within a further twenty one (21) days, terminate the Contract. The Contractor shall then demobilize from the Site.

12.3 Insolvency

If a Party is declared insolvent under any applicable law, the other Party may by notice terminate the Contract immediately. The Contractor shall then demobilize from the Site leaving behind, in the case of the Contractor's insolvency, any Contractor's Equipment which the Procuring Entity instructs in the notice is to be

used for the completion of the Works.

12.4 Payment upon Termination

After termination, the Contractor shall be entitled to payment of the unpaid balance of the value of the Works executed and of the Materials and Plant reasonably delivered to the Site, adjusted by the following:

- a) any sums to which the Contractor is entitled under Sub-Clause 10.4,
- b) any sums to which the Procuring Entity is entitled,
- c) if the Procuring Entity has terminated under Sub-Clause 12.1 or 12.3, the Procuring Entity shall be entitled to a sum equivalent to twenty percent (20%) of the value of parts of the Works not executed at the date of the termination, and
- d) if the Contractor has terminated under Sub-Clause 12.2 or 12.3, the Contractor shall be entitled to the cost of his demobilization together with a sum equivalent to ten percent (10%) of the value of parts of the Works not executed at the date of termination.

The net balance due shall be paid or repaid within twenty eight (28) days of the notice of termination.

13. RISKS AND RESPONSIBILITIES

13.1 Contractor's Care of the Works

Subject to Sub-Clause 9.1, the Contractor shall take full responsibility for the care of the Works from the Commencement Date until the date of the Procuring Entity's/Engineer's issuance of Certificate of Completion under Sub-Clause 8.2. Responsibility shall then pass to the Procuring Entity. If any loss or damage happens to the Works during the above period, the Contractor shall rectify such loss or damage so that the Works conform with the Contract.

Unless the loss or damage happens as a result of any of the Procuring Entity's Risks, the Contractor shall indemnify the Procuring Entity, or his agents against all claims loss, damage and expense arising out of the Works.

13.2 Force Majeure

If Force Majeure occurs, the Contractor shall notify the Engineer/Procuring Entity immediately. If necessary, the Contractor may suspend the execution of the Works and, to the extent agreed with the Procuring Entity demobilize the Contractor's Equipment.

If the event continues for a period of eighty four (84) days, either Party may then give notice of termination which shall take effect twenty eight (28) days after the giving of the notice.

After termination, the Contractor shall be entitled to payment of the unpaid

Balance of the value of the Works executed and of the Materials and Plant reasonably delivered to the Site, adjusted by the following:

- a) any sums to which the Contractor is entitled under Sub-Clause 10.4,
- b) the cost of his demobilization, and
- c) Less any sums to which the Procuring Entity is entitled.

The net balance due shall be paid or repaid within thirty five (35) days of the notice of termination.

14. INSURANCE

14.1 Arrangements

The Contractor shall, prior to commencing the Works, effect insurances of the types, in the amounts and naming as insured the persons stipulated in the Contract Data except for items (a) to (e) and (i) of the Procuring Entity's Risks under Sub-Clause 6.1. The policies shall be issued by insurers and in terms approved by the Procuring Entity. The Contractor shall provide the Engineer/Procuring Entity with evidence that any required policy is in force and that the premiums have been paid.

14.2 Default

If the Contractor fails to effect or keep in force any of the insurances referred to in the previous Sub-Clause, or fails to provide satisfactory evidence, policies or receipts, the Procuring Entity may, without prejudice to any other right or remedy, effect insurance for the cover relevant to such as a default and pay the premiums due and recover the same plus a sum in percentage given in Contractor Data from any other amounts due to the Contractor.

15. RESOLUTION OF DISPUTES

15.1 Engineer's Decision

If a dispute of any kind whatsoever arises between the Procuring Entity and the Contractor in connection with the Works, the matter in dispute shall, in the first place, be referred in writing to the Engineer, with a copy to the other party. Such reference shall state that it is made pursuant to this Clause. No later than the twenty eight (28) days after the day on which he received such reference, the Engineer shall give notice of his decision to the Procuring Entity and the Contractor. Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Work with all due diligence, and the Contractor and the Procuring Entity shall give effect forthwith to every such decision of the Engineer unless and until the same shall be revised, as hereinafter provided in an arbitral award.

15.2 Notice of Dissatisfaction

If a Party is dissatisfied with the decision of the Engineer or if no decision is given within the time set out in Sub-Clause 15.1 here above, the Party may give notice of dissatisfaction referring to this Sub-Clause within fourteen (14) days of receipt of the decision or the expiry of the time for the decision. If no notice of dissatisfaction is given within the specified time, the decision shall be final and binding on the Parties. If notice of dissatisfaction is given within the specified time, the decision shall be binding on the Parties who shall give effect to it without delay unless and until the decision of the Engineer is revised by an arbitrator.

15.3 Arbitration

A dispute which has been the subject of a notice of dissatisfaction shall be finally settled as per provisions of Arbitration Act 1940 (Act No. X of 1940) and Rules made thereunder and any statutory modifications thereto. Any hearing shall be held at the place specified in the Contract Data and in the language referred to in Sub-Clause 1.5.

15.4 Resolution of Dispute in Absence of The Engineer.

In case no Engineer has been appointed, the dispute, if any, between the Procuring Entity and the Contractor in connection with the Works, shall first be tried to be resolved amicably. In case the dispute could not be resolved amicably, it shall be settled as per provision of Arbitration Act-1940.

16 INTEGRITY PACT

16.1 If the Contractor, or any of his Sub-Contractors, agents or servants is found to have violated or involved in violation of the Integrity Pact signed by the Contractor as Schedule-F to his Bid, then the Procuring Entity 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 Sub-Contractors, agents or servants;
- (b) terminate the Contract; and
- (c) Recover from the Contractor any loss or damage to the Procuring Entity as a result of such termination or of any other corrupt business practices of the Contractor or any of his Sub-Contractors, agents or servants.

On termination of the Contract under Sub-Para (b) of this Sub-Clause, the Contractor shall demobilize from the Site leaving behind Contractor's Equipment which the Procuring Entity instructs, in the termination notice, to be used for the completion of the Works at the risk and cost of the Contractor. Payment upon such termination shall be made under Sub-Clause 12.4, in accordance with Sub-Para (c) thereof, after having deducted the amounts due to the Procuring Entity under Sub-Para (a) and (c) of this Sub-Clause.

CONTRACT DATA

(Note: Except where otherwise indicated, all Contract Data should be filled in by the Procuring Entity prior to issuance of the Bidding Documents.)

Sub-Clauses of Conditions of Contract

1.1.3 Procuring Entity's Drawings, if any
(To be listed by the Procuring Entity)

1.1.4 **The Procuring Entity** means
PDA

1.1.5 _____
The Contractor means
The successful bidder

1.1.7 **Commencement Date** means the date of issue of Engineer's Notice to Commence which shall be issued within fourteen (14) days of the signing of the Contract Agreement.

1.1.9 **Time for Completion** 6 months after work order

1.1.20 **Engineer (if appointed)**

1.3 **Documents forming the Contract listed in the order of priority:**

- (a) The Contract Agreement
- (b) Letter of Acceptance
- (c) The completed Form of Bid
- (d) Contract Data
- (e) Conditions of Contract
- (f) The completed Schedules to Bid including Schedule of Prices
- (g) The Drawings, if any
- (h) The Specifications
- (i) _____
- (j) _____

(The Procuring Entity may add, in order of priority, such other documents as form part of the Contract. Delete the document, if not applicable)

2.1 **Provision of Site:** On the Commencement Date*

3.1 **Authorized person:** Assistant director Electrical

3.2 **Name and address of Engineer's/Procuring Entity's representative**

Assistant Director, PDA

4.4 **Performance Security:**

Amount 4% of the bid amount

Validity Till the completion of project

(Form: As provided under Standard Forms* of these Documents)

[Performance Security shall be needed for contracts values equal to or exceeding Rs.20.00 million].

5.1 **Requirements for Contractor's design (if any):**

Specification Clause No's _____

7.2 **Program:**

Time for submission: Within fourteen (14) days* of the Commencement Date.

Form of program: _____ (Bar Chart/CPM/PERT or other)

7.4 Amount payable due to failure to complete shall be ___% per day up to a maximum of (10%) * of sum stated in the Letter of Acceptance

(Usually the liquidated damages are set between 0.05 percent and 0.10 percent per day.)

9.1 **Period for remedying defects**

6 months after completion of work

10.2 (e) **Variation procedure:**

Day work rates _____ (details)

11.1 ***(a) Terms of Payments**

Payment of Contract Price shall be made in the following manners:

ii). Eighty five (90%) shall be paid in accordance with Clause 8.2, 11.2 & 11.3 of Conditions of Contract. And

iii). Five percent (10%) shall be paid in accordance with Clause 11.4 of Conditions of Contract. 11.1

***(b) Valuation of the Works*:**

- i) Lump sum price _____ (details), or
- ii) Lump sum price with schedules of rates _____ (details), or
- iii) Lump sum price with bill of quantities _____ (details), or
- iv) Re-measurement with estimated/bid quantities in the Schedule of Prices _____ (details), or/and
- v) Cost reimbursable _____ (details)

11.2 (b) Percentage of value of Materials and Plant(for day work if applicable):

Materials	Eighty (80%)*
Plant	Ninety (90%)*

11.3 Percentage of retention (8%)

11.6 Currency of payment: Pak. Rupees

14.1 Insurances:

Type of cover

The Works

Amount of cover

The sum stated in the Letter of Acceptance plus fifteen percent (15%)

Type of cover

Contractor's Equipment:

Amount of cover

Full replacement cost

* (Procuring Entity to amend as appropriate)

Type of cover

Third Party-injury to persons and damage to property

(The minimum amount of third party insurance should be assessed by the Procuring Entity and entered).

Workers:

Other cover*:

(In each case name of insured is Contractor and Procuring Entity)

14.2 Amount to be recovered

Premium plus _____ percent (____%).

15.3 Arbitration

Place of Arbitration: _____

* _____
(Procuring Entity to specify as appropriate)

FORM OF PERFORMANCE SECURITY
(Bank Guarantee)

Guarantee No. _____
Executed on _____

(Letter by the Guarantor to the Procuring Entity)

Name of Guarantor (Scheduled Bank in Pakistan) with
address: _____

Name of Principal (Contractor) with
address: _____

Penal Sum of Security (express in words and
figures) _____

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 Procuring Entity) in the penal sum of the amount stated above, for the payment of which sum well and truly to be made to the said Procuring Entity, 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 Procuring Entity's above said Letter of Acceptance for _____
_____ (Name of Contract) for the _____
_____ (Name of Project).

NOW THEREFORE, if the Principal (Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the Procuring Entity, 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 the 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 all requirements of Clause 9, Remedying Defects, of Conditions of Contract are fulfilled.

Our total liability under this Guarantee is limited to the sum stated 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, failing which we shall be discharged of our liability, if any, under this Guarantee.

We, _____ (the Guarantor), waiving all objections and defences under the Contract, do hereby irrevocably and independently guarantee to pay to the Procuring Entity without delay upon the Procuring Entity's first written demand without cavil or arguments and without requiring the Procuring Entity to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Procuring Entity's written declaration that the Principal has refused or failed to perform the obligations under the Contract, for which payment will be effected by the Guarantor to Procuring Entity's designated Bank & Account Number.

PROVIDED ALSO THAT the Procuring Entity shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligations under the Contract or has defaulted in fulfilling said obligations and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Procuring Entity forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above bounded 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:

1. _____

Corporate Secretary (Seal)

2. _____

(Name, Title & Address)

Guarantor (Bank)

1. Signature _____

2. Name _____

3. Title _____

Corporate Guarantor (Seal)

BID DATA SHEET

ITB1.1	The project entity is Peshawar development authority, Government of KPK
	Project Allocation Amount/PC1 Amount = Rs77.749M
	The project name is “ Solarization of tube wells in Hayatabad and Regi model town, Peshawar ”
ITB 6.1	Office of the Deputy Director (Projects), PDA commercial complex Phone # 091-9217481
ITB 8.1	The language of bid shall be English.
ITB 15.1	The amount of bid security will be in accordance with the Rule 20(2) of KPPRA Rules 2014 and subsequent amendments
ITB 18.2 (a)	The bid will be on submitted on EPADS as well as in hard form to the office of Deputy Director (Projects) PDA commercial complex phase 5 Hayatabad
ITB 19.1	Bids shall be submitted on or before 11:00 AM dated: 10/07/2025
ITB 22.1	The bids will be opened on 12:00 PM dated: 10/07/2025 in the PDA conference room.

SNO	Name of site	Cost PKR
1	SOLARIZATION OF HORTICULTURAL TUBE WELL N-4 PARK PHASE 4	2,972,852
2	SOLARIZATION OF TUBE WELL SHALMAN PARK-I	5,842,437
3	SOLARIZATION OF HORTICULTURAL TUBE WELL SHALMAN PARK	5,421,734
4	SOLARIZATION OF BAGH E NARAN	5,842,437
5	SOLARIZATION OF DY DIRECTOR ELECTRICITY PDA (R.M.T) TUBE WELL AT CENTRAL PARK ZONE-3 REGI MODEL TOWN	4,324,715
6	SOLARIZATION OF DY DIRECTOR PDA FOR TUBE WELL A HAYAT ABAD PESHAWAR (TATARA PARK)	7,059,692
7	SOLARIZATION OF DY DIRECTOR MUHAMMAD JAN KHAN GHANI BAGH G-1 PARK P-2	2,972,852
8	SOLARIZATION OF HARTICULTURE T/WELL F-10 PHASE 7 HAYATABAD	2,972,852
9	SOLARIZATION OF T/WELL F-10 PHASE 6 HAYATABAD	18,082,521
10	SOLARIZATION OF CENTRAL PARK ZONE III RMT PESHAWAR	6,316,214
11	SOLARIZATION OF DIRECTOR WSS D4 STREET NO. 24 KHYBER PARK	12,143,092
Total PKR		73,951,000
Consultancy Charges PKR		3,697,550.00
Advertisement Charges PKR		100,000
Grand Total PKR		77,748,550

		BILL OF QUANTITIES (BOQ) Harticultural Tube Well N-4 Park Phase 4					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Rate analysis of Solar Panel Mono-Crystalline						
a	MRS	26-01-d-01	Market Rate of Solar Panel (PV module) mono-crystalline, A Grade, 17.50% Module efficiency minimum and 25 years power output warranty, IEC 61215 and IEC 61730 certified. (Total Capacity = 20000Watts)	Watt	20000	49.72	994,400.00
2	Rate Analysis of ON Grid Inverter						
a	MRS	26-01-i-03-d	Market rate of Solar ON-Grid Inverter, built in MPPT Charge controller and all sorts of safety protections as per instructions of Client / Engineer in-charge. The inverter output power capability must be 20000 kW at p.f = 1.	Watt	20000	26.97	539,400.00
3	Rate Analysis of Misc Items						
a	NSI		500 Amp 4-P MCCB between Inverter and WAPDA	No	1	20000.00	20,000.00
b	NSI		DC Breakers 600V/32A-2P between PV Modules and Inverter	No	2.00	4,000.00	8,000.00
c	NSI		2 Pole Surge Protection device 60 kA at DC inputs	No	2	6,000.00	12,000.00
d	NSI		4 Pole Surge Protection device 60 kA at AC inputs	No	1	20,000.00	20,000.00
e	NSI		Changeover Switches 100 Ampere made of copper	No	1	22000.00	22,000.00
f	NSI		Inauguration/Sign Board (As Per design approved by Engineer In-Charge)	No	1	5,000.00	5,000.00
g	NSI		Supply, Installation and Commissioning of 18 SWG Powder Coated DC Disconnect switch box for housing all DC Circuit Breakers and DC Surge Protective Devices having Grounding Busbar. All circuits must be properly tagged as per site installations.	No	1	20,000.00	20,000.00
h	NSI		Supply, Installation and Commissioning of Three Phase AC Combiner Box made of 18 SWG with Digital Multimeter (Voltmeter and Ammeter), Selectable Switches showing Current and Voltage of each Phase and Separate Bus Bars for each Phase, Neutral and Earth Connection including CTs for housing MCCB 200 Amp, AC Surge Protective Devices complete in all aspects. Note: All circuits must be properly tagged as per site installations	No	1	30,000.00	30,000.00
i	NSI		Lightening Arrestor having 1" Dia & 1m long rod with 5 spikes ball & base, Earthing Plate 1" x 1" x 4mm, Earthing Rod 6 Feet Long 16 mm Dia, and 16 mm2 Earthing Cable, all made of Copper material, and Earthing powder	No	1	40,000.00	40,000.00

		BILL OF QUANTITIES (BOQ) Harticultural Tube Well N-4 Park Phase 4					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
j	NSI		HDPE pipe, Flexible PVC pipe, PVC ducts etc. for cable ducting, Copper thimbles, sleeves, Butt joint connectors, Ring thimbles, PVC shrouds, Heat shrink tubes for all termination, connection and jointing as per international practices.	Job	1	20000	20,000.00
k	NSI		AC Cables 6 mm sq (4 core) from Main Distribution Box (MDB) to inverter then back to MDB	M	15	4000	60,000.00
m	MRS	26-01-g-03	Supply and Erection 1x6 sq.mm single core (XPPE/XPLO insulated/PCV sheathed) flexible copper cable from PV module to Inverter	M	180	543.31	97,795.80
n	MRS	26-01-h-01	Market rate of MC 4 Connectors	Pair	10	354.61	3,546.10
4	Rate Analysis of PV Mounting Structure						
a	NSI	-	Market Rate of Supply and Erection of Elevated structure of H Beam red oxide with double painted and galvanized c/u Channel complete in all respects as per design of in-engineer in charge	Watt	20000	40.00	800,000.00
5	Net Metering Facility						
	NSI	-	Processing of file and installation of bi directional meter capable of import export complete in all respect.	Job	20000	1.00	200,000.00
5	Rate Analysis of Stainless Steel Nuts and Bolts						
a	MRS	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Meter 3	5.228	15436.87	80,710.38
Total (PKR)							2,972,852.28
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption							
Federal GST exempted amount (PKR)							
Federal (FBR) sales tax chargeable amount (PKR)							
Applicable Federal (FBR) sales Tax rate and amount (PKR)							
Provincial (KPRA) sales tax on services (PKR)							
Any other applicable tax							
TOTAL AMOUNT (RS)							

		BILL OF QUANTITIES (BOQ) Harticultural Tube Well N-4 Park Phase 4					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
		BILL OF QUANTITIES (BOQ) Shalman Park I					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Rate analysis of Solar Panel Mono-Crystalline						
a	MRS	26-01-d-01	Market Rate of Solar Panel (PV module) mono-crystalline, A Grade, 17.50% Module efficiency minimum and 25 years power output warranty, IEC 61215 and IEC 61730 certified. (Total Capacity = 40000Watts)	Watt	40000	49.72	1,988,800.00
2	Rate Analysis of ON Grid Inverter						
a	MRS	26-01-i-03-d	Market rate of Solar ON-Grid Inverter, built in MPPT Charge controller and all sorts of safety protections as per instructions of Client / Engineer in-charge. The inverter output power capability must be 40000 kW at p.f = 1.	Watt	40000	26.97	1,078,800.00
3	Rate Analysis of Misc Items						
a	NSI		100 Amp 4-P MCCB between Inverter and WAPDA	No	1	20000.00	20,000.00
b	NSI		DC Breakers 600V/32A-2P between PV Modules and Inverter	No	5.00	4,000.00	20,000.00
c	NSI		2 Pole Surge Protection device 60 kA at DC inputs	No	12	6,000.00	72,000.00
d	NSI		4 Pole Surge Protection device 60 kA at AC inputs	No	1	20,000.00	20,000.00
e	NSI		Changeover Switches 150 Ampere made of Copper	No	1	22000.00	22,000.00
f	NSI		Inauguration/Sign Board (As Per design approved by Engineer In-Charge)	No	1	5,000.00	5,000.00
g	NSI		Supply, Installation and Commissioning of 18 SWG Powder Coated DC Disconnect switch box for housing all DC Circuit Breakers and DC Surge Protective Devices having Grounding Busbar. All circuits must be properly tagged as per site installations.	No	1	40,000.00	40,000.00
h	NSI		Supply, Installation and Commissioning of Three Phase AC Combiner Box made of 18 SWG with Digital Multimeter (Voltmeter and Ammeter), Selectable Switches showing Current and Voltage of each Phase and Separate Bus Bars for each Phase, Neutral and Earth Connection including CTs for housing MCCB 200 Amp, AC Surge Protective Devices complete in all aspects. Note: All circuits must be properly tagged as per site installations	No	1	55,000.00	55,000.00

		BILL OF QUANTITIES (BOQ) Harticultural Tube Well N-4 Park Phase 4					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
i	NSI		Lightening Arrestor having 1" dia & 1m long rod with 5 spikes ball & base, Earthing Plate 1" x 1" x 4mm, Earthing Rod 6 Feet Long 16 mm Dia, and 16 mm2 Earthing Cable, all made of Copper material, and Earthing powder	No	1	90,000.00	90,000.00
j	NSI		HDPE pipe, Flexible PVC pipe, PVC ducts etc for cable ducting, Copper thimbles, sleeves, Butt joint connectors, Ring thimbles, PVC shrouds, Heat shrink tubes for all termination, connection and jointing as per International practices.	Job	1	40000	40,000.00
k	NSI		AC Cables 35 mm sq (4 core) from Main Distribution Box (MDB) to inverter then back to MDB	M	15	7000	105,000.00
m	MRS	26-01-g-03	Supply and Erection 1x6 sq.mm single core (XPLE/XPLO insulated/PCV sheathed) flexible copper cable from PV module to Inverter	M	400	543.31	217,324.00
n	MRS	26-01-h-01	Market rate of MC 4 Connectors	Pair	20	354.61	7,092.20
4	Rate Analysis of PV Mounting Structure						
a	NSI	-	Market Rate of Supply and Erection of Elevated structure of H Beam red oxide with double painted and galvanized c/u Channel complete in all respects as per design of in-engineer in charge	Watt	40000	40.00	1,600,000.00
5	Net Metering Facility						
	NSI	-	Processing of file and installation of bi directional meter capable of import export complete in all respect.	Job	40000	1.00	300,000.00
5	Rate Analysis of Stainless Stell Nuts and Bolts						
a	MRS	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Meter 3	10.457	15436.87	161,420.77
Total (PKR)							5,842,436.97
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption							
Federal GST exempted amount (PKR)							
Federal (FBR) sales tax chargeable amount (PKR)							
Applicable Federal (FBR) sales Tax rate and amount (PKR)							
Provincial (KPRA) sales tax on services (PKR)							
Any other applicable tax							
TOTAL AMOUNT (RS)							

BOQ for Solarization of Existing Water Supply Schemes under Pakhtunkhwa Development Authority						
Scheme Name		Horticultural Tube Well shalman Park	Hayatabad			
Discharge (IGPH)		12000				
Pump Setting		350				
Head		270				
S. No	Item Code	Description	Rate	Qty	Unit	Total
1	24-93-g	Supply & Installation, testing and commissioning of Solar Submersible Pump (ISO - 9906 Certified) coupled with Submersible rewind-able Electric Motor with AC winding and all accessories like Solar Pump Controller, du/dt filter Complete in all accessories including cooling jackets, NRV, Pressure Gauge, Sluice valves (02 Nos) except column pipe and power cable for discharge greater than 3000 iGPH and output capacity greater than 20 WHP and up to 30 WHP (As per Approved Technical Specifications	62,888.33	21.21	WHP	1,333,995
2	24-95-g	Supply & Installation, testing and commissioning of complete Solar PV Generator including A-Grade Mono Crystalline PV Modules ,Fixed Mounting Structure and Foundation Civil work, Junction Boxes, Fuses, DC Breakers, Wiring complete up to Solar Pump Inverter, sized at a sizing factor of 1.75 capable of operating its intended solar pump having discharge greater than 3000 iGPH and output capacity greater than 20 WHP and up to 30 WHP (As per Approved Technical Specifications	166,306.80	21.21	WHP	3,527,720
3	24-56-a	Supply and Fixing MS Column pipe with flanges for submersible pump: 4" (100 mm) Nominal Pipe Size (NPS), 3/16" thick, 10' length	4,388.97	82.32	Meter	361,287
4	24-50-c-02	Supply and installation of Submersible Flat Cable made of 99.9% copper, coated with double PVC as per BSS Standards, 4x16 mm2	2248.41	88.39	Meter	198,732
Grand Total						5,421,734
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption						
Federal GST exempted amount (PKR)						
Federal (FBR) sales tax chargeable amount (PKR)						
Applicable Federal (FBR) sales Tax rate and amount (PKR)						
Provincial (KPRA) sales tax on services (PKR)						
Any other applicable tax						
TOTAL AMOUNT (RS)						

BILL OF QUANTITIES (BOQ) Bagh e Naran							
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Rate analysis of Solar Panel Mono-Crystalline						
a	MRS	26-01-d-01	Market Rate of Solar Panel (PV module) mono-crystalline, A Grade, 17.50% Module efficiency minimum and 25 years power output warranty, IEC 61215 and IEC 61730 certified. (Total Capacity = 40000Watts)	Watt	40000	49.72	1,988,800.00
2	Rate Analysis of ON Grid Inverter						
a	MRS	26-01-i-03-d	Market rate of Solar ON-Grid Inverter, built in MPPT Charge controller and all sorts of safety protections as per instructions of Client / Engineer in-charge. The inverter output power capability must be 40000 kW at p.f = 1.	Watt	40000	26.97	1,078,800.00
3	Rate Analysis of Misc Items						
a	NSI		100 Amp 4-P MCCB between Inverter and WAPDA	No	1	20000.00	20,000.00
b	NSI		DC Breakers 600V/32A-2P between PV Modules and Inverter	No	5.00	4,000.00	20,000.00
c	NSI		2 Pole Surge Protection device 60 kA at DC inputs	No	12	6,000.00	72,000.00
d	NSI		4 Pole Surge Protection device 60 kA at AC inputs	No	1	20,000.00	20,000.00
e	NSI		Changeover Switches 150 Ampere made of Copper	No	1	22000.00	22,000.00
f	NSI		Inauguration/Sign Board (As Per design approved by Engineer In-Charge)	No	1	5,000.00	5,000.00
g	NSI		Supply, Installation and Commissioning of 18 SWG Powder Coated DC Disconnect switch box for housing all DC Circuit Breakers and DC Surge Protective Devices having Grounding Busbar. All circuits must be properly tagged as per site installations.	No	1	40,000.00	40,000.00
h	NSI		Supply, Installation and Commissioning of Three Phase AC Combiner Box made of 18 SWG with Digital Multimeter (Voltmeter and Ammeter), Selectable Switches showing Current and Voltage of each Phase and Separate Bus Bars for each Phase, Neutral and Earth Connection including CTs for housing MCCB 200 Amp, AC Surge Protective Devices complete in all aspects. Note: All circuits must be properly tagged as per site installations	No	1	55,000.00	55,000.00
i	NSI		Lightening Arrestor having 1" dia & 1m long rod with 5 spikes ball & base, Earthing Plate 1" x 1" x 4mm, Earthing Rod 6 Feet Long 16 mm Dia, and 16 mm2	No	1	90,000.00	90,000.00

BILL OF QUANTITIES (BOQ) Bagh e Naran							
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
			Earthing Cable, all made of Copper material, and Earthing powder				
j	NSI		HDPE pipe, Flexible PVC pipe, PVC ducts etc for cable ducting, Copper thimbles, sleeves, Butt joint connectors, Ring thimbles, PVC shrouds, Heat shrink tubes for all termination, connection and jointing as per International practices.	Job	1	40000	40,000.00
k	NSI		AC Cables 35 mm sq (4 core) from Main Distribution Box (MDB) to inverter then back to MDB	M	15	7000	105,000.00
m	MRS	26-01-g-03	Supply and Erection 1x6 sq.mm single core (XPPE/XPLO insulated/PCV sheathed) flexible copper cable from PV module to Inverter	M	400	543.31	217,324.00
n	MRS	26-01-h-01	Market rate of MC 4 Connectors	Pair	20	354.61	7,092.20
4	Rate Analysis of PV Mounting Structure						
a	NSI	-	Market Rate of Supply and Erection of Elevated structure of H Beam red oxide with double painted and galvanized c/u Channel complete in all respects as per design of in-engineer in charge	Watt	40000	40.00	1,600,000.00
5	Net Metering Facility						
	NSI	-	Processing of file and installation of bi directional meter capable of import export complete in all respect.	Job	40000	1.00	300,000.00
5	Rate Analysis of Stainless Steel Nuts and Bolts						
a	MRS	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Meter ³	10.457	15436.87	161,420.77
Total (PKR)							5,842,436.97
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption							
Federal GST exempted amount (PKR)							
Federal (FBR) sales tax chargeable amount (PKR)							
Applicable Federal (FBR) sales Tax rate and amount (PKR)							
Provincial (KPRA) sales tax on services (PKR)							
Any other applicable tax							
TOTAL AMOUNT (RS)							

BILL OF QUANTITIES (BOQ) DY DIRECTOR ELECTRICITY PDA (R.M.T) TUBE WELL AT CENTRAL PARK ZONE-3 REGI MODEL TOWN							
MRS / NSI		Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Rate analysis of Solar Panel Mono-Crystalline						
a	MRS	26-01-d-01	Market Rate of Solar Panel (PV module) mono-crystalline, A Grade, 17.50% Module efficiency minimum and 25 years power output warranty, IEC 61215 and IEC 61730 certified. (Total Capacity = 30000Watts)	Watt	30000	49.72	1,491,600.00
2	Rate Analysis of ON Grid Inverter						
a	MRS	26-01-i-03-d	Market rate of Solar ON-Grid Inverter, built in MPPT Charge controller and all sorts of safety protections as per instructions of Client / Engineer in- charge. The inverter output power capability must be 30000 kW at p.f = 1.	Watt	30000	26.97	809,100.00
3	Rate Analysis of Misc Items						
a	NSI		50 Amp 4-P MCCB between Inverter and WAPDA	No	1	20000.00	20,000.00
b	NSI		DC Breakers 600V/32A-2P between PV Modules and Inverter	No	3.00	4,000.00	12,000.00
c	NSI		2 Pole Surge Protection device 60 kA at DC inputs	No	3	6,000.00	18,000.00
d	NSI		4 Pole Surge Protection device 60 kA at AC inputs	No	1	20,000.00	20,000.00
e	NSI		Changeover Switches 100 Ampere made of Copper	No	1	22000.00	22,000.00
f	NSI		Inauguration/Sign Board (As Per design approved by Engineer In-Charge)	No	1	5,000.00	5,000.00
g	NSI		Supply, Installation and Commissioning of 18 SWG Powder Coated DC Disconnect switch box for housing all DC Circuit Breakers and DC Surge Protective Devices having Grounding Busbar. All circuits must be properly tagged as per site installations.	No	1	30,000.00	30,000.00
h	NSI		Supply, Installation and Commissioning of Three Phase AC Combiner Box made of 18 SWG with Digital Multimeter (Voltmeter and Ammeter), Selectable Switches showing Current and Voltage of each Phase and Separate Bus Bars for each Phase, Neutral and Earth Connection including CTs for housing MCCB 200 Amp, AC Surge Protective Devices complete in all aspects. Note: All circuits must be properly tagged as per site installations	No	1	40,000.00	40,000.00
i	NSI		Lightening Arrestor having 1" dia & 1m long rod with 5 spikes ball & base, Earthing Plate 1" x 1" x 4mm, Earthing Rod 6 Feet Long 16 mm Dia, and 16 mm2 Earthing Cable, all made of Copper material, and Earthing powder	No	1	40,000.00	40,000.00
j	NSI		HDPE pipe, Flexible PVC pipe, PVC ducts etc for cable ducting, Copper thimbles, sleeves, Butt joint connectors, Ring thimbles, PVC shrouds, Heat shrink tubes for all termination, connection and jointing as per International practices.	Job	1	20000	20,000.00

**BILL OF QUANTITIES (BOQ) DY DIRECTOR ELECTRICITY PDA (R.M.T) TUBE WELL AT CENTRAL PARK
ZONE-3 REGI MODEL TOWN**

MRS / NSI		Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
k	NSI		AC Cables 10 mm sq (4 core) from Main Distribution Box (MDB) to inverter then back to MDB	M	15	5000	75,000.00
m	MRS	26-01-g-03	Supply and Erection 1x6 sq.mm single core (XPLE/XPLO insulated/PCV sheathed) flexible copper cable from PV module to Inverter	M	270	543.31	146,693.70
n	MRS	26-01-h-01	Market rate of MC 4 Connectors	Pair	12	354.61	4,255.32
4	Rate Analysis of PV Mounting Structure						
a	NSI	-	Market Rate of Supply and Erection of Elevated structure of H Beam redoxide with double painted and galvanized c/u Channel complete in all respects as per design of in-engineer incharge	Watt	30000	40.00	1,200,000.00
5	Net Metering Facility						
	NSI	-	Processing of file and installation of bi directional meter capable of import export complete in all respect.	Job	30000	1.00	250,000.00
5	Rate Analysis of Stainless Stell Nuts and Bolts						
a	MRS	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Meter3	7.843	15436.87	121,065.58
Total (PKR)							4,324,714.60
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption							
Federal GST exempted amount (PKR)							
Federal (FBR) sales tax chargeable amount (PKR)							
Applicable Federal (FBR) sales Tax rate and amount (PKR)							
Provincial (KPRA) sales tax on services (PKR)							
Any other applicable tax							
TOTAL AMOUNT (RS)							

BILL OF QUANTITIES (BOQ) DY DIRECTOR PDA FOR TUBE WELL A HAYAT ABAD PESHAWAR(Tatara Park)							
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Rate analysis of Solar Panel Mono-Crystalline						
a	MRS	26-01-d-01	Market Rate of Solar Panel (PV module) mono-crystalline, A Grade, 17.50% Module efficiency minimum and 25 years power output warranty, IEC 61215 and IEC 61730 certified. (Total Capacity = 50000Watts)	Watt	50000	49.72	2,486,000.00
2	Rate Analysis of ON Grid Inverter						
a	MRS	26-01-i-03-d	Market rate of Solar ON-Grid Inverter, built in MPPT Charge controller and all sorts of safety protections as per instructions of Client / Engineer in- charge. The inverter output power capability must be 50000 kW at p.f= 1.	Watt	50000	26.97	1,348,500.00
3	Rate Analysis of Misc Items						
a	NSI		100 Amp 4-P MCCB between Inverter and WAPDA	No	1	20000.00	20,000.00
b	NSI		DC Breakers 600V/32A-2P between PV Modules and Inverter	No	5.00	4,000.00	20,000.00
c	NSI		2 Pole Surge Protection device 60 kA at DC inputs	No	12	6,000.00	72,000.00
d	NSI		4 Pole Surge Protection device 60 kA at AC inputs	No	1	20,000.00	20,000.00
e	NSI		Changeover Switches 150 Ampere made of Copper	No	1	22000.00	22,000.00
f	NSI		Inauguration/Sign Board (As Per design approved by Engineer In-Charge)	No	1	5,000.00	5,000.00
g	NSI		Supply, Installation and Commissioning of 18 SWG Powder Coated DC Disconnect switch box for housing all DC Circuit Breakers and DC Surge Protective Devices having Grounding Busbar. All circuits must be properly tagged as per site installations.	No	1	40,000.00	40,000.00
h	NSI		Supply, Installation and Commissioning of Three Phase AC Combiner Box made of 18 SWG with Digital Multimeter (Voltmeter and Ammeter), Selectable Switches showing Current and Voltage of each Phase and Separate Bus Bars for each Phase, Neutral and Earth Connection including CTs for housing MCCB 200 Amp, AC Surge Protective Devices complete in all aspects. Note: All circuits must be properly tagged as per site installations	No	1	55,000.00	55,000.00
i	NSI		Lightening Arrestor having 1" dia & 1m long rod with 5 spikes ball & base, Earthing Plate 1" x 1" x 4mm, Earthing Rod 6 Feet Long 16 mm Dia, and 16 mm ² Earthing Cable, all made of Copper material, and Earthing powder	No	1	90,000.00	90,000.00
j	NSI		HDPE pipe, Flexible PVC pipe, PVC ducts etc for cable ducting, Copper thimbles, sleeves, Butt joint connectors, Ring thimbles, PVC shrouds, Heat shrink tubes for all termination, connection and jointing as per International practices.	Job	1	50000	50,000.00

BILL OF QUANTITIES (BOQ) DY DIRECTOR PDA FOR TUBE WELL A HAYAT ABAD PESHAWAR(Tatara Park)							
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
k	NSI		AC Cables 35 mm sq (4 core) from Main Distribution Box (MDB) to inverter then back to MDB	M	15	7000	105,000.00
m	MRS	26-01-g-03	Supply and Erection 1x6 sq.mm single core (XPLO/XPLO insulated/PCV sheathed) flexible copper cable from PV module to Inverter	M	400	543.31	217,324.00
n	MRS	26-01-h-01	Market rate of MC 4 Connectors	Pair	20	354.61	7,092.20
4	Rate Analysis of PV Mounting Structure						
a	NSI	-	Market Rate of Supply and Erection of Elevated structure of H Beam redoxide with double painted and galvanized c/u Channel complete in all respects as per design of in-engineer incharge	Watt	50000	40.00	2,000,000.00
5	Net Metering Facility						
	NSI	-	Processing of file and installation of bi directional meter capable of import export complete in all respect.	Job	50000	1.00	300,000.00
5	Rate Analysis of Stainless Stel Nuts and Bolts						
a	MRS	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Meter3	13.071	15436.87	201,775.96
Total (PKR)							7,059,692.16
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption							
Federal GST exempted amount (PKR)							
Federal (FBR) sales tax chargeable amount (PKR)							
Applicable Federal (FBR) sales Tax rate and amount (PKR)							
Provincial (KPRA) sales tax on services (PKR)							
Any other applicable tax							
TOTAL AMOUNT (RS)							

BILL OF QUANTITIES (BOQ) DY DIRECTOR MUHAMMAD JAN KHAN GHANI BAGH G-1 PARK P-2							
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Rate analysis of Solar Panel Mono-Crystalline						
a	MRS	26-01-d-01	Market Rate of Solar Panel (PV module) mono-crystalline, A Grade, 17.50% Module efficiency minimum and 25 years power output warranty, IEC 61215 and IEC 61730 certified. (Total Capacity = 20000Watts)	Watt	20000	49.72	994,400.00
2	Rate Analysis of ON Grid Inverter						
a	MRS	26-01-i-03-d	Market rate of Solar ON-Grid Inverter, built in MPPT Charge controller and all sorts of safety protections as per instructions of Client / Engineer in- charge. The inverter output power capability must be 20000 kW at p.f= 1.	Watt	20000	26.97	539,400.00
3	Rate Analysis of Misc Items						
a	NSI		500 Amp 4-P MCCB between Inverter and WAPDA	No	1	20000.00	20,000.00
b	NSI		DC Breakers 600V/32A-2P between PV Modules and Inverter	No	2.00	4,000.00	8,000.00
c	NSI		2 Pole Surge Protection device 60 kA at DC inputs	No	2	6,000.00	12,000.00
d	NSI		4 Pole Surge Protection device 60 kA at AC inputs	No	1	20,000.00	20,000.00
e	NSI		Changeover Switches 100 Ampere made of Copper	No	1	22000.00	22,000.00
f	NSI		Inauguration/Sign Board (As Per design approved by Engineer In-Charge)	No	1	5,000.00	5,000.00
g	NSI		Supply, Installation and Commissioning of 18 SWG Powder Coated DC Disconnect switch box for housing all DC Circuit Breakers and DC Surge Protective Devices having Grounding Busbar. All circuits must be properly tagged as per site installations.	No	1	20,000.00	20,000.00
h	NSI		Supply, Installation and Commissioning of Three Phase AC Combiner Box made of 18 SWG with Digital Multimeter (Voltmeter and Ammeter), Selectable Switches showing Current and Voltage of each Phase and Separate Bus Bars for each Phase, Neutral and Earth Connection including CTs for housing MCCB 200 Amp, AC Surge Protective Devices complete in all aspects. Note: All circuits must be properly tagged as per site installations	No	1	30,000.00	30,000.00
i	NSI		Lightening Arrestor having 1" dia & 1m long rod with 5 spikes ball & base, Earthing Plate 1" x 1" x 4mm, Earthing Rod 6 Feet Long 16 mm Dia, and 16 mm2 Earthing Cable, all made of Copper material, and Earthing powder	No	1	40,000.00	40,000.00

BILL OF QUANTITIES (BOQ) DY DIRECTOR MUHAMMAD JAN KHAN GHANI BAGH G-1 PARK P-2							
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
j	NSI		HDPE pipe, Flexible PVC pipe, PVC ducts etc for cable ducting, Copper thimbles, sleeves, Butt joint connectors, Ring thimbles, PVC shrouds, Heat shrink tubes for all termination, connection and jointing as per International practices.	Job	1	20000	20,000.00
k	NSI		AC Cables 6 mm sq (4 core) from Main Distribution Box (MDB) to inverter then back to MDB	M	15	4000	60,000.00
m	MRS	26-01-g-03	Supply and Erection 1x6 sq.mm single core (XPLE/XPLO insulated/PCV sheathed) flexible copper cable from PV module to Inverter	M	180	543.31	97,795.80
n	MRS	26-01-h-01	Market rate of MC 4 Connectors	Pair	10	354.61	3,546.10
4	Rate Analysis of PV Mounting Structure						
a	NSI	-	Market Rate of Supply and Erection of Elevated structure of H Beam redoxide with double painted and galvanized c/u Channel complete in all respects as per design of in-engineer incharge	Watt	20000	40.00	800,000.00
5	Net Metering Facility						
	NSI	-	Processing of file and installation of bi directional meter capable of import export complete in all respect.	Job	20000	1.00	200,000.00
5	Rate Analysis of Stainless Stell Nuts and Bolts						
a	MRS	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Meter3	5.228	15436.87	80,710.38
Total (PKR)							2,972,852.28
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption							
Federal GST exempted amount (PKR)							
Federal (FBR) sales tax chargeable amount (PKR)							
Applicable Federal (FBR) sales Tax rate and amount (PKR)							
Provincial (KPRA) sales tax on services (PKR)							
Any other applicable tax							
TOTAL AMOUNT (RS)							

BILL OF QUANTITIES (BOQ) DY DIRECTOR MUHAMMAD JAN KHAN GHANI BAGH G-1 PARK P-2							
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
BOQ for Solarization of Existing Water Supply Schemes under Pukhtunkhwa Development Authority							
Scheme Name		Director WSS D4 Street No. 24 KHYBER PARK			Hayatabad		
Discharge(IGPH)		16000					
Pump Setting		350					
Head		270					
S. No	Item Code	Description	Rate	Qty	Unit	Total	
1	24-93-g	Supply & Installation, testing and commissioning of Solar Submersible Pump (ISO - 9906 Certified) coupled with Submersible rewind-able Electric Motor with AC winding and all accessories like Solar Pump Controller, du/dt filter Complete in all accessories including cooling jackets, NRV, Pressure Gauge, Sluice valves (02 Nos) except column pipe and power cable for discharge greater than 3000 iGPH and output capacity greater than 20 WHP and up to 30 WHP (As per Approved Technical Specifications	62,888.33	28.28	WHP	1,778,660	
2	24-95-g	Supply & Installation, testing and commissioning of complete Solar PV Generator including A-Grade Mono Crystalline PV Modules ,Fixed Mounting Structure and Foundation Civil work, Junction Boxes, Fuses, DC Breakers, Wiring complete upto Solar Pump Inverter, sized at a sizing factor of 1.75 capable of operating its intended solar pump having discharge greater than 3000 iGPH and output capacity greater than 20 WHP and up to 30 WHP (As per Approved Technical Specifications	166,306.80	28.28	WHP	4,703,627	
3	24-56-a	Supply and Fixing MS Column pipe with flanges for submersible pump : 4" (100 mm) Nominal Pipe Size (NPS), 3/16" thick, 10' length	4,388.97	82.32	Meter	361,287	
4	24-50-c-02	Supply and installation of Submersible Flat Cable made of 99.9% copper, coated with double PVC as per BSS Standards, 4x16 mm2	2248.41	88.39	Meter	198,732	
Grand Total			7,042,306				
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption							
Federal GST exempted amount (PKR)							
Federal (FBR) sales tax chargeable amount (PKR)							
Applicable Federal (FBR) sales Tax rate and amount (PKR)							
Provincial (KPRA) sales tax on services (PKR)							
Any other applicable tax							
TOTAL AMOUNT (RS)							

BOQ for Solarization of Existing Water Supply Schemes under Pakhtunkhwa Development Authority						
Scheme Name		HARTICULTURE T/WELL F-10 PHASE 7 HAYATABAD	Hayatabad			
Discharge (IGPH)		8000				
Pump Setting		350				
Head		270				
S. No	Item Code	Description	Rate	Qty	Unit	Total
1	24-93-e	Supply & Installation, testing and commissioning of Solar Submersible Pump (ISO - 9906 Certified) coupled with Submersible rewind-able Electric Motor with AC winding and all accessories like Solar Pump Controller, du/dt filter Complete in all accessories including cooling jackets, NRV, Pressure Gauge, Sluice valves (02 Nos) except column pipe and power cable for discharge greater than 3000 iGPH and output capacity greater than 10 WHP and up to 15 WHP (As per Approved Technical Specifications	79,486.02	14.14	WHP	1,124,045
2	24-95-e	Supply & Installation, testing and commissioning of complete Solar PV Generator including A-Grade Mono Crystalline PV Modules, Fixed Mounting Structure and Foundation Civil work, Junction Boxes, Fuses, DC Breakers, Wiring complete upto Solar Pump Inverter, sized at a sizing factor of 1.75 capable of operating its intended solar pump having discharge greater than 3000 iGPH and output capacity greater than 20 WHP and up to 30 WHP (As per Approved Technical Specifications	183,308.30	14.14	WHP	2,592,239
3	24-56-b	Supply and Fixing MS Column pipe with flanges for submersible pump : 3" (75 mm) Nominal Pipe Size (NPS), 3/16" thick, 10' length	3,499.54	82.32	Meter	288,072
4	24-50-c-01	Supply and installation of Submersible Flat Cable made of 99.9% copper, coated with double PVC as per BSS Standards, 4x10 mm2	1897.33	88.39	Meter	167,701
Grand Total			4,172,056			
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption						
Federal GST exempted amount (PKR)						
Federal (FBR) sales tax chargeable amount (PKR)						
Applicable Federal (FBR) sales Tax rate and amount (PKR)						
Provincial (KPRA) sales tax on services (PKR)						
Any other applicable tax						
TOTAL AMOUNT (RS)						

BOQ for Solarization of Existing Water Supply Schemes under Pakhtunkhwa Development Authority						
Scheme Name		Director WSS D4 Street No. 24 KHYBER PARK	Hayatabad			
Discharge(IGPH)		13000				
Pump Setting		350				
Head		270				
S. No	Item Code	Description	Rate	Qty	Unit	Total
1	24-93-g	Supply & Installation, testing and commissioning of Solar Submersible Pump (ISO - 9906 Certified) coupled with Submersible rewind-able Electric Motor with AC winding and all accessories like Solar Pump Controller, du/dt filter Complete in all accessories including cooling jackets, NRV, Pressure Gauge, Sluice valves (02 Nos) except column pipe and power cable for discharge greater than 3000 iGPH and output capacity greater than 20 WHP and up to 30 WHP (As per Approved Technical Specifications	62,888.33	22.98	WHP	1,445,161
2	24-95-g	Supply & Installation, testing and commissioning of complete Solar PV Generator including A-Grade Mono Crystalline PV Modules ,Fixed Mounting Structure and Foundation Civil work, Junction Boxes, Fuses, DC Breakers, Wiring complete upto Solar Pump Inverter, sized at a sizing factor of 1.75 capable of operating its intended solar pump having discharge greater than 3000 iGPH and output capacity greater than 20 WHP and up to 30 WHP (As per Approved Technical Specifications	166,306.80	22.98	WHP	3,821,697
3	24-56-a	Supply and Fixing MS Column pipe with flanges for submersible pump : 4" (100 mm) Nominal Pipe Size (NPS), 3/16" thick, 10' length	4,388.97	82.32	Meter	361,287
4	24-50-c-02	Supply and installation of Submersible Flat Cable made of 99.9% copper, coated with double PVC as per BSS Standards, 4x16 mm2	2248.41	88.39	Meter	198,732
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption						
Federal GST exempted amount (PKR)						
Federal (FBR) sales tax chargeable amount (PKR)						
Applicable Federal (FBR) sales Tax rate and amount (PKR)						
Provincial (KPRA) sales tax on services (PKR)						
Any other applicable tax						
TOTAL AMOUNT (RS)						

		BILL OF QUANTITIES (BOQ) Director WSS D4 Street No. 24 KHYBER PARK					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Rate analysis of Solar Panel Mono-Crystalline						
a	MRS	26-01-d-01	Market Rate of Solar Panel (PV module) mono-crystalline, A Grade, 17.50% Module efficiency minimum and 25 years power output warranty, IEC 61215 and IEC 61730 certified. (Total Capacity = 80000Watts)	Watt	80000	49.72	3,977,600.00
2	Rate Analysis of ON Grid Inverter						
a	MRS	26-01-i-03-d	Market rate of Solar ON-Grid Inverter, built in MPPT Charge controller and all sorts of safety protections as per instructions of Client / Engineer in-charge. The inverter output power capability must be 80000 kW at p.f= 1.	Watt	80000	26.97	2,157,600.00
3	Rate Analysis of Misc Items						
a	NSI		100 Amp 4-P MCCB between Inverter and WAPDA	No	1	20000.00	20,000.00
b	NSI		DC Breakers 600V/32A-2P between PV Modules and Inverter	No	9.00	4,000.00	36,000.00
c	NSI		2 Pole Surge Protection device 60 kA at DC inputs	No	12	6,000.00	72,000.00
d	NSI		4 Pole Surge Protection device 60 kA at AC inputs	No	1	20,000.00	20,000.00
e	NSI		Changeover Switches 150 Ampere made of Copper	No	1	22000.00	22,000.00
f	NSI		Inauguration/Sign Board (As Per design approved by Engineer In-Charge)	No	1	5,000.00	5,000.00
g	NSI		Supply, Installation and Commissioning of 18 SWG Powder Coated DC Disconnect switch box for housing all DC Circuit Breakers and DC Surge Protective Devices having Grounding Busbar. All circuits must be properly tagged as per site installations.	No	1	60,000.00	60,000.00
h	NSI		Supply, Installation and Commissioning of Three Phase AC Combiner Box made of 18 SWG with Digital Multimeter (Voltmeter and Ammeter), Selectable Switches showing Current and Voltage of each Phase and Separate Bus Bars for each Phase, Neutral and Earth Connection including CTs for housing MCCB 200 Amp, AC Surge Protective Devices complete in all aspects. Note: All circuits must be properly tagged as per site installations	No	1	55,000.00	55,000.00
i	NSI		Lightening Arrestor having 1" dia & 1m long rod with 5 spikes ball & base, Earthing Plate 1" x 1" x 4mm, Earthing Rod 6 Feet Long 16 mm Dia, and 16 mm2 Earthing Cable, all made of Copper material, and Earthing powder	No	1	90,000.00	90,000.00

		BILL OF QUANTITIES (BOQ) Director WSS D4 Street No. 24 KHYBER PARK					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
j	NSI		HDPE pipe, Flexible PVC pipe, PVC ducts etc for cable ducting, Copper thimbles, sleeves, Butt joint connectors, Ring thimbles, PVC shrouds, Heat shrink tubes for all termination, connection and jointing as per International practices.	Job	1	50000	50,000.00
k	NSI		AC Cables 35 mm sq (4 core) from Main Distribution Box (MDB) to inverter then back to MDB	M	15	7000	105,000.00
m	MRS	26-01-g-03	Supply and Erection 1x6 sq.mm single core (XPPE/XPLO insulated/PCV sheathed) flexible copper cable from PV module to Inverter	M	810	543.31	440,081.10
n	MRS	26-01-h-01	Market rate of MC 4 Connectors	Pair	20	354.61	7,092.20
4	Rate Analysis of PV Mounting Structure						
a	NSI	-	Market Rate of Supply and Erection of Elevated structure of H Beam redoxide with double painted and galvanized c/u Channel complete in all respects as per design of in-engineer incharge	Watt	80000	40.00	3,200,000.00
5	Net Metering Facility						
	NSI	-	Processing of file and installation of bi directional meter capable of import export complete in all respect.	Job	80000	1.00	400,000.00
5	Rate Analysis of Stainless Stel Nuts and Bolts						
a	MRS	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Meter3	20.914	15436.87	322,841.54
Total (PKR)							11,040,214.84
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption							
Federal GST exempted amount (PKR)							
Federal (FBR) sales tax chargeable amount (PKR)							
Applicable Federal (FBR) sales Tax rate and amount (PKR)							
Provincial (KPRA) sales tax on services (PKR)							
Any other applicable tax							
TOTAL AMOUNT (RS)							

		BILL OF QUANTITIES (BOQ) T/WELL F-10 PHASE 6 HAYATABAD					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Rate analysis of Solar Panel Mono-Crystalline						
a	MRS	26-01-d-01	Market Rate of Solar Panel (PV module) mono-crystalline, A Grade, 17.50% Module efficiency minimum and 25 years power output warranty, IEC 61215 and IEC 61730 certified. (Total Capacity = 80000Watts)	Watt	80000	49.72	3,977,600.00
2	Rate Analysis of ON Grid Inverter						
a	MRS	26-01-i-03-d	Market rate of Solar ON-Grid Inverter, built in MPPT Charge controller and all sorts of safety protections as per instructions of Client / Engineer in-charge. The inverter output power capability must be 80000 kW at p.f= 1.	Watt	80000	26.97	2,157,600.00
3	Rate Analysis of Misc Items						
a	NSI		100 Amp 4-P MCCB between Inverter and WAPDA	No	1	20000.00	20,000.00
b	NSI		DC Breakers 600V/32A-2P between PV Modules and Inverter	No	9.00	4,000.00	36,000.00
c	NSI		2 Pole Surge Protection device 60 kA at DC inputs	No	12	6,000.00	72,000.00
d	NSI		4 Pole Surge Protection device 60 kA at AC inputs	No	1	20,000.00	20,000.00
e	NSI		Changeover Switches 150 Ampere made of Copper	No	1	22000.00	22,000.00
f	NSI		Inauguration/Sign Board (As Per design approved by Engineer In-Charge)	No	1	5,000.00	5,000.00
g	NSI		Supply, Installation and Commissioning of 18 SWG Powder Coated DC Disconnect switch box for housing all DC Circuit Breakers and DC Surge Protective Devices having Grounding Busbar. All circuits must be properly tagged as per site installations.	No	1	60,000.00	60,000.00
h	NSI		Supply, Installation and Commissioning of Three Phase AC Combiner Box made of 18 SWG with Digital Multimeter (Voltmeter and Ammeter), Selectable Switches showing Current and Voltage of each Phase and Separate Bus Bars for each Phase, Neutral and Earth Connection including CTs for housing MCCB 200 Amp, AC Surge Protective Devices complete in all aspects. Note: All circuits must be properly tagged as per site installations	No	1	55,000.00	55,000.00
i	NSI		Lightening Arrestor having 1" dia & 1m long rod with 5 spikes ball & base, Earthing Plate 1" x 1" x 4mm, Earthing Rod 6 Feet Long 16 mm Dia, and 16 mm2 Earthing Cable, all made of Copper material, and Earthing powder	No	1	90,000.00	90,000.00

		BILL OF QUANTITIES (BOQ) T/WELL F-10 PHASE 6 HAYATABAD					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
j	NSI		HDPE pipe, Flexible PVC pipe, PVC ducts etc for cable ducting, Copper thimbles, sleeves, Butt joint connectors, Ring thimbles, PVC shrouds, Heat shrink tubes for all termination, connection and jointing as per International practices.	Job	1	50000	50,000.00
k	NSI		AC Cables 35 mm sq (4 core) from Main Distribution Box (MDB) to inverter then back to MDB	M	15	7000	105,000.00
m	MRS	26-01-g-03	Supply and Erection 1x6 sq.mm single core (XPLE/XPLO insulated/PCV sheathed) flexible copper cable from PV module to Inverter	M	810	543.31	440,081.10
n	MRS	26-01-h-01	Market rate of MC 4 Connectors	Pair	20	354.61	7,092.20
4	Rate Analysis of PV Mounting Structure						
a	NSI	-	Market Rate of Supply and Erection of Elevated structure of H Beam redoxide with double painted and galvanized c/u Channel complete in all respects as per design of in-engineer incharge	Watt	80000	40.00	3,200,000.00
5	Net Metering Facility						
	NSI	-	Processing of file and installation of bi directional meter capable of import export complete in all respect.	Job	80000	1.00	400,000.00
5	Rate Analysis of Stainless Stell Nuts and Bolts						
a	MRS	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Meter3	20.914	15436.87	322,841.54
Total (PKR)							11,040,214.84
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption							
Federal GST exempted amount (PKR)							
Federal (FBR) sales tax chargeable amount (PKR)							
Applicable Federal (FBR) sales Tax rate and amount (PKR)							
Provincial (KPRA) sales tax on services (PKR)							
Any other applicable tax							
TOTAL AMOUNT (RS)							

		BILL OF QUANTITIES (BOQ) Central Park Zone III RMT Peshawar					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Rate analysis of Solar Panel Mono-Crystalline						
a	MRS	26-01-d-01	Market Rate of Solar Panel (PV module) mono-crystalline, A Grade, 17.50% Module efficiency minimum and 25 years power output warranty, IEC 61215 and IEC 61730 certified. (Total Capacity = 45000Watts)	Watt	45000	49.72	2,237,400.00
2	Rate Analysis of ON Grid Inverter						
a	MRS	26-01-i-03-d	Market rate of Solar ON-Grid Inverter, built in MPPT Charge controller and all sorts of safety protections as per instructions of Client / Engineer in-charge. The inverter output power capability must be 40000 kW at p.f= 1.	Watt	40000	26.97	1,078,800.00
3	Rate Analysis of Misc Items						
a	NSI		100 Amp 4-P MCCB between Inverter and WAPDA	No	1	20000.00	20,000.00
b	NSI		DC Breakers 600V/32A-2P between PV Modules and Inverter	No	5.00	4,000.00	20,000.00
c	NSI		2 Pole Surge Protection device 60 kA at DC inputs	No	12	6,000.00	72,000.00
d	NSI		4 Pole Surge Protection device 60 kA at AC inputs	No	1	20,000.00	20,000.00
e	NSI		Changeover Switches 150 Ampere made of Copper	No	1	22000.00	22,000.00
f	NSI		Inauguration/Sign Board (As Per design approved by Engineer In-Charge)	No	1	5,000.00	5,000.00
g	NSI		Supply, Installation and Commissioning of 18 SWG Powder Coated DC Disconnect switch box for housing all DC Circuit Breakers and DC Surge Protective Devices having Grounding Busbar. All circuits must be properly tagged as per site installations.	No	1	40,000.00	40,000.00
h	NSI		Supply, Installation and Commissioning of Three Phase AC Combiner Box made of 18 SWG with Digital Multimeter (Voltmeter and Ammeter), Selectable Switches showing Current and Voltage of each Phase and Separate Bus Bars for each Phase, Neutral and Earth Connection including CTs for housing MCCB 200 Amp, AC Surge Protective Devices complete in all aspects. Note: All circuits must be properly tagged as per site installations	No	1	55,000.00	55,000.00
i	NSI		Lightening Arrestor having 1" dia & 1m long rod with 5 spikes ball & base, Earthing Plate 1" x 1" x 4mm, Earthing Rod 6 Feet Long 16 mm Dia, and 16 mm2 Earthing Cable, all made of Copper material, and Earthing powder	No	1	90,000.00	90,000.00

		BILL OF QUANTITIES (BOQ) Central Park Zone III RMT Peshawar					
S.#	MRS / NSI	Item Code	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
j	NSI		HDPE pipe, Flexible PVC pipe, PVC ducts etc for cable ducting, Copper thimbles, sleeves, Butt joint connectors, Ring thimbles, PVC shrouds, Heat shrink tubes for all termination, connection and jointing as per International practices.	Job	1	45000	45,000.00
k	NSI		AC Cables 35 mm sq (4 core) from Main Distribution Box (MDB) to inverter then back to MDB	M	15	7000	105,000.00
m	MRS	26-01-g-03	Supply and Erection 1x6 sq.mm single core (XPPE/XPLO insulated/PCV sheathed) flexible copper cable from PV module to Inverter	M	400	543.31	217,324.00
n	MRS	26-01-h-01	Market rate of MC 4 Connectors	Pair	20	354.61	7,092.20
4	Rate Analysis of PV Mounting Structure						
a	NSI	-	Market Rate of Supply and Erection of Elevated structure of H Beam redoxide with double painted and galvanized c/u Channel complete in all respects as per design of in-engineer incharge	Watt	45000	40.00	1,800,000.00
5	Net Metering Facility						
	NSI	-	Processing of file and installation of bi directional meter capable of import export complete in all respect.	Job	45000	1.00	300,000.00
5	Rate Analysis of Stainless Stel Nuts and Bolts						
a	MRS	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Meter3	11.764	15436.87	181,598.37
Total (PKR)							6,316,214.57
Note:- Following information is to be provided by the bidder, otherwise bid shall be declared as non-responsive. (Must be duly supported by evidence of exemption							
Federal GST exempted amount (PKR)							
Federal (FBR) sales tax chargeable amount (PKR)							
Applicable Federal (FBR) sales Tax rate and amount (PKR)							
Provincial (KPRA) sales tax on services (PKR)							
Any other applicable tax							
TOTAL AMOUNT (RS)							