Trading Corporation of Pakistan (Pvt.) Limited

Ministry of Commerce, Government of Pakistan

TENDER

For

SOLARIZATION AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI

COMPETITIVE BIDDING
SINGLE STAGE – ONE ENVELOPE PROCEDURE

4th & 5th Floor, Block B, FTC Building, Shahrah-e-Faisal Karachi.
Phone: +92-21-111-TCP(827)-000, 99202947-49(PABX), Fax: +92-21-99202722,
E-Mail: tcp@tcp.gov.pk, URL:tcp.gov.pk

TRADING CORPORATION OF PAKISTAN

(REAL ESTATE BUSINESS DEVELOPMENT DIVISION)

TCP/REM/Solar/TCP-House/313-93/2022 Dated: 19th January, 2024

NOTICE INVITING TENDER (NIT)

"SOLARIZATION (24 KV) INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"

Trading Corporation of Pakistan (Pvt.) Ltd. (TCP), Karachi, a state owned commercial organization working under Ministry of Commerce, Government of Pakistan, invites sealed bids from the registered, authorized and experienced firms for the "SOLARIZATION (24KV) INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"

2. Bidding documents containing detailed terms & conditions, method of procurement, procedure for submission of bids, bid security, bid validity, opening of bids, bid evaluation criteria, clarification/rejection of bids, performance guarantee etc. are available for the interested bidders.

3. The Bidder(s) are expected to update themselves fully about the assignment and the local conditions before submitting the proposal by paying a visit to the TCP as well as the facility, sending written queries to the TCP specified in the Data Sheet. Please note that the cost of any such visits or queries is not reimbursable and shall be borne solely by the Bidder(s).

4. Tender Document, containing terms & conditions can be obtained on payment of Rs.2,000/- (Rupees Two thousand only) during office hours from the date of publication of this notice till **12th February, 2024 by 1100 (hours)** from following offices of TCP.

Deputy Manager (Cash),
Trading Corporation of Pakistan (Pvt.) Ltd,
4th Floor, Block-B, Finance & Trade Centre, Shahrah-e-Faisal, Karachi,
(Tel: 021-99202947-49 Ext. 235).

5. The Tender Documents can also be downloaded from TCP's website www.tcp.gov.pk and PPRA's website www.ppra.org.pk also. Interested parties would however be required to provide separate Demand Draft/Pay Order of Rs.2,000/- as Tender Documents fee while submitting the bids without which their bids will not be accepted.

6. The sealed envelopes prepared in accordance with the instructions contained in the bidding documents can be dropped in the box placed at TCP's Principal Office, 4th floor, Block-B, Finance and Trade Center, Karachi on ***12th February, 2024 by 1100 hours***. Bids will be opened on the same day at **1130 hours** in presence of the bidders or their representatives, who may wish to be present.

19/1/24

(RADAIN SHAH)
GENERAL MANAGER (REBD)

TRADING CORPORATION OF PAKISTAN

(REAL ESTATE MANAGEMENT&SERVICES)

TCP/REM/Solar/TCP-House/313-93/2022 Dated: 19th January, 2024

TENDERDOCUMENT

1. IMPORTANT NOTICE

1.1 TCP, a public sector organization working under Ministry of Commerce invites Bids from the registered, authorized and experienced firms/companies for the" SOLARIZATION (24-KV), INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"

1.2 The evaluation criteria has been determined by the TCP. Neither any of these entities, nor their consultants, advisors, employees, personnel, agents, make any representation (expressed or implied) or warranties as to the accuracy or completeness of the information contained herein, or in any other document made available to a person in connection with the tender process for the Project and the same shall have no liability for this TENDER DOCUMENTS or for any other written or oral communication transmitted to the recipient in the course of the recipient's evaluation of the assignment. Neither any of these entities, nor their employees, personnel, agents, consultants, advisors and contractors etc. will be liable to reimburse or compensate the recipient for any costs, fees, damages or expenses incurred by the recipient in evaluating or acting upon this TENDER DOCUMENTS or otherwise in connection with the assignment as contemplated herein.

1.3 The Bids submitted in response to this TENDER DOCUMENTS by any of the bidders shall be upon the full understanding and agreement of any and all terms of this TENDER DOCUMENTS and such submission shall be deemed as an acceptance to all the terms and conditions stated in the TENDER DOCUMENTS. Any Bid in response to the TENDER DOCUMENTS submitted by any of the Bidder shall be construed based on the understanding that the Bidder has done a complete and careful examination of the TENDER DOCUMENTS and has independently verified all the information received (whether written or oral) from the TCP (including from its employees, personnel, agents, consultants, advisors etc.).

1.4 This TENDER DOCUMENTS does not constitute a solicitation to invest, or otherwise participate, in the Project, nor shall it constitute a guarantee or commitment of any manner on the part of the TCP that the assignment will be awarded. The TCP reserves the right, in its full discretion, to modify the TENDER DOCUMENTS and/or the assignment at any time to the fullest extent permitted by law, and shall not be liable to reimburse or compensate the Bidders for any costs, taxes, expenses or damages incurred by the Bidders in such an event.

1.5 The bidders shall be responsible for all losses, costs, fees, expenses charges and damages related to their Bids and/or matters relating to this TENDER DOCUMENTS. Regardless of the outcome of the Bidding Process, TCP shall neither be liable to the Bidders in any manner nor shall it be responsible to compensate the same for any such losses, costs, fees, expenses, charges and damages of any nature whatsoever, in each case, in respect of matters relating to this TENDER DOCUMENTS.

1.6 TCP may, at its sole discretion at any time and without prior notice:

i. change the timetable for Bidding Process, set out in this TENDER DOCUMENTS;
ii. make other changes to the TENDER DOCUMENTS, or add to it, or provide clarifications;
iii. that TCP reserves the right to change any or all of the provisions of the TENDER DOCUMENTS; and
iv. that it shall not be responsible for any losses, costs, fees, expenses, charges or damages if:
   (a) it makes such changes;
   (b) cancel this Bidding Process, with or without indicating the reason for cancellation.

2. INTRODUCTION, SPECIFICATIONS & SCOPE OF WORKS

2.1 Introduction

2.1.1 The TCP owns residential Bungalow No. 48/1, 26th Street, Khayaban-e-Mujahid, DHA Phase-V, Karachi which is presently electrified through K-Electric with sanctioned load of 22 KV. Accordingly, TCP invites bids from registered, authorized and experienced firms/companies for "SOLARIZATION, INCLUDING NET METERING OF TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"in accordance with the Tender Documents.

2.1.2 The layout plan and some glimpses of the Facility are enclosed herewith as **(Annex-10)**.

2.1.3 It is envisaged that the firm will be selected by the TCP through a fair and transparent national competitive bidding method by Single-Stage-One-Envelope process and the TCP will enter into a contract with the Successful firm in respect of the Project.

2.1.4 This Tender Documents is being issued by the TCP to the registered firms with relevant authority. (Valid electrical license by Sindh Government)

2.2 Specifications:

SOLAR PANELS SPECIFICATION:

Minimum Specifications (24-KV)	
Photovoltaic Panel	Mono PERC ISO certified
PV Size	>550W
Qty of cells	>144
Bus Bar	Multi Bus Bar solar cell
Cell Quality	A Grade, tier 1 Bloomberg
Module Efficiency	>21%
Power Tolerance	0—+3 % or more
Operating Temperature	-40°C to +85°C
Temperature Coefficient of Pmax	-0.35%/°C or better
Fill Factor (Calculations Required)	77% or higher at STC (Detailed
Certification or equivalent	IEC 61215, IEC 61730, IEC61701 ED2, UL1703
Frame	Must withstand 5400 PA Load
Junction Box	IP 65/IP67 rated, with bypass diodes

Connectors	MC4 or comparable
Front Cover	3.2mm tempered glass or higher
Warranty	12 years product replacement 10 years for 90% of warranted minimum power 11 - up to 25 years for 85% of warranted minimum power

ON-GRID INVERTER SPECIFICATION:

Minimum Specifications (24-KV)	
Parameters	Description
Type of Inverter	Grid Tied- 3 Phases, WAPDA / Gen.Sync. With built-in Wi-Fi for Data Monitoring.
Make	Japan/ European/USA Singapore/Malaysia/Taiwan/Korea/China
No of MPPT inputs	3 or more independent MPP trackers
Nominal AC Voltage	230/400 (340-440) VAC 50Hz
Total Harmonic distortion	<3%
Efficiency	98.5% peak
Protection Class	IP 65 or above
Standby power consumption	<1W
Operating Temperature humidity	-25 °C … +60°C
Topology	Transformer less
Max Input Voltage	1KV
Rated Power @ 400 V 3 4 50Hz	50000W
Max AC Apparent Power	55500VA
Power Factor @ Rated power	0.8leading … 0.8lagging
Remote Monitoring App	Yes
Synchronization with Existing Genset	Genset Sync Device
DC reverse polarity protection	Yes
DC Switch	Yes
AC/DC surge protection	Type II / Type II
Insulation resistance monitoring	Yes
AC short-circuit protection	Yes
Ground fault monitoring	Yes
Grid monitoring	Yes
Anti-islanding protection	Yes
Residual-current monitoring unit	Yes

AC Protection

Interface -RS232/US8

-RS48 Modbus Protocol / Ethernet

-LCD Display

-Local Monitoring Software should be lifetime free of cost & integrated

Compliance

UL1741/ 1EEE1547, UL 1998, CE, EN 50178,

or

EN-624109-1, EN 62109-2, EN 61000-6-2, EN-621000-6-4, EN 61000-3-11, EN 61000-3-12, EN 50178,

IEC 62103, EN 55011, IEC 61000-3-11, IEC 61000-3- 12, IEC 61000-6-3

IEC 62109-1/2, AND UL 1741 IEC 61727, VDE-AII-N 4105, VDE 0125-11, G59/3,

(Different country standards needed for net metering)

AC/DC & EARTHING CABLE SPECIFICATION:

Supply and erection of Electric Cable DC XLPE Insulated, XLPE Sheathed 1500VDC with flexible tinned copper conductor, 6mmsq, single core, laid under Solar panels and trenches complete with sand supply and fixing (Pakistan/Fast/Newage/Pioneer or equivalent).

Supply and erection of Electric Cable LT PVC Insulated 450/700V with stranded copper conductor, 35mmsq, 4-Core from Inverter to main termination (Pakistan/Fast or equivalent).

Supply and erection of Earthing cable PVC Insulated 450/700V with stranded copper conductor, 2.5mmsq, single-core for panels to panels earthing (Pakistan/Fast or equivalent).

Supply and erection of Earthing cable PVC Insulated 450/700V with stranded copper conductor, 10mmsq, single-core for structureearthing (Pakistan/Fast or equivalent).

Supply and erection of Earthing cable PVC Insulated 450/700V with stranded copper conductor, 16mmsq, single-core for inverter earthing (Pakistan/Fast or equivalent).

MOUNTING STRUCTURE SPECIFICATIONS:

MS Iron Girder Elevated Structure with hot-dipped galvanization at 80 microns (14gauge)

Sr. No	Structure Details	Specifications
1	Girder	5x2 ½ 1.8kg/feet
2	Supporting Pole	Diameter (14mm) (14 AWG)
3	Base Plate	8x8 inch with 8mm thickness
4	Top Plate	6x6 inch with 6mm thickness
5	Paint	Hot-dipped galvanized @ 80microns, certification required
6	G.I Nut Bolts	Grade A4 8mmx20mm
7	Rawal or Anchor Bolt	Galvanized Iron 12mm x 100mm
8	Concrete Foundation	1:2:4 RCC/PCC Concrete Foundation

EARTHING:

Supply, installation, testing and commissioning of earthing system for both AC & DC system. Earthing with 3 meter long 20 mm dia size copper conductor with bare solid Earth conductor 2 x 70sq.mm in 50mm dia G.I. pipe upto earth connecting point, inspection chamber, marconite concrete, drilling etc, to achieve less than 5 ohms specified earthing results. Complete in all respect as per drawing and specification or as per directed by Engineer.

NET METERING:

Applicant to undertake and ensure that Net-Metering process is fully done from submission of documents, issuance of NEPRA net meter license, installation of Bi- Directional meter&load extendionby K-Electric fully fictionalization of Net-Metering process.

2.3 Scope of works:

2.3.1 As per the requirement of TCP, the assignment will cover all installation, designing including net metering with K-Electric Company at Bungalow No.48/1, 26th Street, Khayaban-E-Mujahid, DHA Phase-V, Karachi.

2.3.2. This is a turnkey project wherein company shall be responsible for all essential designing, civil, electrical and other works till operationalization of the project and its subsequent warranty maintenance. The scope of work will cover the following:

a. Designing- civil, architectural and electrical works etc
b. Installation and commissioning of the solar panels
c. Obtain necessary permissions from DHA, K-Electric & NEPRA
d. Complete necessary documentation with DHA, K-Electric & NEPRA
e. Ensure Net metering with K-Electric
f. Post Installation Maintenance under warranty
g. Any other relevant task to accomplish the assignment

2.4 Bid Costs:

2.4.1 Each bidder shall bear all costs associated with the preparation and submission of its Bids and the Bidder's participation in the Bidding Process including, without limitation, all costs and expenses related to, preparation and submission of the Bidding Documents, the provision of any additional information, conducting due diligence of the assignment, visits to the site and all other costs incurred as part of this Bidding Process up to the signing of the contract by successful Bidders.

2.4.2 The TCP shall not be responsible or liable to pay any Bid Costs of any Bidder, regardless of the conduct or outcome of the Bidding Process.

2.5 Timetable:

2.5.1 The estimated timetable for the Bidding Process is as follows:

Activity	Target Date
Issuance of Bidding Documents	19th January 2024
Clarifications required	Before 7 days of submission
Responses to Bidder's queries	After 02 days from clarifications required deadline
Release Amended Bidding Documents (if required)	On the same day as above
Bids Submission Deadline **AND** Bids Opening	After 15 days of issuance of bidding documents

Bid Evaluation Report	Within 05 days from opening of proposal
Notification of Award	Within 15 days from bid evaluation report and hoisting on PPRA website
Submission of Performance Guarantee	Within 14 days from award of the contract
Signing of the Agreement as at Annex-9	After submission of Performance Guarantee
Execution of the Contract with Successful Bidder	After 07 days from contract signing

2.5.2 The TCP may, at its sole discretion and without prior notice to the bidders, amend the Estimated Timetable and the company shall not incur any liability whatsoever arising out of amendments to the Estimated Timetable.

3. BIDDERS

This TENDER DOCUMENTS are addressed to all firms/companies and contractors.

3.1 Ineligibility of the Bidder

If the firm/company has been barred by any central, state or local government or government instrumentality in Pakistan or in any other jurisdiction to which the Bidder belongs or in which the Bid de conducts its business, from participating in any project on a private participation basis and the bar subsists as on the Bid Submission Deadline. Such entity shall not be eligible to submit a Bid either individually or as a Consortium Partner.

3.1.1 A Bidder should not have, in the fifth (5th) years preceding the Bids Submission Deadline:

i. failed to perform any contract with the government, federal government, or local or provincial governments, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder or Consortium Partner as the case may be; or

ii. been expelled from any project or contract by any public entity or authority; or

iii. had any contract terminated by any government or government instrumentality for breach by such Bidder or Consortium Partner.

4. No Contract

4.1.1. No contract whatsoever is created by or arises from this Tender Documents, which, under no circumstances, constitutes an offer to enter into any contract or arrangement of any nature whatsoever with any party whatsoever.

4.1.2. The TCP, and any of their departments, employees, consultants, advisors and/or personnel shall not have any obligation, responsibility, commitment, or legal liability of any nature whatsoever towards any Bidder arising from this Tender Documents or any Bid submitted in response to it.

5. BIDDING DOCUMENTS

5.1. Part IV – Power of Attorney

Each Bidder shall provide, as Part IV of the proposal, a written power of attorney in the form attached hereto as **ANNEXURE-3**, duly notarized, indicating that the person(s) signing the proposal has/have the authority to sign the Bids and other relevant documents on behalf of the Bidder.

5.2. Contents of Bidding Documents

5.2.1. The nature of the Assignment, bidding procedures, contract terms and technical requirements are prescribed in the Bidding Documents, which include the following

i. TENDER DOCUMENTS;

ii. Annexes to TENDER DOCUMENTS.

5.2.2. Each Bidder shall examine all instructions, terms and conditions, forms, specifications and other information contained in the Bidding Documents. If the Bidder:

(a) fails to provide all documentation and information required by the Bidding Documents; or

(b) submits a Bid which is not substantially responsive to the terms and conditions of the Bidding Documents, such action shall be at the Bidder's risk.

In such a scenario, the TCP may determine that the Bid is non-responsive to the Bidding Documents and may reject it.

5.3. Bidders Comments and Clarifications on Bidding Documents

5.3.1. The Bidders shall have the opportunity to propose comments on the Bidding Documents. However TCP may (at its sole and absolute discretion) accepts or rejects such proposals and comments. All comments shall be made in writing and sent to the relevant persons mentioned in the **ANNEXURE-1**.

5.3.2. Electronic copies of the response, including an explanation of the query but not identification of its source, shall be sent to all Bidders. If similar or repeated queries are made by Bidders, those queries may be listed as one query and TCP may respond to such query only once. The TCP reserves the right not to consider such comments on the Bidding Documents.

5.4. Amendment of Bidding Documents

5.4.1. At any time before the Bids Submission Deadline, TCP may amend the Bidding Documents, for any reason, whether at its own initiative, or in response to the Bidder's questions and comments.

5.4.2. Subject to tender terms, once revised versions of the Bidding Documents, if applicable, have been issued as set out in the Estimated Timetable then no other communications of any kind whatsoever shall modify the Bidding Documents.

5.5. Bidders Due Diligence

5.5.1. Each Bidder is solely responsible for conducting its own independent research, due diligence, any lawful inspection(s), seeking any independent advice necessary or any other work necessary for the preparation of Bids, negotiation of agreements, and the subsequent delivery of all services to be provided by the Successful Bidder in accordance with the Contract.

5.5.2. No representation or warranty, express or implied, is made and no responsibility of any kind is accepted by the TCP or its advisors, employees or agents, for the completeness or accuracy of any information contained in the Bidding Documents or the Response to Questions Document, or provided during the Bidding Process or during the term of the Contract. The Company and its advisors, employees and agents shall not be liable to any person or entity as a result of the use of any

information contained in the Bidding Documents or the Response to Questions Document, or provided during the Bidding Process or during the term of the Contract.

5.5.3. Bidders may not rely on any verbal statements made by the TCP's advisors, employees or agents.

5.5.4. All Bidders shall, prior to submitting their Bid, review all requirements with respect to corporate registration and all other requirements that apply to companies that wish to conduct business in the TCP's country. The Bidders are solely responsible for all matters relating to their legal capacity to operate in the jurisdiction to which this Bidding Process applies. Any Bids submitted in response to this TENDER DOCUMENTS will be submitted upon a full understanding and agreement of terms of this TENDER DOCUMENTS and, therefore, the submission of Bids in response to this TENDER DOCUMENTS would be deemed as an acceptance to the said terms.

5.5.5. Data provided by the TCP, particularly in relation to the numerical accuracy, is only indicative information based on input received from multiple sources. TCP is not responsible for any reliance of such data made by the Bidder in preparation of the Bids.

6. PREPARATION OF BIDS:

6.1. Contents of Bid

6.1.1. Bidders must prepare and submit their Bids in full compliance with the requirements of this TENDER DOCUMENTS together with the submission of the documents, forms and instruments required for submission by this TENDER DOCUMENTS. Each Bidder shall submit the Financial Bid along with the document required at clause 6.2.1.

6.2. Bid Document

6.2.1. Format of the Bidding Documents

Each Bidder shall submit the following documents:

i. Application/Covering Letter (format provided in the **Annexure "2"**);
ii. Power of Attorney (format provided in the **Annexure"3"**);
iii. Conflict of Interest Statement (format provided in the **Annexure "4"**);
iv. Documents constituting eligibility.
    a) List of at least 2 B.Sc Electrical Engineers
    b) List of at least 3 DAE Electrical Technicians
    c) List of at least 5 Technical Helpers
    d) Statement showing financial position 10 to 20 million or above for last one year.
    e) List of at least five (5) completed projects showing experience.

6.2.2. The firm must be registered with relevant tax authorities and attach certificates as a proof of registration.

6.2.3. The firms must be active in tax payer list.

6.2.4. Each Bid shall be prepared in conformity with the requirements specified as at clause 6.2.1.

6.3. Financial Bid

6.3.1. Financial quote may contain Bid Security and Financial Offer as per required at **(ANNEXURE-6).**

6.3.2. Bid Security:

6.3.2.1. The Bid submitted by each Bidder must be accompanied by a Bid Securing of 2% of the offered value in the form of demand draft/pay order in the name of Trading Corporation of Pakistan.

6.3.2.2. Any Bid not accompanied by a **Bid Security** or not in accordance with this TENDER DOCUMENTS, shall be rejected by the TCP as being non-responsive.

6.3.2.3. After the award of contract, the successful bidder shall be required to submit 5% of the contract value as Performance Security within 14 days from the award of the contract.

6.3.2.4. Bid Security shall be forfeited and process will be initiated as per PPRA rules, if the Bidder or Successful Bidder (i) resorts to deceit and/or fraud in its dealings with the TCP (including the Evaluation Committee), its advisors, employees or agents or otherwise in relation to the award of the Contract; or (ii) is proven to have personally or through an intermediary, either directly or indirectly, offered or attempted to offer a bribe to any TCP's employee involved with the Bid or the award of the Contract.

6.4. Language of Bid

6.4.1. All Bids, and all correspondence and documents related to the Bid submitted by the Bidder to the TCP, shall be written in English.

6.5. Bid Validity Period

6.5.1. Bids shall remain valid for ninety (90) days as from the Bids Submission Deadline. A Bid valid for a shorter period shall be rejected by the TCP as non-responsive.

6.5.2. In exceptional circumstances, the TCP may solicit the Bidders' consent to an extension of the Bid Validity Period. The request and responses thereto shall be made in writing. Such extension shall not be for more than ninety (90) days.

6.5.3. A Bidder may refuse the Company's request for extension without forfeiting its Bid Security. A Bidder accepting the request to extend its Bid Validity Period shall not be permitted to modify its Bid.

7. SUBMISSION OF BIDS:

7.1. Format and Signing of Bids

7.1.1. The Bidder shall prepare and submit one (1) printed original, and one copy of the bid.

7.1.2. The original of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or person(s) duly authorized to bind the Bidder to the contract.

7.1.3. The Bid shall contain no alterations, omissions or additions, unless such corrections are initialed by the person or persons signing the Bid.

7.2. **Sealing and Marking of Bids**

7.2.1. Each Bid shall be indicating the Bid as original clearly marked as "ORIGINAL", as appropriate. The envelope/box shall be clearly marked: **"DO NOT OPEN, EXCEPT IN PRESENCE OF THE OPENING COMMITTEE"**. Any Bidder who submits or participates in more than one Bid in respect of the facility will be disqualified.

7.2.2. The Bid Envelope shall each indicate the name and address of the Bidder.

7.2.3. For the avoidance of doubt, it is expressly specified that the Bidders shall not be allowed to submit their Bids by e-mail.

7.3. **Bids Submission Deadline**

7.3.1. Bids should be dropped in the tender box placed on the reception counter of TCP on the 4th Floor, Block-B FTC Building Shahra-e-Faisal Karachi. However, those who send their bids through courier should ensure that the same is received no later than the time and date stated in the Notice and Bid Data Sheet.

7.4. **Late Bids**

7.4.1. Any Bid received by the TCP after the Bids Submission Deadline for any reason whatsoever will be rejected and returned unopened to the Bidder.

7.5. **Modification and Withdrawal of Bids**

7.5.1. The Bidder shall not modify or withdraw its Bid after submission.

7.5.2. Any withdrawal of a Bid in the interval between the Bids Submission Deadline and the expiration of the Bid Validity Period specified in Tender document shall result in the Bidder's forfeiture of its Bid Security, pursuant to Tender Terms.

8. BIDS: OPENING AND EVALUATION

8.1. **Evaluation Committee**

8.1.1. A committee/consultant set up for the evaluation of the tender shall be responsible for assessing the Bids.

8.1.2. The members of the Evaluation Committee/consultant shall be prohibited from participating directly or indirectly in the preparation and/or submission of any Bid, and shall be prohibited from providing any assistance to any Bidder for the purposes thereof, except as may be expressly provided herein.

8.2. **Opening and Preliminary Examination of Bids**

8.2.1. The Bid opening committee shall open the Bids of each Bidder, in the presence of Bidders' designated representatives who choose to attend, at the time, date, and location stipulated in the document. The Bidders' representatives shall bear identification and authorization documents issued by the Bidder. The Bidders' representatives who are present shall sign a register evidencing their attendance.

8.2.2. The Bid Opening Committee shall open the envelopes/boxes, one at a time, in the order in which the Bids were received. These envelopes/boxes shall be placed on a table in open view of the public but shall remain sealed. The Bid opening Committee shall then declare the Bids opening proceedings ended.

8.2.3. No Bid shall be rejected at the Bids opening except for late Bids pursuant to Tender terms.

8.2.4. At the opening of each Bid, the Bid Opening Committee shall announce the Bidders' names and any other details that it may consider appropriate.

8.2.5. The Opening Committee shall prepare report of the Bids, including the information disclosed to those present.

8.2.6. The Evaluation Committee/consultant shall then proceed to the evaluation of the Bids.

8.2.7. The Evaluation Committee/consultant shall rank the Financial Bids from the lowest to the highest Financial Bid Cost. Where two or more Bidders are evaluated to have the same rate in financial proposal, the Evaluation Committee/consultant may request that the relevant Bidders submit a best and final financial offer ("**BAFO**") which, if submitted, must result in a lower Financial Bid Cost than the initial Financial Bid Cost. No Bidder shall be obliged to submit a BAFO and failure to do so shall not result in the forfeiture of the Bid Security. BAFOs shall be ranked lowest to highest.

8.2.8. Arithmetic errors in the Financial Bid, if any, will be rectified on the following basis: if there is a discrepancy between words and figures, the amount in words will prevail. If the Bidder does not accept the correction of errors, its Financial Bid will be rejected.

8.3. Waiver of Non-Conformities in Bids

8.3.1. The Evaluation Committee may waive any minor informality, non-conformity in a Bid that does not constitute a material deviation, and that does not prejudice or affect the Bidder as a result of the Bid evaluation.

8.4. Contacting the TCP

8.4.1. From the time of Bid submission to the time of the Contract award, if any Bidder wishes to contact the TCP, it should do so in writing.

8.4.2. If the Bidder or the Successful Bidder (i) resorts to deceit and/or fraud in its dealings with the TCP (including the Evaluation Committee), its advisors, employees or agents or otherwise in relation to the award of the contract; or (ii) is proven to have personally or through an intermediary, either directly or indirectly, offered or attempted to offer a bribe to any TCP's employee involved with the Bid or award of contract, then the Bidder's Bid and, if applicable, the said award, shall be cancelled and the Bid Security or the Performance Security (as the case may be) shall be forfeited, all without prejudice to any TCP's claim for ensuing damages and without prejudice to any criminal and/or administrative proceedings (or otherwise) in the country.

8.5. Evaluation Report

8.5.1. The results of the Evaluation of the Bids conducted by the Consultant/Evaluation Committee in accordance with this section shall be reflected in the "Bids Evaluation Report" which shall be published on the TCP's official website and PPRA website and communicated to the Bidders on the date specified in the Estimated Timetable.

9. AWARD OF CONTRACT

9.1. Changes In Eligibility Status

9.1.1. Prior to proceeding with the award of contract, the TCP may verify to its satisfaction that no circumstances, in particular the Bidder's current contract works, future commitments and current litigation(s), have arisen or intervened during the period between the submission of this Bid and before the award of contract; that would change the TCP's opinion as to whether the Bidder still meets all criteria as set out in this TENDER DOCUMENTS.

9.1.2. An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's Bid, in which

event the TCP may, subject to tender terms, proceed to the next lowest evaluated Financial Bid.-

9.2. Award Criteria

9.2.1. TCP shall award the contract to the most advantageous Bidder. However, in case of same/equal financial offer, the bidder with provision of the maximum technical staff will be preferred.

9.3. TCP's Right to Accept or Reject

9.3.1. The TCP may, in its sole discretion:

a. accept any Bid;
b. reject any Bid;
c. annul the Bidding Process and reject all Bids;
d. annul the Bidding Process and commence a new process; or
e. waive minor irregularities, minor informalities, or minor non-conformities which do not constitute material deviations in submitting the Bids

at any time prior to the award of the contract without incurring any liability to the affected Bidder or Bidders and without any obligation to inform the affected Bidder or Bidders of the grounds for the TCP's actions.

9.4. Notification of Award

9.4.1. Prior to the expiration of the Bid Validity Period, the TCP shall notify the Successful Bidder in writing that its Bid has been accepted by the TCP.

9.4.2. The results of the Bidding Process shall be published on the TCP's official website and PPRA website.

9.5. Signing of the Contract

9.5.1. Within seven (7) calendar days of the Notification of Award, the Successful Bidder shall sign the Contract with the TCP. There shall be no negotiation on the terms of Contract and modifications (if any) shall only be done in case of missing information and correcting errors.**(Annex-"09")**

9.6. Failure to Sign the Contract

9.6.1. If the Successful Bidder fails to comply with the provisions of Tender, this failure shall constitute sufficient grounds for annulment of the award and forfeiture of the Bid Security and such other remedies as the TCP may take under the applicable law, and the TCP may, in its discretion, award the contract to the Bidder who is the next lowest. In such event, the TCP shall notify the Second Ranking Bidder of its selection by written notice. The Second Ranking Bidder shall, from and after the date of receipt of the Substitute Selection Notice, assume the status of the Successful Bidder hereunder and shall meet the requirements of Tender.

9.6.2. In the event that the TCP delivers a Substitute Selection Notice to the Second lowest Bidder, the Second Ranking Bidder shall extend its Bid Security Validity Period to a date not earlier than the date of delivery of the Performance Security as specified in the Contract.

10. Payment Terms:

i. On Installation of the system and verified by the consultant **(50%)**
ii. On Completion of Net-metering and verified by the consultant **(50%)**

(Taxes will be applicable as per law)

****

ANNEXURE "1"

BID DATA SHEET

The following Bid-specific data shall supplement the provisions in TENDER DOCUMENTS.

S. No.	PROJECT NAME	Solarization of TCP House
1.	ASSIGNMENT NAME	Solarization (24-KV), Including Net Metering At TCP House Located At Bungalow No:48/1, 26th Street, Khayaban-E-Mujahid, DHA Phase-V, Karachi
2.	Address and Contact Person of the TCP:	Name: Radain Shah Designation: General Manager Contact #:021-99202563 Address: 4th Floor, Block-B FTC Building Shahra e Faisal Karachi Email:gm.rebd@tcp.gov.pk
3.	Address for Submission of Bids, Bid Modifications and Bid Withdrawals *[All Bids need to be submitted/sent to this address. Bids submitted/sent elsewhere will not be considered]*	Name: Radain Shah Designation: General Manager Contact #:021-99202563 Address: 4th Floor, Block-B FTC Building Shahra e Faisal Karachi Email:gm.rebd@tcp.gov.pk
4.	Number of Copies of Bids	**Financial Proposal** One (1) printed original
5.	Bids Submission Deadline	1100 hours on 12th February, 2024
6.	Place and Time of Bids Opening	**12th February, 2024** at 1130 hours in the Board room of Principal Office of Trading Corporation of Pakistan, 4th Floor Block-B, FTC Building Karachi

ANNEXURE "2"

APPLICATION/COVERING LETTER

[The application/covering letter is to be submitted by the Bidder]

General Manager
Real Estate Business Development Division
Trading Corporation of Pakistan Private Ltd.
Ministry of Commerce

Date: _____
Place: _____

Dear Sir(s),

"SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"

This is with reference to the captioned matter.

Please find enclosed one (1) original (certified to be true copies of the original) of our Bid (the **"Bid"**) for "SOLARIZATION (24KV), INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI" in response to the TENDER DOCUMENTS issued by the General Manager, Trading Corporation of Pakistan (TCP) Private Ltd. of Government of Pakistan dated _____ (the **"TENDER DOCUMENTS"**);

We hereby confirm the following:

1. The Bid is being submitted by (name of the Bidder) who is the Bidder comprising (mention the names of the entities), in accordance with the conditions stipulated in the TENDER DOCUMENTS;

2. We have examined in detail and have understood and fully accepted the terms and conditions stipulated in the TENDER DOCUMENTS and in any subsequent communications issued by the TCP and hereby agree and undertake to abide by all such terms and conditions. Our Bid is consistent with all the requirements of the TENDER DOCUMENTS and of any subsequent communications from the TCP;

3. We hereby represent that the information submitted in our Bid is complete,is strictly as per the requirements as stipulated in the TENDER DOCUMENTS, and is correct to the best of our knowledge and understanding. We would be solely liable and responsible for any errors or omissions in our submissions and for any error, omission, defect or deficiency in our Bid;

4. We further hereby represent that we are permitted and authorized under the applicable laws and our corporate documents to submit the Bid for the Project and our submission of the same will not conflict with result in the breach of or constitute a default under any applicable laws or any covenant, agreement, understanding, decree are a party or by which we or any of our properties or assets is bound or affected;

5. Further, we hereby represent that (mention name(s) of the entities that are Promoter(s)/Parent Company(s) to satisfy the legal requirements laid down in the TENDER DOCUMENTS;

6. We as the Bidder, designate Mr./Ms. [.] (mention name, designation, contact address, phone no., fax no., email ID, etc.), as our authorized representative and signatory who is authorized to perform all tasks including, but not limited to providing information, responding to enquiries, entering into contractual commitments etc. on our behalf in respect of the Project. [A Power of Attorney from the [Bidder] authorizing the undersigned as the authorized representative, signatory and contact person who is authorized to perform all tasks including, but not limited to providing information, responding to enquiries, entering into

contractual commitments on behalf of the Bidder, etc., in respect of the Project is included as a part of the Bid.

FOR AND ON BEHALF OF:
[Insert name of the Bidder]

Signature: _____

Name: _____
(Authorized Representative/Signatory)

CNIC No.: _____

Designation: _____

List of Enclosures:

i. Basic Information (including but not limited to the following information) of the Bidder, as detailed including an up-to-date list of shareholders or members or stakeholder of the Bidder;

   (a) Legal name;
   (b) Complete head office contact information, including mailing address, telephone and fax numbers, and an e-mail address.

ii. Affidavit (format attached as **ANNEXURE "08"**); and

iii. Power of Attorney (as per **ANNEXURE "3"**);

ANNEXURE "3"

FORMATS OF POWER OF ATTORNEYS

A. FORMAT OF POWER OF ATTORNEY BY THE BIDDER TO ITS AUTHORIZED SIGNATORY

POWER OF ATTORNEY

[To be printed on stamp paper of PKR 200/-]

Know all men by these presents, we [insert name, address and registered office etc. of the Bidder] do hereby constitute, appoint and authorize Mr./Ms. _____[name, CNIC No. and residential address] who is presently employed with us and holding the position of _____ as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our submission for the project envisaging **"TENDER DOCUMENTS"** of the "SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"_including signing and submission of all documents and providing information/responses to the Government of Pakistan, representing us in all matters before the GoP, and generally dealing with the GoP' in all matters in connection with our submission for the Project.

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

FOR AND ON BEHALF OF
[Insert the name of the Bidder]

Signature: _____

Name: _____

CNIC No.: _____

Designation: _____

ACCEPTED & ACKNOWLEDGED BY THE ATTORNEY

Signature: _____
Name: _____
CNIC No.: _____
Designation: _____

Note:

(1) To be executed by each Bidder;

(2) The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the Constitutional Documents of the Bidder and when it is so required the same should be under common seal affixed in accordance with the required procedure.

B. **FORMAT OF POWER OF ATTORNEY**

[To be printed on stamp paper of PKR 200/-]

POWER OF ATTORNEY

We (1) _____, (2) _____, (3) _____[Insert the names, office addresses etc.

IN FAVOR OF

[Insert the complete name, address of the Lead Partner etc.] (hereinafter referred to as the **"Lead Partner"**)

WHEREAS:

A. The Government of Pakistan (**"GoP"**) has invited applications from the prospective bidders for "SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI";

B. The bidders are interested in submitting Bids for the Project and implementing the Project in accordance with the terms and conditions of the **"TENDER DOCUMENTS"** issued by the GoP on _____ and other relevant documents in respect of the Project;

C. It is necessary under the **TENDER DOCUMENTS** for the Partners to designate one of them as the Lead Partner with all necessary powers and authorities to do for all acts, deeds and things as may be necessary in connection with the submission of Bids for the Project.

NOW THIS POWER OF ATTORNEY WITNESSETH THAT

We, the owners of the firm do hereby designate the [Insert the name of the Lead Partner] being one of the Partner, all or any of the acts, deeds or things necessary or incidental to the Bids' submission for the Project, including submission of application/proposal, participating in conferences, responding to queries, submission of information/ documents and generally to represent the Partner in all its dealings with the GoP, any other government agency or any person, in connection with the Project until culmination of the process of bidding and thereafter till the execution of relevant documents as mandated by the TENDER DOCUMENTS with the GoP;

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

FOR AND ON BEHALF OF

[Insert the name of the each Partner]

1.	Signature:	_____	2.	Signature:	_____
	Name:	_____		Name:	_____
	CNIC No.:	_____		CNIC No.:	_____
	Designation:	_____		Designation:	_____

ACCEPTED & ACKNOWLEDGED BY THE LEAD PARTNER (ATTORNEY)

Signature: _____

Name: _____

CNIC No.: _____

Designation: _____

Note:

(1) To be executed by each Partner;

(2) The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the Constitutional Documents (defined in TENDER DOCUMENTS) of the Bidder and when it is so required the same should be under common seal affixed in accordance with the required procedure.

ANNEXURE "4"
CONFLICT OF INTEREST STATEMENT

RELATING TO "SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"

General Manager
Real Estate Business Development Division
Trading Corporation of Pakistan Private Ltd.
Ministry of Commerce

Dated: _____

"SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"

We, [*Insert the name of the Bidder*] are not aware of any conflict or potential conflict arising from prior or existing contract or relationship which could materially affect our capability to comply with our obligations under or pursuant to the Tender Document for the Project;

In particular, other than as disclosed below, we have no prior or existing contracts, negotiations or relationships with the Government of Pakistan ("GoP), its affiliates, representatives, advisors or consultants.

We disclose that the following transactions may be in conflict with the Project:

Name of Project	Date Started	Description of Conflict

FOR AND ON BEHALF OF
[Name of the Bidder]

Signature: _____

Name: _____

CNIC No.: _____

Designation: _____

ANNEXURE "5"

INTEGRITY PACT, DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE BIDDERS

General Manager
Real Estate Business Development Division
Trading Corporation of Pakistan Private Ltd
Ministry of Commerce

Dated: _____

Dear Sir(s),

"SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"

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

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

[*Bidder*] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with the GoP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty. [*Bidder*] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty;

We do hereby declare and confirm that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to the GoP under any law, contract or other instrument, be voidable at the option of the GoP;

Notwithstanding any rights and remedies exercised by the GoP in this regard, the [*Bidder*] agrees to indemnify the GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to the GoS in an amount equivalent to ten (10) time the sum of any commission, gratification, bribe, finder's fee or kickback given by [*Bidder*] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit, in whatsoever form, from the GoP.
Yours truly,

FOR AND ON BEHALF OF
[Name of the Bidder]

Signature: _____
Name: _____
CNIC No.: _____
Designation: _____

ANNEXURE "6"
FINANCIAL BID FORM

"SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"

Dated: _____

General Manager
Real Estate Business Development Division
Trading Corporation of Pakistan Private Ltd.
Ministry of Commerce

Dear Sir(s),

SUBJECT: **"SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"**

Having carefully examined the Bidding Documents, including the Annexes, the receipt of which is hereby acknowledged, and having satisfied ourselves with the nature and location of the works and services referenced above and the general and local conditions to be encountered in the performance thereof, we, the undersigned would be able to execute assignment on the following remuneration basis:

Scope of Work	Basis of Offer
As per tender document	**Rs. .....Inclusive of all taxes**
In Words:	

2. The offer shall be based on inclusive of all taxes.
3. The bidder who has lowest cost in Financial Offer shall be awarded contract subject to meeting tender requirements.
4. We acknowledge that the Financial Bid that we have submitted will remain fixed and will be indexed in accordance with the terms and conditions of the contract.
5. We acknowledge and agree that the General Manager, Trading Corporation of Pakistan (TCP) Private Ltd., Ministry of Commerce, Government of Pakistan will not be responsible for any errors or omissions on our part in preparing this Financial Bid and the Project Cost, and we shall indemnify the Authority fully in connection therewith.

FOR AND ON BEHALF OF
[*Insert the name of the Bidder*]
Signature: _____
Name: _____
CNIC No.: _____
Designation: _____

ANNEXURE "07"
BASIC INFORMATION FORM

BIDDER INFORMATION:

Name:

Type: (Corporation, Partnership, etc.) Company/Entity incorporation/registration no:

Domicile:

Address of principal office:

Telephone number:

Fax number:

E-mail address:

Primary areas of business:

Shareholder/Member certificate (attach separately)

ANNEXURE "8"

FORMAT OF AFFIDAVIT
[To be printed on stamp paper of PKR 50/-]
[REQUIRED FROM EACH CONSORTIUM PARTNER]

General Manager
Real Estate Business Development Division
Trading Corporation of Pakistan (TCP) Private Ltd.

Dated: _____

Dear Sir(s),

"SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"UNDER THE PROJECT "SOLARIZATION OF TCP HOUSE"

Pursuant to the Notice inviting tender dated [please insert the date] ("**TENDER DOCUMENTS**") in respect of the "SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"under the project "Solarization of TCP House" [Name of Bidder/Lead Partner of Consortium] hereby represents and warrants that, as of the date of this Affidavit [Name of Bidder/Lead Partner of Consortium], and each Partner of our Consortium (if applicable):

(a) is not in bankruptcy or liquidation proceedings;

(b) has not been convicted of fraud, corruption, collusion or money laundering;

(c) is not aware of any conflict of interest or potential conflict of interest arising from prior or existing contracts or relationships which could materially affect its capability to comply with the obligations under the management contract; and

(d) does not fall within any of the circumstances for ineligibility listed in Section 4.4 (Ineligibility of a Interested Person) of the TENDER DOCUMENTS;

(e) that whatever stated above are true and correct to the best of my/our knowledge and belief and nothing has been concealed.

DEPONENT

FOR AND ON BEHALF OF
[Insert name of the Interested Person]

Signature: _____
Name: _____
CNIC No.: _____
Designation: _____

ANNEXURE "09"
DRAFT CONTRACT

(ON STAMP PAPER OF RS. 100/-)

AGREEMENT

1. This agreement is made at _____ on this _____ between Trading Corporation of Pakistan (Pvt.) Limited having their office at 4th& 5th Floor, Block-B, FTC Building, Shahra-e-Faisal,Karachi, through its, authorized _____ (REBD), (hereinafter called as client,which expression, wherever the context so permits, shall mean and include its, successor-in-interest, administrators, and assigns) the party of the First Part.

AND

2. M/s. _____ having their office at _____ , through its authorized representative _____ (hereafter called as Contractor) which expression, wherever the context so permits, shall mean and include its heirs, successors interest administrators, attorney/executors and assigns) party of Second Part.

3. WHEREAS the party of First Part on the declaration of the 2nd party as responsive and lowest bidder in the Tender No.....is desirous to award works/assignments of "SOLARIZATION, INCLUDING NET METERING AT TCP HOUSE LOCATED AT BUNGALOW NO:48/1, 26TH STREET, KHAYABAN-E-MUJAHID, DHA PHASE-V, KARACHI"to the 2ndparty on the terms and condition given in the tender.

4. AND WHEREAS in performance of the Professional Services and the conduct of normal duties, the firms/companies shall be governed by the Code Professional Conduct required under rules of professional Associates and byelaws laid down by the Pakistan Engineering Council (where applicable) and Pakistan Council of Architects and Town Planners (where applicable) and requirements of TCP's Management. The Contractor will undertake the responsibility to perform above mentioned services.

5. Now the agreement witnessed as under: -

a) That in this agreement, words and expressions shall have the same meaning as are respectively assigned to them in the condition of contract hereinafter referred.

b) In consideration of the terms and conditions given in the TENDER DOCUMENTS, the agreement, the 2nd Party hereby covenant with the 1st Party to design, plan and proposals in conformity in all respect with the provision of this agreement and tender terms.

c) The client hereby covenant to the contractor to abide by all terms and conditions and fulfill its all obligation in accordance with the laid down clauses/terms and conditions of this agreement.

6. SPECIFICATIONS:

Minimum Specifications (24-KV)	
Photovoltaic Panel	Mono PERC ISO certified
PV Size	>550W
Qty of cells	>144
Bus Bar	Multi Bus Bar solar cell
Cell Quality	A Grade, tier 1 Bloomberg
Module Efficiency	>21%
Power Tolerance	0—+3 % or more
Operating Temperature	-40°C to +85°C
Temperature Coefficient of Pmax	-0.35%/°C or better
Fill Factor (Calculations Required)	77% or higher at STC (Detailed

Certification or equivalent	IEC 61215, IEC 61730, IEC61701 ED2, UL1703
Frame	Must withstand 5400 PA Load
Junction Box	IP 65/IP67 rated, with bypass diodes
Connectors	MC4 or comparable
Front Cover	3.2mm tempered glass or higher
Warranty	12 years product replacement 10 years for 90% of warranted minimum power 11 - up to 25 years for 85% of warranted minimum power

ON-GRID INVERTER SPECIFICATION:

Minimum Specifications (24-KV)	
Parameters	Description
Type of Inverter	Grid Tied- 3 Phases, WAPDA / Gen.Sync. With built-in Wi-Fi for Data Monitoring.
Make	Japan/ European/USA Singapore/Malaysia/Taiwan/Korea/China
No of MPPT inputs	3 or more independent MPP trackers
Nominal AC Voltage	230/400 (340-440) VAC 50Hz
Total Harmonic distortion	<3%
Efficiency	98.5% peak
Protection Class	IP 65 or above
Standby power consumption	<1W
Operating Temperature humidity	-25 °C … +60°C
Topology	Transformer less
Max Input Voltage	1KV
Rated Power @ 400 V 3 4 50Hz	50000W
Max AC Apparent Power	55500VA
Power Factor @ Rated power	0.8leading … 0.8lagging
Remote Monitoring App	Yes
Synchronization with Existing Genset	Genset Sync Device
DC reverse polarity protection	Yes
DC Switch	Yes
AC/DC surge protection	Type II / Type II
Insulation resistance monitoring	Yes
AC short-circuit protection	Yes
Ground fault monitoring	Yes

Grid monitoring	Yes
Anti-islanding protection	Yes
Residual-current monitoring unit	Yes

AC Protection

Interface -RS232/US8

-RS48 Modbus Protocol / Ethernet

-LCD Display

-Local Monitoring Software should be lifetime free of cost &integrated

Compliance

UL1741/ IEEE1547, UL 1998, CE, EN 50178,

or

EN-624109-1, EN 62109-2, EN 61000-6-2, EN-621000-6-4, EN 61000-3-11, EN 61000-3-12, EN 50178,

IEC 62103, EN 55011, IEC 61000-3-11, IEC 61000-3- 12, IEC 61000-6-3

IEC 62109-1/2, AND UL 1741 IEC 61727, VDE-AII-N 4105, VDE 0125-11, G59/3,

(Different country standards needed for net metering)

AC/DC & EARTHING CABLE SPECIFICATION:

Supply and erection of Electric Cable DC XLPE Insulated, XLPE Sheathed 1500VDC with flexible tinned copper conductor, 6mmsq, single core, laid under Solar panels and trenches complete with sand supply and fixing (Pakistan/Fast/Newage/Pioneer or equivalent).

Supply and erection of Electric Cable LT PVC Insulated 450/700V with stranded copper conductor, 35mmsq, 4-Core from Inverter to main termination (Pakistan/Fast or equivalent).

Supply and erection of Earthing cable PVC Insulated 450/700V with stranded copper conductor, 2.5mmsq, single-core for panels to panels earthing (Pakistan/Fast or equivalent).

Supply and erection of Earthing cable PVC Insulated 450/700V with stranded copper conductor, 10mmsq, single-core for structureearthing (Pakistan/Fast or equivalent).

Supply and erection of Earthing cable PVC Insulated 450/700V with stranded copper conductor, 16mmsq, single-core for inverter earthing (Pakistan/Fast or equivalent).

MOUNTING STRUCTURE SPECIFICATIONS:

MS Iron Girder Elevated Structure with hot-dipped galvanization at 80 microns (14gauge)

Sr. No	Structure Details	Specifications
1	Girder	5x2 ½ 1.8kg/feet
2	Supporting Pole	Diameter (14mm) (14 AWG)
3	Base Plate	8x8 inch with 8mm thickness
4	Top Plate	6x6 inch with 6mm thickness
5	Paint	Hot-dipped galvanized @ 80microns, certification required
6	G.I Nut Bolts	Grade A4 8mmx20mm

7	Rawal or Anchor Bolt	Galvanized Iron 12mm x 100mm
8	Concrete Foundation	1:2:4 RCC/PCC Concrete Foundation

EARTHING:

Supply, installation, testing and commissioning of earthing system for both AC & DC system. Earthing with 3 meter long 20 mm dia size copper conductor with bare solid Earth conductor 2 x 70sq.mm in 50mm dia G.I. pipe upto earth connecting point, inspection chamber, marconite concrete, drilling etc, to achieve less than 5 ohms specified earthing results. Complete in all respect as per drawing and specification or as per directed by Engineer.

NET METERING:

Applicant to undertake and ensure that Net-Metering process is fully done from submission of documents, issuance of NEPRA net meter license, installation of Bi- Directional meter&load extendionby K-Electric fully fictionalization of Net-Metering process.

7. SCOPE OF WORK/SERVICES:

The scope of work will cover the following:

a) Designing- civil, architectural and electrical works etc
b) Installation and commissioning of the solar panels
c) Obtain necessary permissions from DHA, K-Electric & NEPRA
d) Complete necessary documentation with DHA, K-Electric & NEPRA
e) Ensure Net metering with K-Electric
f) Post installation Maintenance under warranty
g) Any other relevant task to accomplish the assignment

8. PERFORMANCE GUARANTEE:

i) Performance Guarantee being 5% of the contract value will be submitted in the form of a pay order / demand draft in the name of Trading Corporation of Pakistan which will remain with TCP till completion of the project.

ii) The Performance Guarantee shall be released after the successful and satisfactory performance / completion of the contract.

iii) No interest shall be payable on the amount of Performance Guarantee.

9. TIMELINE OF THE PROJECT:

The project needs to be completed within 2 months from the signing of this agreement.

10. PAYMENT:

i. On Installation of the system and verified by the consultant (50%)
ii. On Completion of Net-metering and verified by the consultant (50%)

(Taxes will be applicable as per law)

11. PERIOD OF AGREEMENT:

This agreement shall be valid for the period of 2 months or till completion of project whichever is earlier. However, TCP at its sole discretion may increase the period of agreement through addendum after recording the reasons.

12. ARBITRATION:

Any dispute or difference arising during the contract period shall be referred for Chairman, TCP whose decision will be final and binding on both the parties.

13. CONTRACT AMENDMENT:

No variation in or modifications to the terms of the Agreement shall be made, except by a written amendment signed by the Parties hereto.

14. NOTICES:

Any notice given by any of the Parties hereto shall be sufficient only if in writing and delivered in person or through registered mail as follows:

To: The TCP ----------

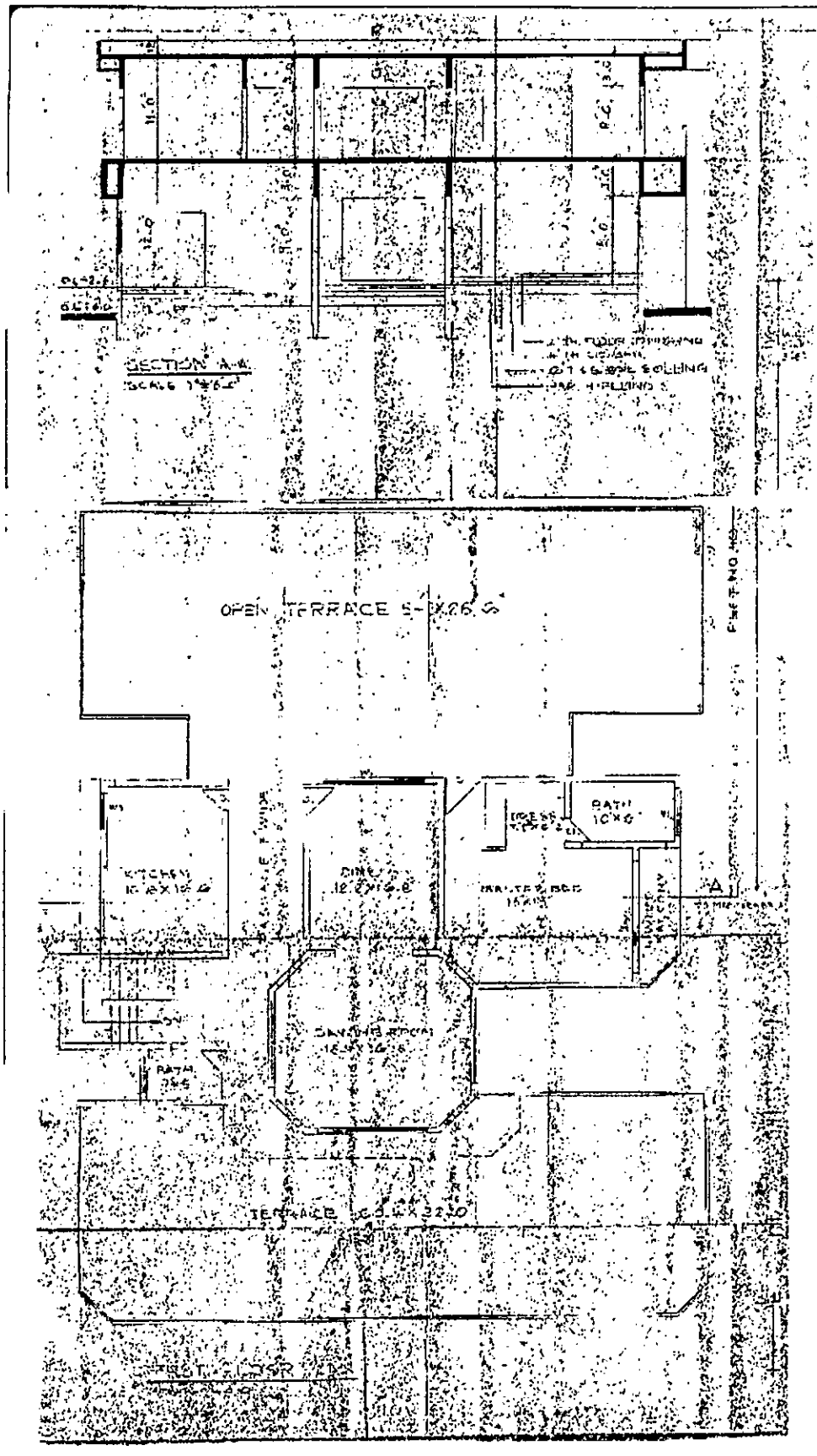
To: The Contractor Project Manager,----------

---

or to such other address as either of these Parties shall designate by notice given as required herein. Notices shall be effective when delivered.

IN WITNESS WHEREOF, the Parties have executed this Agreement, in two (2) identical counterparts, each of which shall be deemed as original, as of the day, month and year first above written.

FOR AND ON BEHALF OF	FOR AND ON BEHALF OF
(The Contractor)	(The TCP)
Signed by: ----------	Signed by: ----------
Designation:----------	Designation:----------
(Seal)	(Seal)
Witness:	Witness:
Signed by:----------	Signed by:----------


SECTION A-A
OPEN TERRACE
KITCHEN
DINE
BATH
BATH
TERRACE