

REQUEST FOR PROPOSALS

**FEASIBILITY STUDY FOR THE
GAS TURBINE COMBINED CYCLE POWER PLANT
IN KHYBER PAKHTUNKHWA PROVINCE**

Submission Deadline: 5:00 PM
LOCAL TIME – Peshawar, Pakistan
NOVEMBER 17, 2014

Submission Place: **Syed Zainullah Shah**
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SEALED PROPOSALS SHALL BE CLEARLY MARKED AND RECEIVED PRIOR TO THE TIME AND DATE SPECIFIED ABOVE. PROPOSALS RECEIVED AFTER SAID TIME AND DATE WILL NOT BE ACCEPTED OR CONSIDERED.

REQUEST FOR PROPOSALS

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Section 1: INTRODUCTION

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US\$1,026,000 to the Pakhtunkhwa Energy Development Organization (PEDO) (the “Grantee”) in accordance with a grant agreement dated September 24, 2014 (the “Grant Agreement”). The grant provided to PEDO will fund a Feasibility Study to evaluate the technical, economic and financial viability of a 400-435 megawatt (MW) gas turbine combined cycle plant (the “Project”) in the Khyber Pakhtunkhwa (KP) Province of Pakistan (the “Host Country”). KP Province has significant gas reserves yet suffers from chronic power shortages. The Grant Agreement is attached at Annex 4 for reference. The Grantee is soliciting technical proposals from qualified U.S. firms to provide expert consulting services to perform the Feasibility Study.

1.1 BACKGROUND SUMMARY

Pakistan is desperately short of the generating capacity needed to power its economy. The Ministry of Water and Power and all distribution companies must employ “load shedding” (i.e., rolling blackouts) year round to prevent system overloading. During the summer, when power needs are the greatest on a national basis, the deficit may reach 7,500 MW or nearly 40 percent of national demand, forcing the shutdown of large portions of Pakistan’s economy. The effect is devastating on economic output, employment, and productivity. In order to overcome the shortfall, the KP provincial government is developing several hundred megawatts of power projects to add to its existing generation portfolio, predominantly in hydro but also some in thermal and renewables. Pakistan’s KP Province is currently producing approximately 400 million cubic feet of natural gas per day (mmcf), which is projected to increase to 556 mmcf by 2018 given the available reserves and exploration activity by various companies. Pakistan’s Oil and Gas Development Company Ltd. (OGDCL) and MOL of Hungary are the major producers at present; some other exploration companies (Pakistani and international) are working at different stages of the process. Indeed, there is no load shedding of gas at present in KP Province. There is, however, significant load shedding of electricity in the province, as is the case to varying degrees across the country.

PEDO, KP Province’s energy project development company, would like to evaluate the feasibility of a combined cycle power plant that may utilize General Electric’s (GE) Frame 9FB advanced gas turbine, which would produce 400-435 megawatts (MW) and employ one heat recovery steam generator (HRSG) and one steam turbine. The expected plant site is between the town of Khushal Garh and a major bridge over the Indus River. This 500-acre non-agricultural area would allow for future expansion of the plant to an 800+ MW rating with the addition of another gas turbine, HRSG and steam turbine.

Portions of a background Desk Study are provided for reference in Annex 2.

1.2 OBJECTIVE

The objective of this feasibility study (“Study”) is to evaluate the technical, economic and financial viability of a 400-435 MW gas-fired combined cycle plant (“Project”) that the Pakhtunkhwa Energy Development Organization (“Grantee” or “PEDO”) is developing on

behalf of the provincial government of Khyber Pakhtunkhwa (“GoKP”) in Pakistan. This plant is anticipated to eventually be expanded to approximately double the initial capacity of 400-435 MW. Assuming the plant’s technical, economic, and financial viability are evaluated favorably, a secondary objective is to facilitate approval by a Panel of Experts (POE) at the Private Power and Infrastructure Board of Pakistan (PPIB), which is required before the Project can be implemented. During the course of the Study, Contractor’s deliverables in accordance with the tasks below should incorporate any comments received from the POE. The Grantee shall be responsible for presenting the Study to the POE and for conveying any comments, suggestions or changes to the Contractor. The Terms of Reference (TOR) for this Feasibility Study are attached as Annex 5.

1.3 PROPOSALS TO BE SUBMITTED

Technical proposals are solicited from interested and qualified U.S. firms. The administrative and technical requirements as detailed throughout the Request for Proposals (RFP) will apply. Specific proposal format and content requirements are detailed in Section 3.

The amount for the contract has been established by a USTDA grant of US\$1,026,000. **The USTDA grant of US\$1,026,000 is a fixed amount. Accordingly, COST will not be a factor in the evaluation and therefore, cost proposals should not be submitted.** Upon detailed evaluation of technical proposals, the Grantee shall select one firm for contract negotiations.

1.4 CONTRACT FUNDED BY USTDA

In accordance with the terms and conditions of the Grant Agreement, USTDA has provided a grant in the amount of US\$1,026,000 to the Grantee. The funding provided under the Grant Agreement shall be used to fund the costs of the contract between the Grantee and the U.S. firm selected by the Grantee to perform the TOR. The contract must include certain USTDA Mandatory Contract Clauses relating to nationality, taxes, payment, reporting, and other matters. The USTDA nationality requirements and the USTDA Mandatory Contract Clauses are attached at Annexes 3 and 4, respectively, for reference.

Section 2: INSTRUCTIONS TO OFFERORS

2.1 PROJECT TITLE

The project is called the Gas Turbine Combined Cycle Power Plant in Khyber Pakhtunkhwa Province.

2.2 DEFINITIONS

Please note the following definitions of terms as used in this RFP.

The term "Request for Proposals" means this solicitation of a formal technical proposal, including qualifications statement.

The term "Offeror" means the U.S. firm, including any and all subcontractors, which responds to the RFP and submits a formal proposal and which may or may not be successful in being awarded this procurement.

2.3 DESK STUDY

USTDA sponsored a Desk Study to address technical, financial, sociopolitical, environmental and other aspects of the proposed project. Portions of the report are attached at Annex 2 for background information only. Please note that the TOR referenced in the report are included in this RFP as Annex 5.

2.4 EXAMINATION OF DOCUMENTS

Offerors should carefully examine this RFP. It will be assumed that Offerors have done such inspection and that through examinations, inquiries and investigation they have become familiarized with local conditions and the nature of problems to be solved during the execution of the Feasibility Study.

Offerors shall address all items as specified in this RFP. Failure to adhere to this format may disqualify an Offeror from further consideration.

Submission of a proposal shall constitute evidence that the Offeror has made all the above mentioned examinations and investigations, and is free of any uncertainty with respect to conditions which would affect the execution and completion of the Feasibility Study.

2.5 PROJECT FUNDING SOURCE

The Feasibility Study will be funded under a grant from USTDA. The total amount of the grant is not to exceed US\$1,026,000.

2.6 RESPONSIBILITY FOR COSTS

Offeror shall be fully responsible for all costs incurred in the development and submission of the proposal. Neither USTDA nor the Grantee assumes any obligation as a result of the issuance of this RFP, the preparation or submission of a proposal by an Offeror, the evaluation of proposals, final selection or negotiation of a contract.

2.7 TAXES

Offerors should submit proposals that note that in accordance with the USTDA Mandatory Contract Clauses, USTDA grant funds shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in the Host Country.

2.8 CONFIDENTIALITY

The Grantee will preserve the confidentiality of any business proprietary or confidential information submitted by the Offeror, which is clearly designated as such by the Offeror, to the extent permitted by the laws of the Host Country.

2.9 ECONOMY OF PROPOSALS

Proposal documents should be prepared simply and economically, providing a comprehensive yet concise description of the Offeror's capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.

2.10 OFFEROR CERTIFICATIONS

The Offeror shall certify (a) that its proposal is genuine and is not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with, and agreement of, any undisclosed group, association, organization, or corporation; (b) that it has not directly or indirectly induced or solicited any other Offeror to put in a false proposal; (c) that it has not solicited or induced any other person, firm, or corporation to refrain from submitting a proposal; and (d) that it has not sought by collusion to obtain for itself any advantage over any other Offeror or over the Grantee or USTDA or any employee thereof.

2.11 CONDITIONS REQUIRED FOR PARTICIPATION

Only U.S. firms are eligible to participate in this tender. However, U.S. firms may utilize subcontractors from the Host Country for up to 20 percent of the amount of the USTDA grant for

specific services from the TOR identified in the subcontract. USTDA's nationality requirements, including definitions, are detailed in Annex 3.

2.12 LANGUAGE OF PROPOSAL

All proposal documents shall be prepared and submitted in English and only English.

2.13 PROPOSAL SUBMISSION REQUIREMENTS

The **Cover Letter** in the proposal must be addressed to:

Syed Zainullah Shah

General Manager for Thermal
Pakhtunkhwa Energy Development Organization (PEDO)
38/B-2, Phase V, Hayatabad
Peshawar, Khyber Pakhtunkhwa
Pakistan

Phone: +92 300 592 1163 +92 91 922 3625 +92 300 500 1038 +92 333 538 0240

Fax: +92 91 921 7331 +92 91 922 3624

Email: zain.shah@kpkep.gov.pk cc: razi.ceo@kpogcl.com.pk

An Original and six (6) copies of your proposal must be received at the above address no later than 5:00 PM on NOVEMBER 17, 2014.

Proposals may be either sent by mail, overnight courier, or hand-delivered. Whether the proposal is sent by mail, courier or hand-delivered, the Offeror shall be responsible for actual delivery of the proposal to the above address before the deadline. Any proposal received after the deadline will be returned unopened. The Grantee will promptly notify any Offeror if its proposal was received late.

Upon timely receipt, all proposals become the property of the Grantee.

2.14 PACKAGING

The original and each copy of the proposal must be sealed to ensure confidentiality of the information. The proposals should be individually wrapped and sealed, and labeled for content including the name of the project and designation of "original" or "copy number x." The original and six (6) copies should be collectively wrapped and sealed, and clearly labeled, including the contact name and the name of the project.

Neither USTDA nor the Grantee will be responsible for premature opening of proposals not properly wrapped, sealed and labeled.

2.15 OFFEROR'S AUTHORIZED NEGOTIATOR

The Offeror must provide the name, title, address, telephone number, e-mail address and fax number of the Offeror's authorized negotiator. The person cited shall be empowered to make binding commitments for the Offeror and its subcontractors, if any.

2.16 AUTHORIZED SIGNATURE

The proposal must contain the signature of a duly authorized officer or agent of the Offeror empowered with the right to bind the Offeror.

2.17 EFFECTIVE PERIOD OF PROPOSAL

The proposal shall be binding upon the Offeror for ninety (90) days after the proposal due date, and Offeror may withdraw or modify this proposal at any time prior to the due date upon written request, signed in the same manner and by the same person who signed the original proposal.

2.18 EXCEPTIONS

All Offerors agree by their response to this RFP announcement to abide by the procedures set forth herein. No exceptions shall be permitted.

2.19 OFFEROR QUALIFICATIONS

As provided in Section 3, Offerors shall submit evidence that they have relevant past experience and have previously delivered advisory, feasibility study and/or other services similar to those required in the TOR, as applicable.

2.20 RIGHT TO REJECT PROPOSALS

The Grantee reserves the right to reject any and all proposals.

2.21 PRIME CONTRACTOR RESPONSIBILITY

Offerors have the option of subcontracting parts of the services they propose. The Offeror's proposal must include a description of any anticipated subcontracting arrangements, including the name, address, and qualifications of any subcontractors. USTDA nationality provisions apply to the use of subcontractors and are set forth in detail in Annex 3. The successful Offeror shall cause appropriate provisions of its contract, including all of the applicable USTDA Mandatory Contract Clauses, to be inserted in any subcontract funded or partially funded by USTDA grant funds.

2.22 AWARD

The Grantee shall make an award resulting from this RFP to the best qualified Offeror, on the basis of the evaluation factors set forth herein. The Grantee reserves the right to reject any and all proposals received.

2.23 COMPLETE SERVICES

The successful Offeror shall be required to (a) provide local transportation, office space and secretarial support required to perform the TOR if such support is not provided by the Grantee; (b) provide and perform all necessary labor, supervision and services; and (c) in accordance with best technical and business practice, and in accordance with the requirements, stipulations, provisions and conditions of this RFP and the resultant contract, execute and complete the TOR to the satisfaction of the Grantee and USTDA.

2.24 INVOICING AND PAYMENT

Deliverables under the contract shall be delivered on a schedule to be agreed upon in a contract with the Grantee. The Contractor may submit invoices to the designated Grantee Project Director in accordance with a schedule to be negotiated and included in the contract. After the Grantee's approval of each invoice, the Grantee will forward the invoice to USTDA. If all of the requirements of USTDA's Mandatory Contract Clauses are met, USTDA shall make its respective disbursement of the grant funds directly to the U.S. firm in the United States. All payments by USTDA under the Grant Agreement will be made in U.S. currency. Detailed provisions with respect to invoicing and disbursement of grant funds are set forth in the USTDA Mandatory Contract Clauses attached in Annex 4.

Section 3: PROPOSAL FORMAT AND CONTENT

To expedite proposal review and evaluation, and to assure that each proposal receives the same orderly review, all proposals must follow the format described in this section.

Proposal sections and pages shall be appropriately numbered and the proposal shall include a Table of Contents. Offerors are encouraged to submit concise and clear responses to the RFP. Proposals shall contain all elements of information requested without exception. Instructions regarding the required scope and content are given in this section. The Grantee reserves the right to include any part of the selected proposal in the final contract.

The proposal shall consist of a technical proposal only. A cost proposal is NOT required because the amount for the contract has been established by a USTDA grant of US\$1,026,000, which is a fixed amount.

Offerors shall submit one (1) original and six (6) copies of the proposal. Proposals received by fax cannot be accepted.

Each proposal must include the following:

- Transmittal Letter,
- Cover/Title Page,
- Table of Contents,
- Executive Summary,
- Firm Background Information,
- Completed U.S. Firm Information Form,
- Organizational Structure, Management Plan, and Key Personnel,
- Technical Approach and Work Plan, and
- Experience and Qualifications.

Detailed requirements and directions for the preparation of the proposal are presented below.

3.1 EXECUTIVE SUMMARY

An Executive Summary should be prepared describing the major elements of the proposal, including any conclusions, assumptions, and general recommendations the Offeror desires to make. Offerors are requested to make every effort to limit the length of the Executive Summary to no more than five (5) pages.

3.2 U.S. FIRM INFORMATION

A U.S. Firm Information Form in .pdf fillable format is attached at the end of this RFP in Annex 6. The Offeror must complete the U.S. Firm Information Form and include the completed U.S. Firm Information Form with its proposal.

3.3 ORGANIZATIONAL STRUCTURE, MANAGEMENT, AND KEY PERSONNEL

Describe the Offeror's proposed project organizational structure. Discuss how the project will be managed including the principal and key staff assignments for this Feasibility Study. Identify the Project Manager who will be the individual responsible for this project. The Project Manager shall have the responsibility and authority to act on behalf of the Offeror in all matters related to the Feasibility Study.

Provide a listing of personnel (including subcontractors) to be engaged in the project, including both U.S. and local subcontractors, with the following information for key staff: position in the project; pertinent experience, curriculum vitae; other relevant information. If subcontractors are to be used, the Offeror shall describe the organizational relationship, if any, between the Offeror and the subcontractor.

A manpower schedule and the level of effort for the project period, by activities and tasks, as detailed under the Technical Approach and Work Plan shall be submitted. A statement confirming the availability of the proposed project manager and key staff over the duration of the project must be included in the proposal.

3.4 TECHNICAL APPROACH AND WORK PLAN

Describe in detail the proposed Technical Approach and Work Plan (the "Work Plan"). Discuss the Offeror's methodology for completing the project requirements. Include a brief narrative of the Offeror's methodology for completing the tasks within each activity series. Begin with the information gathering phase and continue through delivery and approval of all required reports.

Prepare a detailed schedule of performance that describes all activities and tasks within the Work Plan, including periodic reporting or review points, incremental delivery dates, and other project milestones.

Based on the Work Plan, and previous project experience, describe any support that the Offeror will require from the Grantee. Detail the amount of staff time required by the Grantee or other participating agencies and any work space or facilities needed to complete the Feasibility Study.

3.5 EXPERIENCE AND QUALIFICATIONS

Provide a discussion of the Offeror's experience and qualifications that are relevant to the objectives and TOR for the Feasibility Study. If a subcontractor(s) is being used, similar information must be provided for the prime and each subcontractor firm proposed for the project. The Offeror shall provide information with respect to relevant experience and qualifications of key staff proposed. The Offeror shall include letters of commitment from the individuals proposed confirming their availability for contract performance.

As many as possible but not more than six (6) relevant and verifiable project references must be provided for each of the Offeror and any subcontractor, including the following information:

Project name,
Name and address of client (indicate if joint venture),
Client contact person (name/ position/ current phone and fax numbers),
Period of Contract,
Description of services provided,
Dollar amount of Contract, and
Status and comments.

Offerors are strongly encouraged to include in their experience summary primarily those projects that are similar to the Feasibility Study as described in this RFP.

Section 4: AWARD CRITERIA

Individual proposals will be initially evaluated by a Procurement Selection Committee of representatives from the Grantee. The Committee will then conduct a final evaluation and completion of ranking of qualified Offerors. The Grantee will notify USTDA of the best qualified Offeror, and upon receipt of USTDA's no-objection letter, the Grantee shall promptly notify all Offerors of the award and negotiate a contract with the best qualified Offeror. If a satisfactory contract cannot be negotiated with the best qualified Offeror, negotiations will be formally terminated. Negotiations may then be undertaken with the second most qualified Offeror and so forth.

The selection of the Contractor will be based on the following criteria:

Professional Experience (40%) - Bidders shall propose a project team that will be fully qualified to execute the entire scope the Feasibility Study. The proposed staff should have strong qualifications in engineering and design of, or consulting and project development for, large scale combined cycle power plants. The proposed personnel is anticipated to consist of:

- A Project Manager with at least 20 years of power engineering, team management and scheduling experience,
- A gas turbine specialist with at least 15 years of experience with industrial frame gas turbines including General Electric Frame 9 FA (or 9FB) and Siemens SGT5-4000F (or 8000H),
- A Lead Mechanical Engineer with at least 15 years of power plant design and consulting experience with special emphasis on gas turbine combined cycle power plants,
- A Lead Electrical Engineer with at least 15 years of power plant design and consulting experience including gas turbine combined cycle power plants,
- A Lead Civil/Structural Engineer with at least 15 years of power plant design and consulting experience including gas turbine combined cycle power plants,
- Multi-disciplines of engineering including mechanical, electrical, environmental, I&C and draftsmen to work under the Lead Engineers as required,
- Specialists to cover Cost Estimating and Scheduling, Economic Analysis and Project Funding.

The project manager, the gas turbine expert and all lead engineers need to have a valid P.E. License.

Experience in the 250-750 MW range combined cycle plants with Utility or Independent Power Producers is the main requirement. The qualified bidder will be expected to provide evidence of satisfactorily executing at least six (6) similar projects within the past 10 years either as the Plant Designer or the Owner's Engineer.

Proposed Work Plan (35%) - Bidders shall demonstrate good understanding of all the TOR tasks. Their approach to tackle the tasks should be in agreement with the generally accepted engineering methods used in the energy and power sector. The work plan should be detailed and

responsive to the requirements presented in the TOR and should prove value-added in the implementation phase of the Project.

International Experience (15%)

Host Country Experience (10%)

Bidders are encouraged to list their international energy project and/or FS experience. The ideal Bidder will have successfully completed at least (2) two similar projects overseas by the time of bid evaluations, preferably one of them being in Pakistan.

Proposals that do not include all requested information may be considered non-responsive.

Price will not be a factor in contractor selection.

ANNEX 1

FEDBIZOPPS ANNOUNCEMENT

Proposal Submission Place:

Syed Zainullah Shah
General Manager for Thermal
Pakhtunkhwa Energy Development Organization (PEDO)
38/B-2, Phase V, Hayatabad
Peshawar, Khyber Pakhtunkhwa Pakistan
Phone: +92 300 592 1163 +92 91 922 3625 +92 300 500 1038 +92 333 538 0240 Fax: +92 91 921 7331 +92 91 922 3624 Email: zain.shah@kpkep.gov.pk razi.ceo@kpogcl.com.pk

Solicitation Number: 2014-31026A**Project Title:** Gas Turbine Combined Cycle Power Plant in Khyber Pakhtunkhwa Province**POC:**

Jennifer Van Renterghem
USTDA
1000 Wilson Boulevard, Suite 1600
Arlington, VA 22209-3901
Tel: (703) 875-4357
Fax: (703) 875-4009
Email: RFPQuestions@ustda.gov

The Grantee invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms that are qualified on the basis of experience and capability to develop a feasibility study to evaluate the technical, economic and financial viability of a gas turbine combined cycle plant ("Project") in the Khyber Pakhtunkhwa (KP) Province of Pakistan. This combined cycle plant would utilize a General Electric (GE) 9FB gas turbine that would produce 400-435 MW of electricity, employ one Heat Recovery Steam Generator (HRSG) and one steam turbine.

With the proposed gas turbine combined cycle power plant, PEDO seeks to diversify into thermal power generation taking advantage of the long term availability of natural gas in the Province. Being a provincial government agency PEDO is in a unique and advantageous position to develop this project. The main objective of this gas turbine combined cycle plant would be to eliminate load shedding in Khyber Pakhtunkhwa.

The selected Contractor will evaluate the technical, economic and financial viability of a 400-435 MW gas-fired combined cycle plant ("Project ") that the Pakhtunkhwa Energy Development Organization ("Grantee" or "PEDO") is developing on behalf of the provincial government of Khyber Pakhtunkhwa ("GoKP") in Pakistan. This plant is anticipated to eventually be expanded to approximately double the initial capacity of 400-435 MW. Assuming the plant's technical, economic, and financial viability are evaluated favorably, a secondary objective is to facilitate approval by a Panel of Experts (POE) at the Private Power and Infrastructure Board of Pakistan (PPIB), which is required before the Project can be implemented. During the course of the Study, Contractor's deliverables in accordance with the tasks below should incorporate any comments received from the POE. The Grantee shall

be responsible for presenting the Study to the POE and for conveying any comments, suggestions or changes to the Contractor until the point of approval by the POE (within the timeframe established for the Study).

The U.S. firm selected will be paid in U.S. dollars from a US\$1,026,000 grant to the Grantee from the U.S. Trade and Development Agency (USTDA).

A detailed Request for Proposals (RFP), which includes requirements for the Proposal, the Terms of Reference, and portions of a background desk study report are available from USTDA, at 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901.

To request the RFP in PDF format, please go to:

<https://www.ustda.gov/businessopps/rfpform.asp>.

Requests for a mailed hardcopy version of the RFP may also be faxed to the IRC, USTDA at 703-875-4009. In the fax, please include your firm's name, contact person, address, and telephone number. Some firms have found that RFP materials sent by U.S. mail do not reach them in time for preparation of an adequate response. Firms that want USTDA to use an overnight delivery service should include the name of the delivery service and your firm's account number in the request for the RFP. Firms that want to send a courier to USTDA to retrieve the RFP should allow one hour after faxing the request to USTDA before scheduling a pick-up. Please note that no telephone requests for the RFP will be honored. Please check your internal fax verification receipt. Because of the large number of RFP requests, USTDA cannot respond to requests for fax verification. Requests for RFPs received before 4:00 PM will be mailed the same day. Requests received after 4:00 PM will be mailed the following day. Please check with your courier and/or mail room before calling USTDA.

Only U.S. firms and individuals may bid on this USTDA financed activity. Interested firms, their subcontractors and employees of all participants must qualify under USTDA's nationality requirements as of the due date for submission of qualifications and proposals and, if selected to carry out the USTDA-financed activity, must continue to meet such requirements throughout the duration of the USTDA-financed activity. All goods and services to be provided by the selected firm shall have their nationality, source and origin in the U.S. or host country. The U.S. firm may use subcontractors from the host country for up to 20 percent of the USTDA grant amount. Details of USTDA's nationality requirements and mandatory contract clauses are also included in the RFP.

Interested U.S. firms should submit their Proposal in English directly to the Grantee by 5:00 PM on November 17, 2014 at the above address. Evaluation criteria for the Proposal are included in the RFP. Price will not be a factor in contractor selection, and therefore, cost proposals should NOT be submitted. The Grantee reserves the right to reject any and/or all Proposals. The Grantee also reserves the right to contract with the selected firm for subsequent work related to the project. The Grantee is not bound to pay for any costs associated with the preparation and submission of Proposals.

A N N E X 2

PORTIONS OF BACKGROUND DESK STUDY REPORT

Glossary:

NEPRA: National Electric Power Regulatory Authority

PPIB: Private Power & Infrastructure Board

POE: Panel of Experts

PESCO: Peshawar Electric Supply Company Ltd.

CPPA: Central Power Purchase Authority

NPCC: National Power Coordination Center

SNGPL: Sui National Gas Pipeline Ltd.

NTDCL: National Transmission & Dispatch Company Ltd.

GTCCP: Gas turbine Combined Cycle Plant

1. Project Evaluation

The Pakistani province of Khyber Pakhtunkhwa (KP) is currently producing around 400 million cubic feet of natural gas per day. Production is expected to increase in the coming years. In order to utilize this potential, the Pakhtunkhwa Energy Development Organization (PEDO) would like to evaluate the feasibility of a combined cycle plant based on a General Electric (GE) 9FB gas turbine that would produce 400-435 MW, employing one Heat Recovery Steam Generator (HRSG) and one steam turbine. PEDO would like to site this plant at a 500 acre non-agricultural area which would allow for the future expansion of the plant 800+ MW rating with the addition of another gas turbine, HRSG and steam turbine.

Technical Merit

Gas turbine combined cycle plants are inherently feasible due to their high efficiency and low environmental emissions. The main components of a gas-fired combined cycle power plant are the gas turbine (GT), a heat recovery steam generator (HRSG) and a steam turbine (ST). The gas turbine compresses the inlet air which in turn mixes with, and burns the natural gas in a combustion chamber under high pressure. The thermal energy produced (typically 900 to 1500°C) gets converted first into mechanical energy as the combustion products expand through turbine and drive the turbine shaft, then into electrical energy via the rotating generator. The remaining thermal energy in exhaust gases (typically 450 to 650°C) is not wasted; the exiting exhaust gases are routed into the heat recovery steam generator where they generate high pressure and high temperature steam. The steam is sent to a steam turbine producing additional electric power. The cascading process increases the efficiency of the thermal cycle by at least 20 percentage points, rendering the combined cycle power plant the most efficient among all thermal power plants.

A 435 MW single-shaft combined cycle plant employing a General Electric 9FB gas turbine would achieve 59% efficiency and put out only half the CO₂, and NO_x emission of a conventional fossil fuel fired plant. The SO_x and PM10 (particulate) emissions would completely be eliminated when compared to a conventional fuel oil or coal-fired plant.

For a given site pre-feasibility of a proposed combined cycle plant is investigated based on the following criteria;

- Long term availability of fuel gas supply, documented with a Fuel Supply Agreement (FSA), typically for 20 years or longer,
- Availability of real estate to accommodate the plant,
- Availability of large amounts cooling water for condenser cooling and make-up water for the steam cycle,
- Availability of Transmission and Distribution (T&D) grid to export the electric power,
- A Power Purchase Agreement (PPA) to ensure the revenue generation potential of the plant, typically for 20 years or longer.

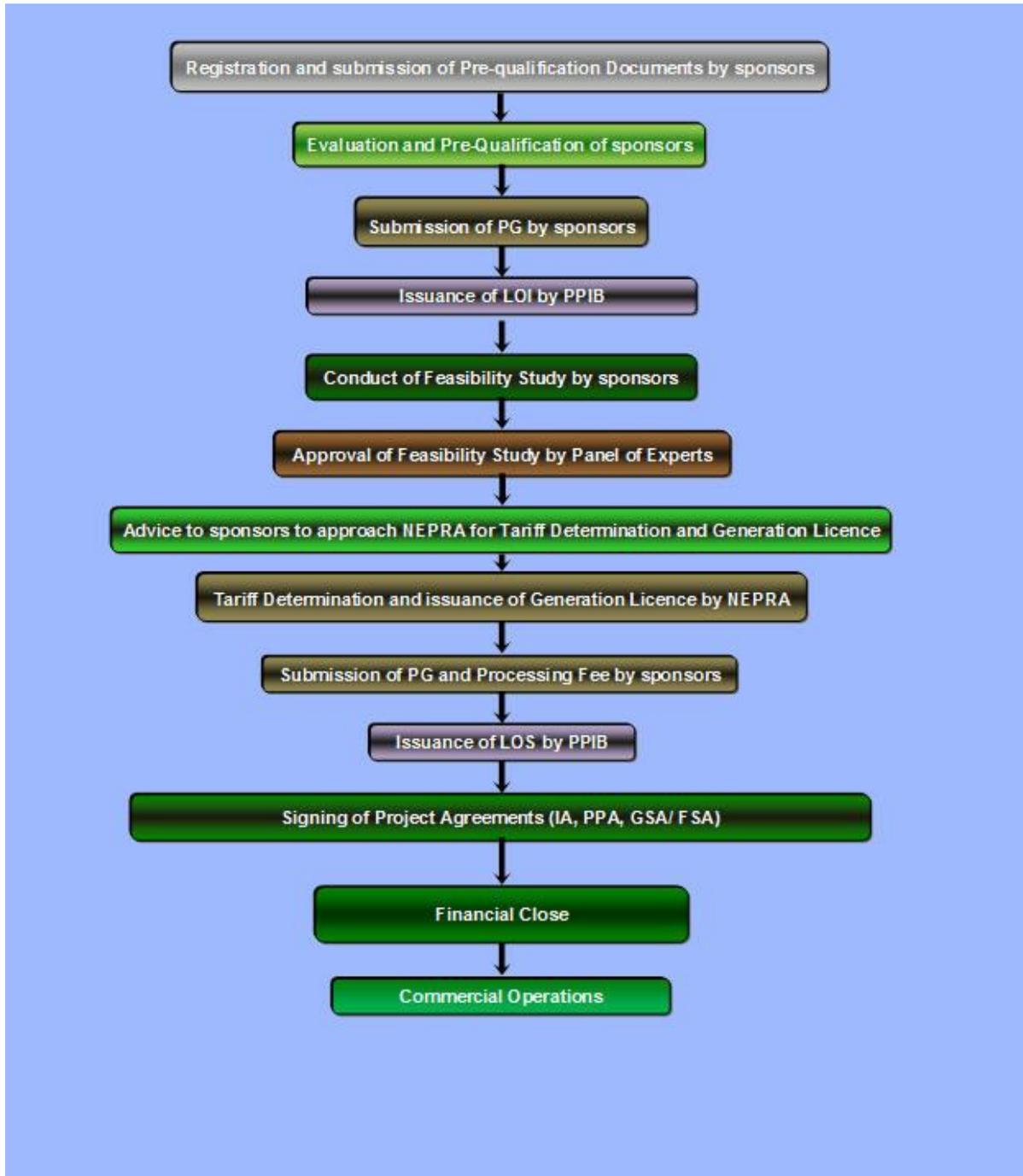
PEDO states that both the FSA and PPA will be signed with the respective government owned entities once the technical feasibility is established via a detailed study and approved by the Panel Of Experts (POE) at PPIB. Based on Article 158 of the Constitution, provincial governments are entitled to priority rights to utilize the natural gas that is extracted in their province for projects and consumption, including power generation. Per Power Policy of 2002/Amended, an Independent Power Producer (IPP) established via a Public Private Partnership (PPP) by the participation of a provincial government would be entitled to a 25 year FSA with SNGPL (Sui Northern Gas Pipelines Limited), the national gas transmission and distribution company and to a 25 year PPA with NTDCL (National Dispatch and Transmission Company Limited), the national bulk purchaser of electricity in the province.

PEDO also reports that a 500 acre non-agricultural land near the Indus River has been earmarked to site the proposed facility. The cooling water and cycle make-up water will be supplied from the Indus River. The generated power would be exported to the national grid via an existing/upgraded substation and HV transmission lines nearby.

Project Viability in Terms of Regulatory Framework and Project Financing

In order to develop the proposed project, a Private Public Partnership (PPP) will be established under the corporate identity of a Special Purpose Vehicle (SPV). A Special Purpose Vehicle is essentially a project company consisting of multiple share- holders. PEDO will be the majority stakeholder in the SPV, with the intent of diluting its shares as more private sector partners are identified to partake in the SPV. Per the regulatory framework already in place in Pakistan, it is the SPV that will apply to the Private Power and Infrastructure Board (PPIB) of the Ministry of Water and Power to meet all L/P (Licensing and Permitting) requirements.

PPIB's sequential approval process for new power projects are depicted in the following schematic.



PPIB's Application and Approval Process for New Power Plant Projects

EnerconAmerica estimates that each subject 435 MW combined cycle power plan would cost around \$380 million to implement in Pakistan. This is a high-level estimate which does not include land acquisition costs. International Finance Institutions (IFIs) typically limit their debt financing to 80% - 85% of the project total. That means up to \$300 million external funding

needs to be secured to implement the project. Once the application process to the PPIB is completed the SPV will apply to the central and provincial governments for sovereign guarantees to collateralize this debt funding in the form of Implementation Agreement (IA) Typically a 400 MW combined cycle power plant pays for itself in 5-7 years, depending on the fuel cost (expense), CAPEX including EPC costs (expense), fixed and variable O&M expenses and the feed-in tariff rate (revenues). This project will enjoy the privilege of subsidized fuel cost which will be treated as pass-through expense, shortening the pay-back period. Currently IFIs extend 7-10 year financing for “non-renewable energy” projects which is longer than the pay-back period of the subject project.

2. Project Background

2.1 COUNTRY PROFILE

Pakistan, officially the Islamic Republic of Pakistan, is a sovereign country in South Asia. With a population exceeding 180 million people, it is the sixth most populous country and with an area covering 796,095 km² (307,374 sq mile). Pakistan has a 1,046-kilometre (650 mile) coastline along the Arabian Sea and the Gulf of Oman in the south and is bordered by India to the east, Afghanistan to the west and north, Iran to the southwest and China in the far northeast. It is separated from Tajikistan by Afghanistan's narrow Wakhan Corridor in the north and also shares a marine border with Oman.

The country consists of four provinces, namely; Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan, as well as the Islamabad Capital Territory and the Federally Administered Tribal Areas in the northwest. The Government of Pakistan exercises de facto jurisdiction over the western parts of the disputed Kashmir region which is organized into the separate political entities, Azad Kashmir and Gilgit–Baltistan (formerly Northern Areas).

Pakistan is a federal parliamentary republic. It is an ethnically and linguistically diverse country, with a similar variation in its geography and wildlife. It has a semi-industrialized economy with a well-integrated agriculture sector, its economy is the 26th largest in the world in terms of purchasing power and 45th largest in terms of nominal GDP. It is characterized among the emerging and growth-leading economies of the world.



Provincial Map of Pakistan

Pakistan is a member of the United Nations, the Commonwealth of Nations, the Next Eleven Economies, SAARC, ECO, UfC, D8, Cairns Group, Kyoto Protocol, ICCPR, RCD, UNCHR, Group of Eleven, CPFTA, Group of 24, the G20 developing nations, ECOSOC, founding member of the Organization of the Islamic Conference (now the Organization of Islamic Cooperation), and CERN.

2.2 ENERGY SECTOR AND ELECTRIC POWER GENERATION

Historically, electric power in Pakistan has been generated, transmitted, distributed, and retail supplied by two vertically integrated public sector utilities; the Water and Power Development Authority (WAPDA) for all of Pakistan (except Karachi), and the Karachi Electric Supply Corporation (KESC) for the city of Karachi and its surrounding areas. There are also around 20 independent power producers (IPPs) that contribute significantly in electricity generation. Nuclear energy is generated solely by PAEC (Pakistan Atomic Energy Commission) as a natural government monopoly.

As of 2012, the total installed power capacity is estimated to be 21,000 MW, out of which 15,000 MW is reported to be in service generating around 95,000 GW-hr of electric power annually. The contribution of fossil fired plants is 13,637 MW (65%), hydropower accounts for 6,654 MW (31%) and nuclear generation stands at 812 MW (4%). Renewable energy, although initiated with several small wind and solar power projects, is only in its infancy in Pakistan and currently does not contribute to the country's energy mix in a significant way.

For decades Pakistan did not devise a long-term investment plan to balance power generation with increasing demand. The country was hit by its worst power crisis in 2007 when production fell by 6,000 Megawatts resulting in massive blackouts. Since then load shedding and rolling blackouts have become the norm in daily life in Pakistan.

Today, it is estimated that the power production is at least 15% lower than the country's current demand.

The government body responsible for regulating the electricity sector in Pakistan is the National Electric Power Regulatory Authority (NEPRA). NEPRA was created in 1997 to introduce transparent and judicious economic regulation, based on sound commercial principals, to the electric power sector. This was a critical step in evolution of the sector, especially to attract more foreign investment.

NEPRA's main responsibilities are to:

1. Issue licenses for generation, transmission and distribution of electric power;
2. Establish and enforce standards to ensure quality and safety of operation and supply of electric power to consumers;
3. Approve investment and power acquisition programs of the utility companies; and
4. Determine tariffs for generation, transmission and distribution of electric power.

By law, NEPRA is mandated to ensure that the interests of the investors and the customer are protected through judicious decisions based on transparent commercial principals. This helps move the sector moves towards a competitive environment.

Also, in response to the 2007 energy crisis, in October 2007, thermal power management was split into the newly formed Pakistan Electric Power Company (PEPCO).

3. Project Sponsor's Capability and Commitment

Originally established in 1986 as the "Small Hydroelectric Development Organization" (SHDO) to develop hydropower projects in the Province of Pakhtunkhwa, PEDO (Pakhtunkhwa Energy Development Organization) has been restructured in 2014 with additional responsibilities to;

- Continue to develop hydroelectric power potential,
- Develop thermal power through gas resources,
- Develop renewable energy including solar PV, solar water heater and wind,
- Develop substations and the local T&D grid in the Province.

As of 2014, PEDO has completed the 81 MW Malakand-III Hydro Power Plant (HPP), the 18 MW Pehur HPP, the 4.2 MW Reshun HPP and the 2.0 MW Shishi HPP. Annual revenues generated from the sales of electric power from these facilities amount to 2.0 billion Rupees (US\$ 20 Million). International EPC Tenders have recently been issued for the 69 MW Lawi and 84 MW Matiltan hydro power projects for which the equity funding will be provided by the Government of Khyber Pakhtunkhwa.

With the proposed gas turbine combined cycle power plant, PEDO would like to diversify into thermal power generation taking advantage of the long term availability of natural gas in the Province. Being a provincial government agency PEDO is in a unique and advantageous position to develop this project. The main objective of this GTCCP would be to eliminate load shedding in Khyber Pakhtunkhwa.

PEDO's 2014 activities include the planning and development of the following power projects:

- Thermal Power (GTCC) 400 MW, extendable to 800 MW:
- Solar Power, 50 MW:
- Wind Power, 20 MW:
- Transmission & Distribution (Management over of Peshawar Electric Supply Company)

PEDO operates from a 3,000 square meter office in Hayatabad, Peshawar. Additional information can be found at the agency's website: <http://www.shydo.gov.pk>.

4. Developmental and Environmental Impacts

The proposed combined cycle power plant is poised to make significant developmental impacts in Pakistan. The potential developmental impacts per USTDA criteria are foreseen as;

1. **Impact on Infrastructure:** With the implementation of the power plant, 435 MW of new generation capacity will be added to the system. This is enough energy to power 1,300,000 million households in Pakistan, which is very significant. This power would also help with industrial growth. Given the fact that pay-back periods are relatively short for combined cycle power plants, the project would create substantial revenues for the Grantee after the loans are paid-off. These revenues are likely to be reinvested in additional energy and infrastructure projects.
2. **Human Capacity Building:** During the construction of the facility about 500-700 new jobs in construction, technical services/engineering and landscaping are likely to be created for 2.5 - 3 years. When the combined cycle plant is in operation, about 30 full-time operations and maintenance (O&M) and 200 indirect personnel positions will be created for at least 25 years. The O&M personnel will receive special training.

5. Implementation Financing

The Financial Institutions most likely to provide loans for this project are the World Bank's International Financing Corporation (IFC), the Asian Development Bank (ADB), and the U.S. Export-Import Bank. Additional financial institutions such local commercial banks and the Islamic Development Bank (IsDB) could also participate with syndication loans under the IFC's umbrella.

In the World Bank Group, IBRD (International Bank for Reconstruction and Development) finances government sponsored projects, and IFC supports private sector projects and undertakings by the nonsubsidized local government entities, such as municipalities and public-private partnerships. Collectively, the Group provides about \$8 billion in financing for energy projects and programs.

To date IFC has made cumulative investments worth \$4.5 billion in Pakistan. In fiscal year 2013 alone \$514 million was committed to infrastructure projects including syndication loans from other investors and lenders. The current committed portfolio stands at \$843 million and represents IFC's second largest country portfolio in the region. Among IFC's significant investments in Pakistan are the financing of over 3,500 MW worth of power generation and distribution projects (Source: www.ifc.org). IFC typically makes direct loans (or organizes syndication loans) up to 85% of the project total. Terms of this financing package could include a 2 grace period to allow for deferred loan payments.

Pakistan is a member of the Asian Development Bank (ADB) and is qualified for infrastructure and power/energy sector loans. It is reported that Pakistan has received more \$ 24 billion in loans since joining the ADB in 1966. Out of this sum, \$ 6.1 billion financed energy projects. In the 2014-2016 time frame ADB is planning to address energy sector needs both through investments and policy reforms. This support aims at a more efficient system for generating, transmitting, and distributing electricity; improvements in collection; adjustments to pricing mechanisms; and improved management (Source: www.adb.com). ADB could offer both long term project finance and an advance mobilization support for the subject project. The tenor of the ADB loans heavily depends on the project pay-back period and could be as long as 15 years including a 2 year grace period. For this particular PPP project, ADB would require sovereign guarantees from the Pakistan Ministry of Finance (MoF).

The proposed project could qualify for U.S. Exim Bank credits under the Power Generation Exports program. However, currently Pakistan is subject loan tenor limitations by the Ex-Im Bank; export credits for only up to 7 years would be possible against sovereign guarantees. (Source: www.exim.gov). Exim Bank could offer either loan guarantees or up to 85% direct loans to potential developers in Pakistan at Libor+several basis point interest rate, provided that project consists of at least 51% U.S. content in the way of equipment and services.

Pakistan is a member of the Islamic Development Bank (IsDB) and is qualified for infrastructure and power/energy loans. (Source: www.isdb.org). However given the magnitude of the debt financing required for this particular project, the IDB is likely to participate in financing only with a syndication loan under the IFC umbrella.

6. U.S. Export Potential

The proposed project could create \$70-150 million export potential for U.S. equipment and services.

7. Foreign Competition

Many of the lower price equipment such as small motors, small bore piping, structural steel, low voltage cable, and most construction materials are likely to be procured from the local Pakistani suppliers.

If PEDO could secure project funding or loan guarantees from the U.S. Exim Bank or, a syndication loan from IFC with the participation of U.S based lenders, the U.S. suppliers would have an edge over the said competition.

8. Impact on U.S. Labor

EnerconAmerica does not foresee any negative impacts on U.S. Labor resulting from implementation of the proposed project. This project would not result in any commodities that could be imported to U.S. The technology transfer required for this project is unlikely to create a global competitor to the U.S. technology providers either. Implementation of the combined cycle power plant will only create some installation and O&M (operation and maintenance) jobs locally without posing radical threats to U.S. Labor.

On the other hand, positive impacts are anticipated as U.S. based consulting services, power plant equipment and software will be exported, creating job security at home in these sectors. Similarly, high price man-hours might be created for U.S. Engineering companies as the EPC (Engineer, Procure and Construct) phases of the project will require the services of such specialists.

Based on the Consultant's past experience, if the project should get implemented with U.S. equipment and U.S. know-how, the Project Sponsor is also likely to retain consultants from the U.S. during the life of the project.

9. Project Justification and Risks Factors

For several decades Pakistan has been enjoying one of the fastest growing economies in the South Asia region. Electric power generation has been trying to keep up with the population increase and industrial growth. The gap between the supply of and demand for electricity is expected to keep growing unless sizeable investments are made in this sector fairly soon. Currently this gap is estimated to be at least 15% and manifests itself with chronic power blackouts in the country.

The proposed combined cycle power plant, if implemented, will add about 435 MW of new generation capacity to the existing power infrastructure, electrifying more than 1,300,000 households in the Province. Should the prospective expansion plans be carried out, the generation capacity will be increased to 800 MW to double the number of households that can be powered. The proposed fuel is natural gas, the cleanest burning fossil fuel, hence it could replace 3,400,000 tons of coal per year in power generation based on 800 MW generation capacity.

If implemented, the combined cycle project will be first of a kind in the Province. Currently the main mode of power generation is hydroelectricity in Khyber Pakhtunkhwa, which displays high seasonal variations. However given the large natural gas reserves in the Province, it makes strong sense to diversify into base load thermal power generation as well. The project is a high profile one and will create considerable goodwill towards the U.S. Government for its support. The project offers significant export potential for U.S. made equipment and services.

While the Project Sponsor does not have any previous thermal power generation experience, they are very well versed in the regulatory framework as it pertains to the power sector through previous hydropower projects. The Project Sponsor is also proposing to hire a professional core staff to develop the project on their behalf once the SPV is established to make up for the lack of experience in this segment of the power business. PEDO has formed a Task Force consisting of professionals/experts from its sister organizations who have expertise in similar thermal power plants in their previous careers. PEDO has expertise in project management, civil, mechanical, electrical and instrumentation & control.

Currently, out of 380 mmcf/d of gas produced in Khyber Pakhtunkhwa, 268 mmcf/d is used in the summers, and 320 mmcf/d is used in the winters within the Province. The balance is exported to the neighboring provinces.

The fact that the FS procedure will take more than a year, (-and if found feasible- the plant construction, will take another 3 years) one could assume that enough gas will be allocated to this plant before it comes online.

A N N E X 3

USTDA NATIONALITY REQUIREMENTS



**U.S. TRADE AND DEVELOPMENT AGENCY
Arlington, VA 22209-3901**

NATIONALITY, SOURCE, AND ORIGIN REQUIREMENTS

The purpose of USTDA's nationality, source, and origin requirements is to ensure the maximum practicable participation of American contractors, technology, equipment and materials in the prefeasibility, feasibility, and implementation stages of a project.

USTDA STANDARD RULE (GRANT AGREEMENT STANDARD LANGUAGE):

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and professional services funded by USTDA under the Grant Agreement:

- (a) the Contractor must be a U.S. firm;
- (b) the Contractor may use U.S. subcontractors without limitation;
- (c) employees of U.S. Contractor or U.S. subcontractor firms shall be U.S. citizens, non-U.S. citizens lawfully admitted for permanent residence in the United States or non-U.S. citizens lawfully admitted to work in the United States, except as provided pursuant to subpart (d) below;
- (d) up to twenty percent (20%) of the USTDA Grant amount may be used to pay for services performed by (i) Host Country subcontractors, and/or (ii) Host Country nationals who are employees of the Contractor;
- (e) a Host Country subcontractor may only be used for specific services from the Terms of Reference identified in the subcontract;
- (f) subcontractors from countries other than the United States or Host Country may not be used;
- (g) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and
- (h) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions.

NATIONALITY:

1) Application

A U.S. firm that submits a proposal must meet USTDA's nationality requirements as of the date of submission of the proposal and, if selected, must continue to meet such requirements throughout the duration of the USTDA-funded activity. These nationality provisions apply to all portions of the Terms of Reference that are funded with the USTDA grant.

2) Definitions

A "U.S. firm" is a privately owned firm that is incorporated in the U.S., with its principal place of business in the U.S., and which is either (a) more than 50% owned by U.S. citizens and/or non-U.S. citizens lawfully admitted for permanent residence in the United States, or (b) has been incorporated in the U.S. for more than three (3) years prior to the issuance date of the request for proposals; has performed similar services in the U.S. for that three (3) year period; employs U.S. citizens in more than half of its permanent full-time positions in the U.S.; and has the existing capability in the U.S. to perform the work in question.

A partnership that is organized in the U.S., has its principal place of business in the U.S., and is more than 50% owned by U.S. citizens and/or permanent residents, qualifies as a "U.S. firm".

A nonprofit organization, such as an educational institution, foundation, or association, also qualifies as a "U.S. firm" if it is incorporated in the U.S. and managed by a governing body, a majority of whose members are U.S. citizens and/or permanent residents.

SOURCE AND ORIGIN:

Definitions

"Source" means the country from which shipment is made.

"Origin" means the place of production, through manufacturing, assembly or otherwise.

Questions regarding these nationality, source and origin requirements may be addressed to the USTDA Office of General Counsel.

A N N E X 4

**USTDA GRANT AGREEMENT, INCLUDING MANDATORY
CONTRACT CLAUSES**

GRANT AGREEMENT

This Grant Agreement is entered into between the Government of the United States of America, acting through the U.S. Trade and Development Agency (“USTDA”) and the Pakhtunkhwa Energy Development Organization (“Grantee”). USTDA agrees to provide the Grantee under the terms of this Grant Agreement US\$1,026,000 (“USTDA Grant”) to fund the cost of goods and services required for a feasibility study (“Study”) on the proposed Gas Turbine Combined Cycle Power Plant (“Project”) in Pakistan (“Host Country”).

1. USTDA Funding

The USTDA Grant to be provided under this Grant Agreement shall be used to fund the costs of a contract between the Grantee and the U.S. firm selected by the Grantee (“Contractor”) under which the Contractor will perform the Study (“Contract”). Payment to the Contractor will be made directly by USTDA on behalf of the Grantee with the USTDA Grant funds provided under this Grant Agreement.

2. Terms of Reference

The terms of reference for the Study (“Terms of Reference”) are attached as Annex I and are hereby incorporated by reference into this Grant Agreement. The Study will examine the technical, financial, environmental, and other critical aspects of the proposed Project. The Terms of Reference for the Study shall also be included in the Contract.

3. Standards of Conduct

USTDA and the Grantee recognize the existence of standards of conduct for public officials and commercial entities in their respective countries. Therefore, USTDA, the Grantee, and the Contractor shall not directly or indirectly provide, offer or promise to provide money or anything of value to any public official in violation of any United States or Host Country laws relating to corruption or bribery.

4. Grantee Responsibilities

The Grantee shall undertake its best efforts to provide reasonable support for the Contractor, such as security while in Khyber Pakhtunkhwa Province, local transportation, office space, and secretarial support.

5. Contract Matters and USTDA’s Rights as Financier

(A) Grantee Competitive Selection Procedures

Selection of the U.S. Contractor shall be carried out by the Grantee according to its established procedures for the competitive selection of contractors with advance notice of the procurement published online through *Federal Business Opportunities*

(www.fedbizopps.gov). Upon request, the Grantee will submit these contracting procedures and related documents to USTDA for information and/or approval.

(B) USTDA's Right to Approve Contractor Selection

The Grantee shall notify USTDA at the address of record set forth in Article 16 below upon selection of the Contractor to perform the Study. USTDA then shall notify the Grantee whether or not USTDA approves the Grantee's Contractor selection. Upon USTDA approval of the Grantee's Contractor selection, the Grantee shall notify in writing the U.S. firms that submitted unsuccessful proposals to perform the Study that they were not selected. The Grantee and the Contractor then shall enter into a Contract for performance of the Study.

(C) USTDA's Right to Approve Contract Between Grantee and Contractor

(1) Contract

The Grantee and the Contractor shall enter into a Contract for performance of the Study. The Grantee (or the Contractor on the Grantee's behalf) shall transmit to USTDA, at the address set forth in Article 16 below, a photocopy of an English language version of the signed Contract or a final negotiated draft version of the Contract. USTDA then shall notify the Grantee and the Contractor whether or not USTDA approves the Contract.

(2) Amendments and Assignments

The Grantee or the Contractor may submit any proposed amendment to the Contract, including any proposed amendment to any annex thereto, or any proposed assignment of the Contract, to USTDA at the address set forth in Article 16 below. USTDA then shall notify the Grantee and the Contractor whether or not USTDA approves the proposed amendment or assignment.

(D) USTDA Not a Party to the Contract

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of the Contract and any amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any Contract funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of U.S. Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of funding the Study and shall not be construed as making USTDA a party to the Contract. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the Contract or any subcontract, jointly or separately, without thereby incurring any responsibility or liability to such parties. Any approval or failure to approve by USTDA shall not bar the Grantee or USTDA from asserting any right they

might have against the Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Grantee or USTDA.

(E) Grant Agreement Controlling

Regardless of USTDA approval, the rights and obligations of any party to the Contract or any subcontract thereunder must be consistent with this Grant Agreement. In the event of any inconsistency between the Grant Agreement and the Contract or any subcontract funded by the Grant Agreement, the Grant Agreement shall control.

6. Disbursement Procedures

(A) USTDA Approval of Contract Required

USTDA will make disbursements of USTDA Grant funds directly to the Contractor only after USTDA approves the Grantee's Contract with the Contractor.

(B) Contractor Invoice Requirements

The Grantee should request disbursement of funds by USTDA to the Contractor for performance of the Study by submitting invoices in accordance with the procedures set forth in the USTDA Mandatory Contract Clauses in Annex II.

7. Effective Date

The effective date of this Grant Agreement (“Effective Date”) shall be the date of signature by both parties or, if the parties sign on different dates, the date of the last signature. In the event that only one signature is dated, such date shall constitute the Effective Date.

8. Study Schedule

(A) Study Completion Date

The completion date for the Study, which is January 31, 2016, is the date by which the parties estimate that the Study will have been completed.

(B) Time Limitation on Disbursement of USTDA Grant Funds

Except as USTDA may otherwise agree, (i) no USTDA funds may be disbursed under this Grant Agreement for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (ii) no USTDA funds may be disbursed more than four (4) years after the Effective Date of the Grant Agreement.

9. USTDA Mandatory Contract Clauses

All contracts funded under this Grant Agreement shall include the USTDA Mandatory Contract Clauses set forth in Annex II to this Grant Agreement. All subcontracts funded or

partially funded with USTDA Grant funds shall include the USTDA Mandatory Contract Clauses, except for Clauses B(1), G, H, I, and S.

10. Use of U.S. Carriers

(A) Air

Transportation by air of persons or property funded under this Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

(B) Marine

Transportation by sea of property funded under this Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

11. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and professional services funded by USTDA under the Grant Agreement:

- (a) the Contractor must be a U.S. firm;
- (b) the Contractor may use U.S. subcontractors without limitation;
- (c) employees of U.S. Contractor or U.S. subcontractor firms shall be U.S. citizens, non-U.S. citizens lawfully admitted for permanent residence in the United States or non-U.S. citizens lawfully admitted to work in the United States, except as provided pursuant to subpart (d) below;
- (d) up to twenty percent (20%) of the USTDA Grant amount may be used to pay for services performed by (i) Host Country subcontractors, and/or (ii) Host Country nationals who are employees of the Contractor;
- (e) a Host Country subcontractor may only be used for specific services from the Terms of Reference identified in the subcontract;
- (f) subcontractors from countries other than the United States or Host Country may not be used;
- (g) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and
- (h) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions.

USTDA will make available further details concerning these provisions upon request.

12. Taxes

USTDA funds provided under this Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country, except for taxes of a de minimis nature imposed on local lodging, food, transportation, or airport arrivals or departures. Neither the Grantee nor the Contractor will seek reimbursement from USTDA for taxes, tariffs, duties, fees or other levies, except for taxes of a de minimis nature referenced above.

13. USTDA Project Evaluation

The parties will cooperate to assure that the purposes of the Grant Agreement are accomplished. For five (5) years following receipt by USTDA of the Final Report, the Grantee agrees to respond to any reasonable inquiries from USTDA about the status of the Project. Inquiries will include, but not be limited to, whether the Final Report recommendations have been or will be used to implement the Project, anticipated Project implementation timeline, and likely source of financing. Whether or not to implement the Project and how to go about this process will be at the sole discretion of the Grantee. In addition, the Grantee agrees to notify USTDA any time the Grantee selects a new primary contact person for this Project during the five-year period referenced above.

14. Recordkeeping and Audit

The Grantee agrees to maintain books, records, and other documents relating to the Study and this Grant Agreement adequate to demonstrate implementation of its responsibilities under this Grant Agreement, including the selection of contractors, receipt and approval of Contract deliverables, and approval or disapproval of Contractor invoices for payment by USTDA. Such books, records, and other documents shall be separately maintained for three (3) years after the date of the final disbursement by USTDA. The Grantee shall afford USTDA or its authorized representatives the opportunity at reasonable times to review books, records, and other documents relating to the Study and the Grant Agreement.

15. Representation of Parties

For all purposes relevant to this Grant Agreement, the Government of the United States of America will be represented by the U. S. Ambassador to Host Country or USTDA and Grantee will be represented by its Chief Executive Officer. The parties hereto may, by written notice, designate additional representatives for all purposes under this Grant Agreement.

16. Addresses of Record for Parties

Any notice, request, document, or other communication submitted by either party to the other under the Grant Agreement shall be in writing or through an electronic medium that produces a tangible record of the transmission, such as a facsimile or e-mail message, and will be deemed duly given or sent when delivered to such party at the following:

To: Syed Zainullah Shah
General Manager for Thermal
Pakhtunkhwa Energy Development Organization (PEDO)
38/B-2, Phase V, Hayatabad
Peshawar, Khyber Pakhtunkhwa
Pakistan

Phone: +92 300 592 1163 +92 3005001038 +923335380240 +92 919223625
Fax: +92 91 921 7331 +92 91 922 3624
E-Mail: zain.shah@kpkep.com cc: razi.ceo@kpogel.com.pk

To: Pakistan Country Manager
U.S. Trade and Development Agency
1000 Wilson Boulevard, Suite 1600
Arlington, Virginia 22209-3901
USA

Phone: (703) 875-4357
Fax: (703) 875-4009
E-Mail: jflewelling@ustda.gov and hsteingass@ustda.gov

All such communications shall be in English, unless the parties otherwise agree in writing. In addition, the Grantee shall provide the Commercial or Economic Section of the U.S. Embassy in Host Country with a copy of each communication sent to USTDA.

Any communication relating to this Grant Agreement shall include the following fiscal data:

Appropriation No.: 1109/141001
Activity No.: 2014-31026A
Reservation No.: 2014264
Grant No.: GH201431264

17. Implementation Letters

To assist the Grantee in the implementation of the Study, USTDA may, from time to time, issue implementation letters that will provide additional information about matters covered by this Grant Agreement. USTDA may also issue implementation letters to (i) extend the estimated completion date set forth in Article 8(A) above, or (ii) change the fiscal data set forth in Article 16 above. The parties may also use jointly agreed upon implementation

letters to confirm and record their mutual understanding of matters covered by this Grant Agreement.

18. Grant Agreement Amendments

Either party may submit to the other party at any time a proposed amendment to the Grant Agreement. A Grant Agreement amendment shall be effective only if it has been signed by both parties.

19. Termination Clause

Either party may terminate this Grant Agreement by giving the other party written notice thereof. The termination of the Grant Agreement will end any obligations of the parties to provide financial or other resources for the Study, except for payments that may be made pursuant to Clause H of the USTDA Mandatory Contract Clauses set forth in Annex II to this Grant Agreement. This article and Articles 5, 12, 13, 14, and 21 of the Grant Agreement shall survive termination of the Grant Agreement.

20. Non-waiver of Rights and Remedies

No delay in exercising any right or remedy accruing to either party in connection with the Grant Agreement shall be construed as a waiver of such right or remedy.

21. U.S. Technology and Equipment

By funding this Study, USTDA seeks to promote the project objectives of the Host Country through the use of U.S. technology, goods, and services. In recognition of this purpose, the Grantee agrees that it will allow U.S. suppliers to compete in the international competitive procurement of technology, goods and services needed for Project implementation in accordance with the laws of the Host Country.

22. Governing Law

This Grant Agreement shall be governed by, and construed in accordance with, the applicable laws of the United States of America. In the absence of federal law, the laws of the State of New York shall apply.

23. Counterparts

This Grant Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement. Counterparts may be delivered via electronic mail or other transmission method and any counterpart so delivered shall be deemed to be valid and effective for all purposes.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Government of the United States of America and the Pakhtunkhwa Energy Development Organization, each acting through its duly authorized representative, have caused this Grant Agreement to be signed in the English language in their names and delivered as of the day and year written below. In the event that this Grant Agreement is signed in more than one language, the English language version shall govern.

For the Government of the United States of America

For the Pakhtunkhwa Energy Development Organization

By: _____

By: _____

Date: _____

Date: _____

Witnessed:

Witnessed:

By: _____

By: _____

USTDA Mandatory Contract Clauses

A. USTDA Mandatory Clauses Controlling

The parties to this Contract acknowledge that this Contract is funded in whole or in part by the U.S. Trade and Development Agency (“USTDA”) under the Grant Agreement between the Government of the United States of America acting through USTDA and the Pakhtunkhwa Energy Development Organization (“Client”), dated _____ (“Grant Agreement”). The Client has selected _____ (“Contractor”) to perform the feasibility study (“Study”) for the Gas Turbine Combined Cycle Power Plant project (“Project”) in Pakistan (“Host Country”). The Client and the Contractor are the parties to this Contract, and they hereinafter are referred to collectively as the “Contract Parties.” Notwithstanding any other provisions of this Contract, the following USTDA Mandatory Contract Clauses shall govern. All subcontracts entered into by Contractor funded or partially funded with USTDA Grant funds shall include these USTDA Mandatory Contract Clauses, except for Clauses B(1), G, H, I, and S. In addition, in the event of any inconsistency between the Grant Agreement and the Contract or any subcontract thereunder, the Grant Agreement shall be controlling.

B. USTDA as Financier

(1) USTDA Approval of Contract

This Contract, and any amendment thereto, including any amendment to any annex thereto, and any proposed assignment of this Contract, must be approved by USTDA in writing in order to be effective with respect to the expenditure of USTDA Grant funds. USTDA will not authorize the disbursement of USTDA Grant funds until the Contract conforms to modifications required by USTDA during the Contract review process and the Contract has been formally approved by USTDA. To make this review in a timely fashion, USTDA must receive from either the Client or the Contractor an English language version of a final negotiated draft Contract or a signed Contract to the attention of the General Counsel's office at USTDA's address listed in Clause M below.

(2) USTDA Not a Party to the Contract

It is understood by the Contract Parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of this Contract and amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any contract funded under the Grant Agreement. The Contract Parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of financing the Study and shall not be construed as making USTDA a party to the Contract. The Contract Parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss

matters related to these rights and the Project with the Contract Parties or the parties to any subcontract, jointly or separately; and in consideration of USTDA's role as financier, the Contract Parties further agree that USTDA's rights may be exercised without thereby incurring any responsibility or liability, in contract, tort, or otherwise, to the Contract Parties or the parties to any subcontract. Any approval or failure to approve by USTDA shall not bar the Client or USTDA from asserting any right they might have against the Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Client or USTDA.

C. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and professional services funded by USTDA under the Grant Agreement:

- (a) the Contractor must be a U.S. firm;
- (b) the Contractor may use U.S. subcontractors without limitation;
- (c) employees of U.S. Contractor or U.S. subcontractor firms shall be U.S. citizens, non-U.S. citizens lawfully admitted for permanent residence in the United States or non-U.S. citizens lawfully admitted to work in the United States, except as provided pursuant to subpart (d) below;
- (d) up to twenty percent (20%) of the USTDA Grant amount may be used to pay for services performed by (i) Host Country subcontractors, and/or (ii) Host Country nationals who are employees of the Contractor;
- (e) a Host Country subcontractor may only be used for specific services from the Terms of Reference identified in the subcontract;
- (f) subcontractors from countries other than the United States or Host Country may not be used;
- (g) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and
- (h) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions.

USTDA will make available further details concerning these provisions upon request.

D. Recordkeeping and Audit

The Contractor and subcontractors funded under the Grant Agreement shall maintain, in accordance with generally accepted accounting procedures, books, records, and other documents, sufficient to reflect properly all transactions under or in connection with the

Contract. These books, records, and other documents shall clearly identify and track the use and expenditure of USTDA funds, separately from other funding sources. Such books, records, and documents shall be maintained during the period of performance of work provided for by this Contract, and for a period of three (3) years after final disbursement by USTDA. The Contractor and subcontractors shall afford USTDA, or its authorized representatives, the opportunity at reasonable times for inspection and audit of such books, records, and other documentation.

E. U.S. Carriers

(1) Air

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

(2) Marine

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

F. Workman's Compensation Insurance

The Contractor shall provide adequate Workman's Compensation Insurance coverage for work performed under this Contract.

G. Disbursement Procedures

(1) USTDA Approval of Contract

Disbursement of Grant funds will be made only after USTDA approval of this Contract.

(2) Payment Schedule Requirements

A payment schedule for disbursement of Grant funds to the Contractor shall be included in this Contract. Such payment schedule must conform to the following USTDA requirements: (1) up to twenty percent (20%) of the total USTDA Grant amount may be used as a mobilization payment; (2) all other payments, with the exception of the final payment, shall be based upon Contract performance milestones; and (3) the final payment may be no less than fifteen percent (15%) of the total USTDA Grant amount, payable upon approval by USTDA of a Final Report that has been (i) prepared and submitted in accordance with the requirements set forth in Clause I below, and (ii) approved in writing by the Client in the manner provided for by Clause G(3)(b)(iii) below. Invoicing procedures for all payments are described below.

(3) Contractor Invoice Requirements

USTDA will make all disbursements of USTDA Grant funds directly to the Contractor. The Contractor must provide USTDA with an ACH Vendor Enrollment Form (available from USTDA) with the first invoice. The Client shall request disbursement of funds by USTDA to the Contractor for performance of the Contract by submitting the following to USTDA:

(a) Contractor's Invoice

The Contractor's invoice shall include reference to an item listed in the Contract payment schedule, the requested payment amount, and an appropriate certification by the Contractor, as follows:

(i) For a mobilization payment (if any):

“As a condition for this mobilization payment, the Contractor certifies that it will perform all work in accordance with the terms of its Contract with the Client. To the extent that the Contractor does not comply with the terms and conditions of the Contract, including the USTDA Mandatory Contract Clauses contained therein, it will, upon USTDA’s request, make an appropriate refund to USTDA.”

(ii) For Contract performance milestone payments:

“The Contractor has performed the work described in this invoice in accordance with the terms of its Contract with the Client and is entitled to payment thereunder. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA Mandatory Contract Clauses contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA.”

(iii) For final payment:

“The Contractor has performed the work described in this invoice in accordance with the terms of its Contract with the Client and is entitled to payment thereunder. Specifically, the Contractor has submitted the Final Report to the Client, as required by the Contract, and received the Client’s approval of the Final Report. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA Mandatory Contract Clauses contained therein, it will, upon USTDA’s request, make an appropriate refund to USTDA.”

(b) Client's Approval of the Contractor's Invoice

(i) The invoice for a mobilization payment must be approved in writing by the Client.

(ii) For Contract performance milestone payments, the following certification by the Client must be provided on the invoice or separately:

“The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement.”

(iii) For final payment, the following certification by the Client must be provided on the invoice or separately:

“The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement. The Final Report submitted by the Contractor has been reviewed and approved by the Client.”

(c) USTDA Address for Disbursement Requests

Requests for disbursement shall be submitted to the attention of the Finance Department at USTDA's address listed in Clause M below, or by e-mail to invoices@ustda.gov.

H. Termination

(1) Method of Termination

Either Contract Party may terminate this Contract upon giving written notice to the other party and USTDA. This notice shall be effective after either 30 days, or any other period set forth elsewhere in this Contract. Furthermore, this Contract shall terminate immediately upon notification of USTDA's termination of the Grant Agreement or the term of availability of any funds thereunder.

(2) Ramifications of Termination

In the event that this Contract is terminated prior to completion, the Contractor will be eligible, subject to USTDA approval, for payment for the value of the work performed pursuant to the terms of this Contract. Likewise, in the event of such termination, USTDA is entitled to receive from the Contractor all USTDA Grant funds previously disbursed to the Contractor (including but not limited to mobilization payments) which exceed the value of the work performed pursuant to the terms of this Contract.

(3) Survivability

Clauses B, D, G, H, N and S of the USTDA Mandatory Contract Clauses shall survive the termination of this Contract.

I. USTDA Final Report

(1) Definition

“Final Report” shall mean the Final Report described in the attached Annex I Terms of Reference or, if no such “Final Report” is described therein, “Final Report” shall mean a substantive and comprehensive report of work performed in accordance with the attached Annex I Terms of Reference, including any documents delivered to the Client.

(2) Final Report Submission Requirements

The Contractor shall provide the following to USTDA:

(a) One (1) complete hard copy of the Final Report for USTDA's records. This version shall have been approved by the Client in writing and must be in the English language. It is the responsibility of the Contractor to ensure that confidential information, if any, contained in this version be clearly marked. USTDA will maintain the confidentiality of such information in accordance with applicable law.

and

(b) One (1) hard copy of the Final Report suitable for public distribution (“Public Version”). The Public Version shall have been approved by the Client in writing and must be in the English language. As this version will be available for public distribution, it must not contain any confidential information. If the report in (a) above contains no confidential information, it may be used as the Public Version. In any event, the Public Version must be informative and contain sufficient Project detail to be useful to prospective equipment and service providers.

and

(c) Two (2) CD-ROMs, each containing a complete copy of the Public Version of the Final Report. The electronic files on the CD-ROMs shall be submitted in a commonly accessible read-only format. As these CD-ROMs will be available for public distribution, they must not contain any confidential information. It is the responsibility of the Contractor to ensure that no confidential information is contained on the CD-ROMs.

The Contractor shall also provide one (1) hard copy of the Public Version of the Final Report to the Commercial or Economic Section of the U.S. Embassy in Host Country for informational purposes.

(3) Final Report Presentation

All Final Reports submitted to USTDA must be paginated and include the following:

(a) The front cover of every Final Report shall contain the name of the Client, the name of the Contractor who prepared the report, a report title, USTDA's logo, and USTDA's address. If the complete version of the Final Report contains confidential information, the Contractor shall be responsible for labeling the front cover of that version of the Final Report with the term "Confidential Version". The Contractor shall be responsible for labeling the front cover of the Public Version of the Final Report with the term "Public Version". The front cover of every Final Report shall also contain the following disclaimer:

"This report was funded by the U.S. Trade and Development Agency (USTDA), an agency of the U.S. Government. The opinions, findings, conclusions or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA. USTDA makes no representation about, nor does it accept responsibility for, the accuracy or completeness of the information contained in this report."

(b) The inside front cover of every Final Report shall contain USTDA's logo, USTDA's address, and USTDA's mission statement. Camera-ready copy of USTDA Final Report specifications will be available from USTDA upon request.

(c) The Contractor shall affix to the front of the CD-ROM a label identifying the Host Country, USTDA Activity Number, the name of the Client, the name of the Contractor who prepared the report, a report title, and the following language:

"The Contractor certifies that this CD-ROM contains the Public Version of the Final Report and that all contents are suitable for public distribution."

(d) The Contractor and any subcontractors that perform work pursuant to the Grant Agreement must be clearly identified in the Final Report. Business name, point of contact, address, telephone and fax numbers, and e-mail address shall be included for Contractor and each subcontractor.

(e) The Final Report, while aiming at optimum specifications and characteristics for the Project, shall identify the availability of prospective U.S. sources of supply. Business name, point of contact, address, telephone and fax numbers, and e-mail address shall be included for each commercial source.

(f) The Final Report shall be accompanied by a letter or other notation by the Client which states that the Client approves the Final Report. A certification by the Client to this effect provided on or with the invoice for final payment will meet this requirement.

(g) The Client, USTDA, and the Commercial and/or Economic Section(s) of the U.S. Embassy in Host Country shall have irrevocable, worldwide, royalty-free, non-exclusive rights to use and distribute the Final Report.

J. Modifications

All changes, modifications, assignments or amendments to this Contract, including the appendices, shall be made only by written agreement by the Contract Parties hereto, subject to written USTDA approval.

K. Study Schedule

(1) Study Completion Date

The completion date for the Study, which is January 31, 2016, is the date by which the Contract Parties estimate that the Study will have been completed.

(2) Time Limitation on Disbursement of USTDA Grant Funds

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this Contract for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) no USTDA funds may be disbursed more than four (4) years after the Effective Date of the Grant Agreement.

L. Business Practices

The Contract Parties recognize the existence of standards of conduct for public officials and commercial entities in their respective countries. Therefore, the Contract Parties shall fully comply with all United States and Host Country laws relating to corruption or bribery. For example, the Contractor and its subcontractors shall fully comply with the requirements of the Foreign Corrupt Practices Act, as amended (15 U.S.C. §§ 78dd-1 et seq.). Each Contract Party agrees that it shall require that any agent or representative hired to represent it in connection with the Study will comply with this paragraph and all laws which apply to activities and obligations of that Contract Party, including, but not limited to, those laws and obligations referenced above.

M. USTDA Address and Fiscal Data

Any communication with USTDA regarding this Contract shall be sent to the following address and include the fiscal data listed below:

U.S. Trade and Development Agency
1000 Wilson Boulevard, Suite 1600
Arlington, Virginia 22209-3901
USA

Phone: (703) 875-4357
Fax: (703) 875-4009

Fiscal Data:

Appropriation No.: 1109/141001

Activity No.: 2014-31026A
Reservation No.: 2014264
Grant No.: GH201431264

N. Taxes

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country, except for taxes of a de minimis nature imposed on local lodging, food, transportation, or airport arrivals or departures. Neither the Client nor the Contractor will seek reimbursement from USTDA for taxes, tariffs, duties, fees or other levies, except for taxes of a de minimis nature referenced above.

O. Export Licensing

The Contractor and all subcontractors are responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.

P. Contact Persons

The Client designates the following person as the contact person for matters concerning this Contract:

Name: Syed Zainullah Shah
Title: General Manager for Thermal
Phone: +92 300 592 1163 +92 91 922 3625 +92 300 500 1038 +92 333 538 0240
Fax: +92 91 921 7331 +92 91 922 3624
E-Mail: zain.shah@kpkep.com cc: razi.ceo@kpogcl.com.pk

The Contractor designates the following person as the contact person for matters concerning this Contract:

Name:
Title:
Phone:
Fax:
E-Mail:

If anyone designated by a Contract Party as a contact person ceases service as a contact person at any point during the ten-year period following the date of signing of this Contract, the Contract Party that had designated that contact person shall provide USTDA and the other Contract Party with the name and contact information of a replacement contact person.

Q. Liability

This Contract may include a clause that limits the liability of the Contract Parties, provided that such a clause does not (i) disclaim liability for damages that are natural, probable, and

reasonably foreseeable as a result of a breach of this Contract, or (ii) limit the total amount of damages recoverable to an amount less than the total amount disbursed to the Contractor pursuant to this Contract. If any clause included by the Contract Parties is inconsistent with either or both of these limitations, it shall be invalid and unenforceable to the extent of the inconsistency.

R. Arbitration

If the Contract Parties submit any dispute arising under this Contract for arbitration, the scope of any such arbitration shall be limited to the Contract Parties' rights and/or obligations under this Contract and may not extend to any right or obligation of USTDA. The arbitrator(s) shall not arbitrate issues directly affecting the rights or obligations of USTDA.

S. Reporting Requirements

The Contractor shall advise USTDA by letter as to the status of the Project on March 1st annually for a period of two (2) years after completion of the Study. In addition, if at any time the Contractor receives follow-on work from the Client, the Contractor shall so notify USTDA and designate the Contractor's contact point including name, telephone, fax number, and e-mail address. Since this information may be made publicly available by USTDA, any information which is confidential shall be designated as such by the Contractor and provided separately to USTDA. USTDA will maintain the confidentiality of such information in accordance with applicable law.

A N N E X 5

TERMS OF REFERENCE (FROM USTDA GRANT AGREEMENT)

TERMS OF REFERENCE

Objective

The objective of this feasibility study (“Study”) is to evaluate the technical, economic and financial viability of a 400-435 MW gas-fired combined cycle plant (“Project”) that the Pakhtunkhwa Energy Development Organization (“Grantee” or “PEDO”) is developing on behalf of the provincial government of Khyber Pakhtunkhwa (“GoKP”) in Pakistan. This plant is anticipated to eventually be expanded to approximately double the initial capacity of 400-435 MW. Assuming the plant’s technical, economic, and financial viability are evaluated favorably, a secondary objective is to facilitate approval by a Panel of Experts (POE) at the Private Power and Infrastructure Board of Pakistan (PPIB), which is required before the Project can be implemented. During the course of the Study, Contractor’s deliverables in accordance with the tasks below should incorporate any comments received from the POE. The Grantee shall be responsible for presenting the Study to the POE and for conveying any comments, suggestions or changes to the Contractor until the point of approval by the POE (within the timeframe established herein for the Study).

General Considerations for Deliverables and Documents

In all steps of the Study, the U.S. firm selected by the Grantee to perform the Study (“Contractor”) is expected to work closely with the Grantee to advance the Project to the implementation phase. In carrying out the Study, the Contractor needs to be detail-oriented in all critical issues related to technology and equipment selection, economic viability, negative environmental impacts, regulatory issues, and financing options. The interim deliverables specified in these Terms of Reference (“TOR”) shall serve to keep the Grantee informed about the Contractor’s work and to ensure that the Contractor’s findings are acceptable to the Grantee before critical decisions are made based on the Study findings. The Contractor shall undertake a quality control review process, including a technical and editorial review, of all deliverables and documents submitted to the Grantee to ensure accuracy, consistency, and readability. The Contractor shall familiarize itself with the relevant requirements of the PPIB and its approval process.

Task 1: Kick-off Meeting and Site Condition Assessment

Subtask 1a) The Contractor shall travel to Islamabad and Peshawar for a kick-off meeting with the Grantee. This shall be at least a ten day trip. During the meetings, the Contractor shall obtain all background and planning information prepared to date for the Project including the critical milestones and deadlines for the realization of the Project. The Contractor is expected to meet also with the representatives of the National Electric Power Regulatory Authority (NEPRA), PPIB, Peshawar Electric Supply Company Ltd. (PESCO), Central Power Purchase Authority (CPAA), National Power Coordination Center (NPCC), Sui National Gas Pipeline Ltd. (SNGPL) and National Transmission & Dispatch Company Ltd. (NTDC) during this trip to develop a full understanding of the project development requirements. All such meetings with the third parties shall be organized by the Grantee.

Subtask 1b) The Contractor shall travel to the proposed project site for field inspection. Any site specific problems or irregularities that would preclude the Project from progressing per the Grantee's intent shall be identified at this stage. During the field inspection the Contractor shall:

- Determine the required logistics, infrastructure capital, and operations and maintenance costs for natural gas resources to be delivered to the site,
- Determine the logistics for distillate oil shipments as secondary or start-up fuel,
- Determine availability of cooling and cycle make-up water;
- Determine the condition and capacity of nearest substations; and,
- Determine the space availability and the possible lay-out combinations for the nominal 400-435 MW plant and the future expansion to double that capacity.
- Determine road access and worthiness for heavy equipment movement to the location from the closest main road network to be accessed
- Determine mean conditions at the site for plant performance calculations.

Subtask 1c) The Contractor shall conduct a brief study (without the need of additional travel to Pakistan) on gas reserves and contingencies that may arise. The Contractor shall collect reservoir data and historical production profile from the Directorate General Petroleum Concessions, Ministry of Petroleum and LMKR (company) data repository to assess the remaining gas in place and future production profile. Since the gas is coming from a number of fields, gas availability data are spread over five existing blocks and two to three new blocks.

The Contractor shall also review the Basin Study, Vision-2025 of the Planning Commission, the USAID-sponsored shale gas study and other available studies to assess sustainability of gas to the power plant. The Contractor shall not be required to perform any field visits, analysis or reservoir modeling during this subtask, yet shall offer solutions and mitigating plans to augment gas from KP, as required. The information compiled shall be used to support the Tariff Petition at NEPRA. For this subtask the Contractor's team shall include a geologist (or a geophysicist) and a reservoir engineer with prior experience on fuel gas data reduction (i.e., distilling the raw data to a useable final set of numbers).

Task 1 Deliverables: The Contractor shall submit the following documents:

- i) Detailed meeting minutes;
- ii) A condition assessment report confirming the suitability (or identifying the steps to increase the suitability) of the proposed site;
- iii) A fuel gas sustainability write-up;
- iv) A finalized work plan and the optimum use of subcontractors consistent with this Terms of Reference; and
- v) A finalized schedule for the Study.

Task 2: Front End Engineering and Design of the Combined Cycle Plant

The Contractor shall develop a front end engineering design (FEED) package for the Project. The FEED shall be based on F technology gas turbines with an ISO rating of around 255 MW to arrive at combined cycle power output of at least 400-435 MW. The Contractor shall optimize the configuration, including but not limited to the plant sizing in terms of gross rating, net rating and valve wide open (VWO) condition; cooling via towers and or single pass once-through cooling (OTC); stack height; and install air inlet cooling system. The FEED package shall be inclusive of, but not limited to:

- Plant configuration (i.e., 1x1x 1 or 2x2x1 with due justification);
- Plant Lay-out;
- Evaluation of power enhancement options including gas turbine inlet cooling, steam/water injection and heat recovery steam generator (HRSG) duct firing;
- Heat and Mass Balance Diagrams for winter, summer, mean ambient (both for temperature and relative humidity) conditions, and ISO conditions showing the seasonal performance of the final thermal cycle, specifically tabulating the fuel consumption, the gross power, auxiliary power, net power and the VWO net power;
- Plant availability factor and the annual MWhr production potential
- Major equipment list, at a minimum including:
 - Gas turbine, inlet system w/cooling (if warranted), feed water treatment system, HRSG(s), natural gas and distillate oil systems, large bore and high pressure steam piping, steam turbine, condenser, cooling tower or OTC, power transformers, switchgear, mechanical and electrical balance of plant, distributed control system (DCS), major instrumentation and controls;
- Process flow diagrams;
- Electrical one line diagram;
- High Level Grid Interconnection Study in conformance with the Grid Code of Pakistan established by NEPRA;
- Geotechnical study, including several soil bore samples as it relates to the foundations of the Gas Turbine(s); HRSGs, steam turbine, condenser and the cooling tower; and
- Plant Narrative (also referred to as the Design Basis Document).

Task 2 Deliverable: The Contractor shall submit a FEED package as described above. To facilitate the Grantee's review, the Contractor shall provide components of this deliverable to the Grantee as they are completed. The Contractor shall ensure that the Grantee has an opportunity to review and comment on all components at least once prior to submitting the full FEED package

Task 3: Environmental and Social Impact Assessments

The Contractor shall prepare an Environmental Impact Assessment (EIA) based on both natural gas and distillate oil firing. The Contractor shall identify, and propose remedies for all air, water, or noise pollution increases that will result from project implementation, and discuss in detail the benefits of water/steam injection into the gas turbines for nitrogen oxide (NO_x) control and selective catalytic reduction (SCR) equipment that could be installed in/downstream of the HRSG(s).

The Contractor shall refer to International Finance Corporation's (IFC) Environmental, Health and Safety Guidelines, IFC Performance Standards on Environmental and Social Sustainability, and the requirements of the Pakistan Environmental Protection Agency (Pak EPA) and Khyber Pakhtunkhwa Environmental Protection Agency (KP EPA) in preparing the EIA. The environmental impact categories shall include but not be limited to:

- 1) Air Quality (Dust and Stack Emissions)
- 2) Watershed, Underground Water Table and Marine Environment
- 3) Soils and Geology
- 4) Flora and Fauna
- 5) Land Use, Landscape and Visual Impacts
- 6) Noise and Vibration Impacts (Construction and Operation Phases)
- 7) Traffic (Construction and Operation Phases)
- 8) Archaeology, Historical and Cultural Heritage
- 9) Natural Disaster Risk
- 10) Major Accident Hazards
- 11) Solid Waste and Effluent Management
- 12) Occupational Health and Safety
- 13) Water Contamination
- 14) Greenhouse gas emissions reductions in tons of carbon dioxide per year versus the baseline

The Environmental Impact Assessment shall be sufficiently detailed to enable the Grantee to obtain project financing from the IFC or other international financial institutions (IFIs).

The Social Impact Analysis (SIA) shall include but not be limited to the following:

1. Any alteration to inhabitants' way of living
2. Negative and positive impacts on livelihood of the inhabitants
3. Gender inequality

The Contractor shall incorporate any recommendations provided within a reasonable timeframe from Pak EPA and KP EPA into its EIA and SIA reports.

Task 3 Deliverables: The Contractor shall submit and Environmental Impact Assessment and a Social Impact Assessment.

Task 4: Developmental Impact Assessment

The Contractor shall report on the potential social development impacts of the Project in the Host Country focusing on what economic and social outcomes will result if the Project is implemented according to the Study recommendations. While specific focus should be paid to the immediate impact of the specific Project that is being considered, the Contractor shall include any additional development benefits to the Project including spin-off and demonstration effects. The analysis of potential benefits of the Contractor shall be as concrete and detailed as possible. The development impact factors are intended to provide the Project's decision-makers and interested parties with a broader view of the Project's potential effects on the Host Country. The Contractor shall provide estimates of the Project's potential benefits in the following areas:

- *Infrastructure:* A statement on the infrastructure impact giving a synopsis. For example "This Project would result in the construction of a power plant that would provide xxx MW of power, which is anticipated to serve xxx additional households in the region."
- *Human Capacity Building:* The number and type of jobs that would be created to construct and operate the proposed plant as well as the number of people who will receive training and a brief description of the training program.
- *Other:* any other significant developmental benefits to the Project, including any spin-off or demonstration effects.

Task 4 Deliverables: The Contractor shall submit a Developmental Impact Assessment.

Task 5: Project Cost Estimate and Implementation Schedule

The Contractor shall prepare a $\pm 15\%$ EPC cost estimate, which includes a detailed breakdown of all civil works, equipment and materials, including but not limited to;

- Fuel gas delivery and treatment system, gas turbine, HRSG(s), high pressure steam system, steam turbine, condenser and cooling tower, feedwater and condensate systems, water treatment, power transformers, switchgear, plant DCS, chemical dosing and sampling systems, continuous emissions monitoring system, civil and structural systems including piles and foundations, all pertinent instrumentation and control equipment, mechanical and electrical balance of plant (BOP) equipment and bulk items,
- Detailed design and procurement services,
- Construction and commissioning,
- Land acquisition, cost of financing and insurance.

The Contractor shall also prepare an EPC implementation schedule for the Project starting with EPC tender issuance and ending with plant commissioning. Floats associated with each sequential tasks, milestones and critical path(s) shall be clearly identified in the implementation schedule.

Task 5 Deliverables: The Contractor shall submit a report that contains all relevant information collected, work performed and analysis provided under Task 5.

Task 6: Economic Analysis

The Contractor shall conduct a plant economic analysis based on current and future parameters that will affect the Project, including the cost of natural gas and distillate oil, electricity tariff rates, interest rates and financing costs. The Contractor shall calculate net present value, payback period, and internal rate of return by varying the sensitivities to develop best and worst case scenarios.

Based on the economic analysis, the Contractor shall provide data, additional calculations, presentation materials and an Excel-based interactive Tariff Model needed by Grantee to prepare the Power Generation Tariff Petition which will be submitted to NEPRA. The Power Generation Tariff shall address Capacity Purchase Price (CPP) payment as well as Energy Purchase Price (EPP) payment as described in the “Pakistan Power Policy, 2002/Amended”. The Tariff Model shall include return on equity (ROE), debt servicing, fixed and variable operations and maintenance, and fuel transportation charges. The Tariff Model must conform to NEPRA guidelines.

The Contractor shall conduct a Life Cycle Cost Analysis (LCCA) as part of the overall project cost estimate. The LCCA shall examine the total initial capital costs to plan, design, develop, and build the project, and also shall include a detailed analysis of the costs associated with the long-term operation of the project, which includes maintaining the facilities, equipment, and other assets financed as part of the project. Such costs include, but are not limited to, warranties, operation, maintenance, acquisition, installation, refurbishment, and disposal costs that could be encountered throughout the life of the project.

Task 6 Deliverable: The Contractor shall submit a report that contains all relevant information collected, work performed and analysis provided under Task 6.

Task 7: Regulatory Framework Review and License Applications

The Contractor shall review all regulations pertaining to the Project to ensure legal compliance both during project development and after the project is implemented. Specifically, the Contractor shall review Articles 157 and 158 of the Constitution, the Power Policy of 2002 (as amended), permitting and licensing (L/P) requirements by NEPRA, local building codes, local right-of-way, and zoning ordinances.

The Contractor shall assist the Grantee in preparing the Generation License application to NEPRA and shall draft the “Security Package”, which is comprised of the Power Purchase Agreement (PPA), the Fuel Supply Agreement (FSA), the Implementation Agreement (IA) and Acknowledgement Agreement (AA), based on the templates available from PPIB and the GoKP Energy & Power Department.

The Contractor shall prepare a list of all other permits required during the project development phase.

Task 7 Deliverables: The Contractor shall submit a draft Security Package and a report that contains all other relevant information collected, work performed and analysis provided under Task 7.

Task 8: Project Implementation Guidance

Contractor shall prepare an implementation plan starting with the formation of a Special Purpose Vehicle (SPV) that will be the de facto owner of the Project. The Contractor shall evaluate the Grantee's institutional structure and interim management plan for the project, and describe training or capacity building needs to ensure adequate skills will be available within Grantee's institution and/or describe the hiring requirements for critical project development positions enhance the in-house team. The said critical positions are inclusive of a CEO, Technical Director and Chief Finance Officer with previous combined cycle power plant experience.

The Contractor shall outline all project development activities to be undertaken by the SPV in chronological order, inclusive of;

- i) Pre-EPC activities,
- ii) EPC Tender Issuance and Solicitation,
- iii) EPC Bid Evaluation,
- iv) Conformed EPC Specification Preparation,
- v) Owner's Engineering Requirements (if deemed necessary),
- vi) EPC Contractor Progress Reporting and Monitoring,
- vii) Change Order Policy
- viii) Start-up and Commissioning

Task 8 Deliverables: The Contractor shall submit a report that contains all relevant information collected, work performed and analysis provided under Task 8.

Task 9: U.S. Sources of Supply

Based on the FEED that was developed in Task 2, the Contractor shall identify the likely U.S. suppliers for equipment procurement for the Project and prepare a qualified and interested Vendors List. The list shall be complete with company names, contact name(s), physical and e-mail addresses and phone numbers. To the greatest extent practicable, the Contractor shall identify for each supplier the sourcing location and percentage U.S.-sourced content as to inform potential for U.S. Ex-Im Bank financing in Task 9. The qualified U.S. Vendors List shall be inclusive of engineering and design service providers as well.

Task 9 Deliverables: The Contractor shall submit a qualified U.S. Vendors List.

Task 10: Project Financing Options

The Contractor shall contact the international finance institutions (IFIs) that are mostly likely to provide debt and/or equity financing for the Project. The IFIs shall include but not be limited to the International Finance Corporation (IFC), Asian Development Bank (ADB), U.S. Export-Import Bank (Ex-Im), and the U.S. Overseas Private Investment Corporation

(OPIC). The Grantee is also expected to attend the meetings that will be held at Resident Missions of the IFIs in Islamabad. During the meetings the Contractor shall present to the IFIs a Project Prospectus addressing:

- Project overview
- Brief plant description and technical feasibility
- Project cost, project economics with net present value, payback period and internal rate of return, and
- Equity partnership opportunities (for third party investors such as GE Finance, potential U.S. Investor through OPIC and Host Country commercial banks)

The Contractor shall provide a detailed description of each financing institutions'/lenders' current terms and conditions. The Contractor shall draft Term Sheets for obtaining a loan(s), which shall comprise of spread and tenure of debts, return on equity and return on investment that are acceptable for the project as the Contractor has completed the financial model, prudential regulations as advised by the State Bank of Pakistan, Securities and Exchange Commission of Pakistan, Competition Commission of Pakistan and other regulatory institutions.

Task 10 Deliverables: The Contractor shall submit a Project Prospectus in IFI-acceptable format, Term Sheet for obtaining loans and equity and a report that contains all relevant information collected, work performed and analysis provided under Task 10.

The Contractor shall travel to Pakistan to meet with the Grantee and give a presentation explaining the conclusions from all work performed to date. If the Grantee decides that the Study supports the Project, the Grantee and Contractor shall notify USTDA in writing and provide an estimated completion date of the remaining work to be performed under the Terms of Reference. USTDA will notify the Grantee and Contractor of the authority to proceed with the remaining work under these Terms of Reference.

Task 11: EPC Tender Documents Preparation

Upon the Grantee's determination that the Study supports the Project as described above and authorization from USTDA to proceed, the Contractor shall prepare EPC Tender Documents based on the meetings held in Pakistan and acceptable to NEPRA that will enable the Grantee to solicit EPC bids from interested parties. The EPC Tender Documents shall include but not be limited to:

1. Project Definition,
2. Technical Specifications based on the FEED and the Environmental Impact Assessment, divided into the following sections:
 - a. Major Mechanical, Electrical and I&C Equipment,
 - b. Civil Works and Construction,
 - c. Plant Narrative (i.e. design basis),
 - d. Plant Performance Requirements for power, heat rate, emissions and availability
 - e. Start-up and Commissioning
 - f. Project Implementation Schedule

3. Draft Term Sheet comprising commercial and special terms and conditions of the EPC Contract, to include but not limited to:
 - a. Physical requirements of the project
 - b. Compliance with International Federation of Consulting Engineers (FIDIC) and Pakistan Engineering Council (PEC) guidelines
 - c. The Penalties and Liquidated Damages which would apply in case of non-compliance with the Physical, Performance and Schedule requirements.

The Contractor shall develop a weighted score based bid evaluation criteria for the Grantee's independent use.

Task 11 Deliverables: The Contractor shall submit EPC Tender Documents, a Term Sheet and the Bid Evaluation Criteria.

Task 12: Final Report

The Contractor shall prepare and deliver to the Grantee a substantive and comprehensive draft final report of all work performed pursuant to these Terms of Reference ("Draft Final Report").

The Grantee shall provide written comments to the Contractor within two weeks of the Contractor's presentation. The Contractor shall promptly make the necessary changes and modifications to the Draft Final Report. Consequently, the Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference ("Final Report"). The Final Report shall be organized according to the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall also contain an Executive Summary in addition to the other required deliverables, and shall be prepared in accordance with Clause J of Annex II of the Grant Agreement.

ANNEX 6

U.S. FIRM INFORMATION FORM



USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

U.S. Firm Information Form

This form is designed to enable the U.S. Trade and Development Agency ("USTDA") to obtain information about entities and individuals proposed for participation in USTDA-funded activities. Information in this form is used to conduct screening of entities and individuals to ensure compliance with legislative and executive branch prohibitions on providing support or resources to, or engaging in transactions with, certain individuals or entities with which USTDA must comply.

USTDA Activity Number [<i>To be completed by USTDA</i>]							
Activity Type [<i>To be completed by USTDA</i>]		Feasibility Study		Technical Assistance		Other (specify)	
Activity Title [<i>To be completed by USTDA</i>]							
Full Legal Name of U.S. Firm							
Business Address (street address only)							
Telephone		Fax		Website			
Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.							
Type of Ownership		Publicly Traded Company					
		Private Company					
		Other (please specify)					
Please provide a list of directors and principal officers as detailed in Attachment A. Attached? (Not Applicable for U.S. Publicly Traded Company)						Yes	
If Private Company or Other (if applicable), provide a list of shareholders and the percentage of their ownership. In addition, for each shareholder that owns 15% or more shares in U.S. Firm, please complete Attachment B.							
Is the U.S. Firm a wholly-owned or partially owned subsidiary?		Yes					
		No					
If so, please provide the name of the U.S. Firm's parent company(ies). In addition, for any parent identified, please complete Attachment B.							
Is the U.S. Firm proposing to subcontract some of the proposed work to another firm?		Yes					
		No					
If yes, U.S. Firm shall complete Attachment C for each subcontractor. Attached?		Yes					
		Not applicable					
Project Manager							
Name		Surname					
		Given Name					
Address							
Telephone							
Fax							
Email							
Negotiation Prerequisites							
Discuss any current or anticipated commitments which may impact the ability of the U.S. Firm or its subcontractors to complete the Activity as proposed and reflect such impact within the project schedule.							
Identify any specific information which is needed from the Grantee before commencing negotiations.							

U.S. Firm may attach additional sheets, as necessary.

U.S. Firm's Representations

U.S. Firm shall certify to the following (or provide an explanation as to why any representation cannot be made):

1. U.S. Firm is a [check one] Corporation LLC Partnership Sole Proprietor Other:
 duly organized, validly existing and in good standing under the laws of the State of: .
 The U.S. Firm has all the requisite corporate power and authority to conduct its business as presently conducted, to submit this proposal, and if selected, to execute and deliver a contract to the Grantee for the performance of the USTDA Activity. The U.S. Firm is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.
2. The U.S. Firm has included herewith, a copy of its Articles of Incorporation (or equivalent charter or document issued by a designated authority in accordance with applicable laws that provides information and authentication regarding the legal status of an entity) and a Certificate of Good Standing (or equivalent document) issued within 1 month of the date of signature below by the State of: .
 The U.S. Firm commits to notify USTDA and the Grantee if it becomes aware of any change in its status in the state in which it is incorporated. USTDA retains the right to request an updated certificate of good standing. **(U.S. publicly traded companies need not include Articles of Incorporation or Good Standing Certificate)**
3. Neither the U.S. Firm nor any of its directors and principal officers have, within the ten-year period preceding the submission of this proposal, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.
4. Neither the U.S. Firm, nor any of its directors and principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 3 above.
5. There are no federal or state tax liens pending against the assets, property or business of the U.S. Firm. The U.S. Firm, has not, within the three-year period preceding the submission of this proposal, been notified of any delinquent federal or state taxes in an amount that exceeds US\$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.
6. The U.S. Firm has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself of its debts under any bankruptcy, insolvency or other similar law. The U.S. Firm has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.
7. The U.S. Firm certifies that it complies with USTDA Nationality, Source, and Origin Requirements and shall continue to comply with such requirements throughout the duration of the USTDA-funded activity. The U.S. Firm commits to notify USTDA and the Grantee if it becomes aware of any change which might affect U.S. Firm's ability to meet the USTDA Nationality, Source, and Origin Requirements.

The U.S. Firm shall notify USTDA if any of the representations are no longer true and correct.

U.S. Firm certifies that the information provided in this form is true and correct. U.S. Firm understands and agrees that the U.S. Government may rely on the accuracy of this information in processing a request to participate in a USTDA-funded activity. If at any time USTDA has reason to believe that any person or entity has willfully and knowingly provided incorrect information or made false statements, USTDA may take action under applicable law. The undersigned represents and warrants that he/she has the requisite power and authority to sign on behalf of the U.S. Firm.

Name		Signature	
Title			
Full Legal Name of U.S. Firm		Date	



ATTACHMENT B

USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

U.S. Firm Information Form – Shareholder(s) and Parent Company(ies)

If applicable, U.S. Firm provided a list of shareholders and the percentage of their ownership. This form shall be completed for each shareholder that owns 15% or more shares in U.S. Firm, as well as any parent corporation of the U.S. Firm (“Shareholder”). In addition, this form shall be completed for each shareholder identified in Attachment B that owns 15% or more shares in any Shareholder, as well as any parent identified in Attachment B.

USTDA Activity Number [To be completed by USTDA]	
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Activity Title [To be completed by USTDA]	
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Full Legal Name of U.S. Firm	
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Full Legal Name of Shareholder	
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Business Address of Shareholder (street address only)	
---	--

Telephone number		Fax Number	
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Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.	
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Country of Shareholder’s Principal Place of Business	
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Please provide a list of directors and principal officers as detailed in Attachment A. Attached?	Yes
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Type of Ownership	Publicly Traded Company
	Private Company
	Other

If applicable, provide a list of shareholders and the percentage of their ownership. In addition, for each shareholder that owns 15% or more shares in Shareholder, please complete Attachment B.	
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Is the Shareholder a wholly-owned or partially owned subsidiary?	Yes
	No

If so, please provide the name of the Shareholder’s parent(s). In addition, for any parent identified, please complete Attachment B.	
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Shareholder may attach additional sheets, as necessary.



ATTACHMENT C

USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

Subcontractor Information Form

This form is designed to enable the U.S. Trade and Development Agency ("USTDA") to obtain information about entities and individuals proposed for participation in USTDA-funded activities. Information in this form is used to conduct screening of entities and individuals to ensure compliance with legislative and executive branch prohibitions on providing support or resources to, or engaging in transactions with, certain individuals or entities with which USTDA must comply.

USTDA Activity Number [<i>To be completed by USTDA</i>]	
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Activity Title [<i>To be completed by USTDA</i>]	
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Full Legal Name of Prime Contractor U.S. Firm ("U.S. Firm")	
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Full Legal Name of Subcontractor	
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Business Address of Subcontractor (street address only)	
---	--

Telephone Number	
------------------	--

Fax Number	
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Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.	
---	--

Subcontractor Point of Contact

Name	Surname	
	Given Name	

Address	
---------	--

Telephone	
-----------	--

Fax	
-----	--

Email	
-------	--

Subcontractor's Representations

Subcontractor shall provide the following (or any explanation as to why any representation cannot be made), made as of the date of the proposal:

1. Subcontractor is a <i>[check one]</i>	<input type="checkbox"/> Corporation	<input type="checkbox"/> LLC	<input type="checkbox"/> Partnership	<input type="checkbox"/> Sole Proprietor	<input type="checkbox"/> Other
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duly organized, validly existing and in good standing under the laws of: .

2. The subcontractor has all the requisite corporate power and authority to conduct its business as presently conducted, to participate in this proposal, and if the U.S. Firm is selected, to execute and deliver a subcontract to the U.S. Firm for the performance of the USTDA Activity and to perform the USTDA Activity. The subcontractor is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.
3. Neither the subcontractor nor any of its directors and principal officers have, within the ten-year period preceding the submission of the Offeror's proposal, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.
4. Neither the subcontractor, nor any of its directors and principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.
5. There are no federal or state tax liens pending against the assets, property or business of the subcontractor. The subcontractor, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.
6. The subcontractor has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The subcontractor has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.
7. The Subcontractor certifies that it complies with the USTDA Nationality, Source, and Origin Requirements and shall continue to comply with such requirements throughout the duration of the USTDA-funded activity. The Subcontractor commits to notify USTDA, the Contractor, and the Grantee if it becomes aware of any change which might affect U.S. Firm's ability to meet the USTDA Nationality, Source, and Origin Requirements.

The selected Subcontractor shall notify the U.S. Firm, Grantee and USTDA if any of the representations included in its proposal are no longer true and correct.

Subcontractor certifies that the information provided in this form is true and correct. Subcontractor understands and agrees that the U.S. Government may rely on the accuracy of this information in processing a request to participate in a USTDA-funded activity. If at any time USTDA has reason to believe that any person or entity has willfully and knowingly provided incorrect information or made false statements, USTDA may take action under applicable law. The undersigned represents and warrants that he/she has the requisite power and authority to sign on behalf of the Subcontractor.

Name	<input type="text"/>	Signature	<input type="text"/>
Title	<input type="text"/>		
Full Legal Name of Subcontractor	<input type="text"/>	Date	<input type="text"/>